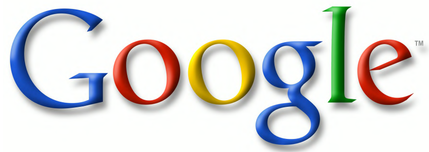

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THE

LONDON ENCYCLOPÆDIA.

The Subscribers to the London Encyclopædia cannot but be gratified by the introduction of the following Article on Infidelity, from the pen of the late Rev. Robert Hall; and its importance, the publishers hope, will be a sufficient apology for giving it prominence, by placing it at the *beginning* of this Part.

INFIDELITY is the joint offspring of an irreligious temper and unholy speculation, employed, not in examining the evidences of Christianity, but in detecting the vices and imperfections of professing Christians. It has passed through various stages, each distinguished by higher gradations of impiety; for when men arrogantly abandon their guide, and wilfully shut their eyes on the light of heaven, it is wisely ordained that their errors shall multiply at every step, until their extravagance confutes itself, and the mischief of their principles works its own antidote. That such has been the progress of infidelity will be obvious from a slight survey of its history.

Lord Herbert, the first and purest of our English *free-thinkers*, who flourished in the beginning of the reign of Charles I., did not so much impugn the doctrine or the morality of the Scriptures, as attempt to supersede their necessity, by endeavouring to show that the great principles of the unity of God, a moral government, and a future world, are taught with sufficient clearness by the light of nature. Bolingbroke, and others of his successors, advanced much farther, and attempted to invalidate the proofs of the moral character of the Deity, and, consequently, all expectations of rewards and punishments; leaving the Supreme Being no other perfections than those which belong to a first cause, or Almighty contriver. After him, at a considerable distance, followed Hume, the most subtle, if not the most philosophical, of the Deists; who, by perplexing the relations of cause and effect, boldly aimed to introduce an universal scepticism, and to pour more than Egyptian darkness into the whole region of morals. Since his time sceptical writers have sprung up in abundance, and infidelity has allured multitudes to its standard: the young and superficial by its dextrous sophistry, the vain by the literary fame of its champions, and the profligate by the licentiousness of its principles. Atheism, the most undisguised, has at length began to make its appearance.

Animated by numbers, and emboldened by success at the commencement of the French revolution, infidels gave a new direction to their efforts, and impressed a new character on the ever-growing mass of their impious speculations.

By uniting more closely with each other, by giving a sprinkling of irreligion to all their literary productions, they aimed to engross the formation of the public mind; and, amidst the warmest professions of attachment to virtue, to effect an entire disruption of morality from religion. Pretending to be the teachers of virtue, and the guides of life, they proposed to revolutionize the morals of mankind; to regenerate the world, by a process entirely new; and to rear the temple of virtue, not merely without the aid of religion, but on the renunciation of its principles, and the derision of its sanctions.

With respect to the sceptical and religious systems, the inquiry at present is not so much which is the truest in speculation, as which is the most useful in practice; or, in other words, whether morality will be best promoted by considering it as a part of a great and comprehensive law, emanating from the will of a supreme, omnipotent legislator, or as a mere expedient, adapted to our present situation, enforced by no other motives than those which arise from the prospects and interests of the present state.

The subject, viewed in this light, may be considered under two aspects; the influence of the opposite systems on the principles of morals, and on the formation of character. The first may be styled their direct, the latter their equally important, but indirect consequence and tendency.

1. The sceptical, or irreligious, system subverts the whole foundation of morals. It may be assumed as a maxim that no person can be required to act contrary to his greatest good, or his highest interest, comprehensively viewed in relation to the whole duration of his being. It is often our duty to forego our own interest *partially*, to sacrifice a smaller pleasure for the sake of a greater, to incur a present evil in pursuit of a distant good of more consequence. In a word, to arbitrate amongst interfering claims of inclination is the moral arithmetic of human life. But, to risk the happiness of the whole duration of our being in any case whatever, admitting it to be possible, would be foolish; because the sacrifice must, by the nature of it, be so great as to preclude the possibility of compensation.

As the present world, on sceptical principles, is the only place of recompense, whenever the practice of virtue fails to promise the greatest sum of present good, cases which often occur in reality, and much oftener in appearance, every motive to virtuous conduct is superseded; a deviation from rectitude becomes the part of wisdom; and should the path of virtue, in addition to this, be obstructed by disgrace, torment, or death, to persevere would be madness and folly, and a violation of the first and most essential law of nature. Virtue, on these principles, being in numberless instances at war with self-preservation, never can or ought to become a fixed habit of the mind.

The system of infidelity is not only incapable of arming virtue for great and trying occasions, but leaves it unsupported on the most ordinary occurrences. In vain will its advocates appeal to a moral sense, to benevolence and sympathy. In vain will they expatiate on the tranquillity and pleasure attendant on a virtuous course; for it is undeniable that these impulses may be overcome; and though you may remind the offender that in disregarding them he has violated his nature and that a conduct consistent with them is productive of much internal satisfaction; yet, if he reply that his taste is of a different sort, that there are other gratifications which he values more, and that every man must choose his own pleasures, the argument is at an end.

Rewards and punishments, awarded by omnipotent power, afford a palpable and pressing motive, which can never be neglected without renouncing the character of a rational creature: but tastes and relishes are not to be proscribed.

A motive in which the reason of man shall acquiesce, enforcing the practice of virtue at all times and seasons, enters into the very essence of moral obligation. Modern infidelity supplies no such motives: it is therefore essentially and infallibly a system of enervation, turpitude, and vice.

This chasm in the construction of morals can only be supplied by the firm belief of a rewarding and avenging Deity, who binds duty and happiness, though they may seem distant, in an indissoluble chain, without which, whatever usurps the name of virtue, is not a principle, but a feeling; not a determinate rule, but a fluctuating expedient, varying with the tastes of individuals, and changing with the scenes of life.

Nor is this the only way in which infidelity subverts the foundation of morals. All reasoning on morals pre-supposes a distinction between inclinations and duties, affections and rules. The former prompt, the latter prescribe. The former supply motives to action; the latter regulate and control it. Hence it is evident, if virtue have any just claim to authority, it must be under the latter of these notions, that is, under the character of a law. It is under this notion, *in fact*, that its dominion has ever been acknowledged to be paramount and supreme.

But, without the intervention of a superior will, it is impossible there should be any moral laws, except in the lax metaphorical sense in which we speak of the laws of matter and motion. Men being essentially equal, morality is, on these principles, only a stipulation, or silent compact, into which every individual is supposed to enter, as far as suits his convenience, and for the breach of which he is accountable to nothing but his own mind. His own mind is his law, his tribunal, and his judge!

Two consequences, the most disastrous to society, will inevitably follow the general prevalence of this system; the frequent perpetration of great crimes, and the total absence of great virtues.

1. In those conjunctions which tempt avarice, or inflame ambition, when a crime flatters with the prospect of impunity, and the certainty of immense advantage, what is to restrain an Atheist from its commission? To say that remorse will deter him is absurd; for remorse, as distinguished from pity, is the sole offspring of religious belief, the extinction of which is the great purpose of the infidel philosophy. The dread of punishment, or infamy, from his fellow-creatures, will be an equally ineffectual barrier, because crimes are only committed under such circumstances as suggest the hope of concealment; not to say that crimes themselves will soon lose their infamy and their horror, under the influence of that system which destroys the sanctity of virtue, by converting it into a low calculation of worldly interest. Here the sense of an ever-present Ruler, and of an avenging Judge, is of the most awful and indispensable necessity; as it is that alone which impresses on all crimes the character of *folly*, shows that duty and interest in every instance coincide, and that the most prosperous career of vice, the most brilliant successes of criminality, are but an *accumulation of wrath against the day of wrath.*

As the frequent perpetration of great crimes is an inevitable consequence of the diffusion of sceptical principles, so, to understand this consequence in its full extent, we must look beyond their immediate effects, and consider the disruption of social ties, the destruction of confidence, the terror, suspicion, and hatred, which must prevail in that state of society in which barbarous deeds are familiar. The tranquillity which pervades a well-ordered community, and the mutual good offices which bind its members together, is founded on an implied confidence in the indisposition to annoy; in the justice, humanity, and moderation of those among whom we dwell. So that the worst consequence of crimes is, that they impair the stock of public charity and general tenderness. The dread and hatred of our species would infallibly be grafted on a conviction that we were exposed every moment to the surges of an unbridled ferocity, and that nothing but the power of the magistrate stood between us and the daggers of assassins. In such a state, laws deriving no support from public manners are unequal to the task of curbing the fury of the passions, which, from being concentrated into selfishness, fear, and revenge, acquire new force. Terror and suspicion beget cruelty, and inflict injuries by way of prevention.

Pity is extinguished in the stronger impulse of self-preservation. The tender and generous affections are crushed; and nothing is seen but the retaliation of wrongs; the fierce and unmitigated struggle for superiority. This is but a faint sketch of the incalculable calamities and horrors we must expect, should we be so unfortunate as ever to witness the triumph of modern infidelity.

2. This system is a soil as barren of great and sublime virtues as it is prolific in crimes. By great and sublime virtues are meant those which are called into action on great and trying occasions, which demand the sacrifice of the dearest interests and prospects of human life, and sometimes of life itself. The virtues, in a word, which, by their rarity and splendour, draw admiration, and have rendered illustrious the characters of

patriots, martyrs, and confessors. It requires but little reflection to perceive that whatever veils a future world, and contracts the limits of existence within the present life, must tend, in a proportionable degree, to diminish the grandeur, and narrow the sphere of human agency.

As well might you expect exalted sentiments of justice from a professed gamester, as look for noble principles in the man whose hopes and fears are all suspended on the present moment, and who stakes the whole happiness of his being on this vain and fleeting life. If he be ever impelled to the performance of great achievements in a good cause, it must be solely by the hope of fame, a motive which, besides that it makes virtue the servant of opinion, usually grows weaker at the approach of death, and which, however it may surmount the love of existence in the heat of battle, or in the moment of public observation, can seldom be expected to operate with much force on the retired duties of a private station.

In affirming that infidelity is unfavorable to the higher class of virtues, we are supported as well by facts as by reasoning. We should be sorry to load our adversaries with unmerited reproach, but to what history, to what record will they appeal for the traits of moral greatness exhibited by their disciples? Where shall we look for the trophies of infidel magnanimity, or atheistical virtue? Not that we mean to accuse them of inactivity; they have recently filled the world with the fame of their exploits; exploits of a different kind, indeed, but of imperishable memory, and disastrous lustre.

Though it is confessed great and splendid actions are not the ordinary employment of life, but must, from their nature, be reserved for high and eminent occasions, yet that system is essentially defective which leaves no room for their cultivation. They are important, both from their immediate advantage and their remoter influence. They often save, and always illustrate the age and nation in which they appear. They raise the standard of morals; they arrest the progress of degeneracy; they diffuse a lustre over the path of life; monuments of the greatness of the human soul, they present to the world the august image of virtue in her sublimest form, from which streams of light and glory issue to remote times and ages, while their commemoration, by the pen of historians and poets, awakens in distant bosoms the sparks of kindred excellence.

Combine the frequent and familiar perpetration of atrocious deeds with the dearth of great and generous actions, and you have the exact picture of that condition of society which completes the degradation of the species—the frightful contrast of dwarfish virtues and gigantic vices, where every thing good is mean and little, and every thing evil is rank and luxuriant. A dead and sickening uniformity prevails, broken only at intervals by volcanic eruptions of anarchy and crime.

II. Hitherto we have considered the influence of scepticism on the principles of virtue; and have endeavoured to show that it despoils it of its dignity, and lays its authority in the dust. Its influence on the formation of character remains to be examined. The actions of men are oftener determined by their character than their interest: their conduct takes its colour more from their acquired taste, inclinations, and habits, than from a deliberate regard to their greatest good. It is only on great occasions the mind awakes to take an extended survey of her whole course, and that she suffers the dictates of reason to impress a new bias upon her movements. The actions of each day are, for the most part, links which follow each other in the chain of custom. Hence the great effort of practical wisdom is to imbue the mind with right tastes, affections, and habits; the elements of character, and masters of action.

I. The exclusion of a Supreme Being, and of a superintending Providence, tends directly to the destruction of moral taste. It robs the universe of all finished and consummate excellence, even in idea. The admiration of perfect wisdom and goodness, for which we are formed, and which kindles such unspeakable rapture in the soul, finding in the regions of scepticism nothing to which it corresponds, droops and languishes. In a world which presents a fair spectacle of order and beauty, of a vast family nourished and supported by an Almighty Parent, in a world which leads the devout mind, step by step, to the contemplation of the first fair and the first good, the sceptic is encompassed with nothing but obscurity, meanness, and disorder.

When we reflect on the manner in which the idea of Deity is formed, we must be convinced that such an idea, intimately present to the mind, must have a most powerful effect in refining the moral taste. Composed of the richest elements, it embraces, in the character of a beneficent Parent and Almighty Ruler, whatever is venerable in wisdom, whatever is awful in authority, whatever is touching in goodness. Human excellence is blended with many imperfections, and seen under many limitations. It is beheld only in detached and separate portions, nor ever appears in any one character whole and entire. So that when, in imitation of the Stoics, we wish to form out of these fragments the notion of a perfectly wise and good man, we know it is a mere fiction of the mind, without any real being in whom it is embodied and realised. In the belief of a Deity, these conceptions are reduced to reality; the scattered rays of an ideal excellence are concentrated, and become the real attributes of that Being with whom we stand in the nearest relation, who sits supreme at the head of the universe, is armed with infinite power, and pervades all nature with his presence.

The efficacy of these sentiments in producing and augmenting a virtuous taste, will indeed be proportioned to the vividness with which they are formed, and the frequency with which they recur; yet some benefit will not fail to result from them, even in their lowest degree. The idea of the Supreme Being has this peculiar property; that as it admits of no substitute, so, from the first moment it is impressed, it is capable of continual growth and enlargement. God himself is immutable; but our conception of his

character is continually receiving fresh accessions, is continually growing more extended and refulgent, by having transferred upon it new perceptions of beauty and goodness; by attracting to itself, as a centre, whatever bears the impress of dignity, order, or happiness. It borrows splendour from all that is fair; subordinates to itself all that is great; and sits enthroned on the riches of the universe.

As the object of worship will always be, in a degree, the object of imitation, hence arises a fixed standard of moral excellence, by the contemplation of which, the tendencies to corruption are counteracted, the contagion of bad example is checked, and human nature arises above its natural level.

When the knowledge of God was lost in the world, just ideas of virtue and moral obligation disappeared along with it. How is it to be otherwise accounted for, that in the polished nations, and in the enlightened times of Pagan antiquity, the most unnatural lusts and detestable impurities were not only tolerated in private life, but entered into religion, and formed a material part of public worship. While among the Jews, a people so much inferior in every other branch of knowledge, the same vices were regarded with horror.

The reason is this: the true character of God was unknown to the former, which, by the light of divine revelation was imparted to the latter. The former cast their deities in the mould of their own imaginations, in consequence of which they partook of the vices and defects of their worshippers. To the latter, no scope was left for the wanderings of fancy, but a pure and perfect model was prescribed.

False and corrupt, however, as was the religion of the Pagans (if it deserve the name), and defective, and often vicious, as was the character of their imaginary deities, it was still better for the world for the void of knowledge to be filled with these, than abandoned to a total scepticism; for if both systems are equally false, they are not equally pernicious. When the fictions of Heathenism consecrated the memory of its legislators and heroes, it invested them for the most part with those qualities which were in the greatest repute. They were supposed to possess in the highest degree the virtues in which it was most honorable to excel, and to be the witnesses, approvers, and patrons of those perfections in others, by which their own character was chiefly distinguished. Men saw, or rather fancied they saw, in these supposed deities, the qualities they most admired, dilated to a larger size, moving in a higher sphere, and associated with the power, dignity, and happiness of superior natures. With such ideal models before them, and conceiving themselves continually acting under the eye of such spectators and judges, they felt a real elevation, their eloquence became more impassioned, their patriotism inflamed, and their courage exalted.

Revelation, by displaying the true character of God, affords a pure and perfect standard of virtue: heathenism, one in many respects defective and vicious; the fashionable scepticism of the present day, which excludes the belief of all superior powers, affords no standard at all. Human nature knows nothing better or higher than itself. All above and around it being shrouded in darkness, and the prospect confined to the tame realities of life; virtue has no room upwards to expand, nor are any excursions permitted into that unseen world, the true element of the great and good, by which it is fortified with motives equally calculated to satisfy the reason, to delight the fancy, and to impress the heart.

2. Modern infidelity not only tends to corrupt the moral taste; it also promotes the growth of those vices which are the most hostile to social happiness. Of all the vices incident to human nature, the most destructive to society are vanity, ferocity, and unbridled sensuality; and these are precisely the vices which infidelity is calculated to cherish.

That the love, fear, and habitual contemplation of a Being infinitely exalted, or in other words, devotion, is adapted to promote a sober and moderate estimate of our own excellencies, is incontestible; nor is it less evident that the exclusion of such sentiments must be favorable to pride. The criminality of pride will, perhaps, be less readily admitted; for, though there is no vice so opposite to the spirit of Christianity, yet there is none which, even in the Christian world, has, under various pretences, been treated with so much indulgence.

There is, it will be confessed, a delicate sensibility to character, a sober desire of reputation, a wish to possess the esteem of the wise and good, felt by the purest minds, and which is the farthest remove from arrogance and vanity. The humility of a noble mind scarcely dares to approve of itself until it has secured the approbation of others. Very different is that restless desire of distinction, that passion for theatrical display, which inflames the heart, and occupies the whole attention of vain men. This, of all the passions, is the most unsocial; avarice itself is not excepted. The reason is plain. Property is a kind of good which may be more easily attained, and is capable of more minute subdivisions than fame. In the pursuit of wealth, men are led by an attention to their own interest to promote the welfare of each other; their advantages are reciprocal; the benefits which each is anxious to acquire for himself, he reaps in the greatest abundance from the union and conjunction in society. The pursuits of vanity are quite contrary. The portion of time and attention mankind are willing to spare from their avocations and pleasures, to devote to the admiration of each other is so small, that every successful adventurer is felt to have impaired the common stock. The success of one is the disappointment of multitudes. For though there be many rich, many virtuous, many wise men, fame must necessarily be the portion of but few. Hence every vain man, every man in whom vanity is the ruling passion, regarding his rival as his enemy, is strongly tempted to rejoice in his miscarriage, and repine at his success.

Besides, as the passions are seldom seen in a simple, unmixed state, so vanity, when it succeeds, degenerates into arrogance; when it is

disappointed (and it is often disappointed) it is exasperated into malignity, and corrupted into envy. In this stage the vain man commences a determined misanthropist. He detests that excellence he cannot reach. He detests his species, and longs to be revenged for the unpardonable injustice he has sustained in their insensibility to his merits. He lives upon the calamities of the world; the vices and miseries of men are his element and his food. Virtue, talents, and genius, are his natural enemies, which he persecutes with instinctive eagerness, and unremitting hostility. There are who doubt the existence of such a disposition; but it certainly issues out of the dregs of disappointed vanity; a disease which taints and vitiates the whole character wherever it prevails. It forms the heart to such a profound indifference to the welfare of others, that whatever appearances he may assume, or however wide the circle of his seeming virtues may extend, you will infallibly find the vain man is his own centre. Attentive only to himself, absorbed in the contemplation of his own perfections, instead of feeling tenderness for his fellow-creatures as members of the same family, as beings with whom he is appointed to act, to suffer, and to sympathise; he considers life as a stage on which he is performing a part, and mankind in no other light than spectators. Whether he smiles or frowns, whether his path is adorned with rays of beneficence, or his steps are dyed in blood, an attention to self is the spring of every movement, and the motive to which every action is referred.

His apparent good qualities lose all their worth, by losing all that is simple, genuine, and natural: they are even pressed into the service of vanity, and become the means of enlarging its power. The truly good man is jealous over himself, lest the notoriety of his best actions, by blending itself with their motive, should diminish their value; the vain man performs the same actions for the sake of that notoriety. The good man quietly discharges his duty, and shuns ostentation; the vain man considers every good deed lost that is not publicly displayed. The one is intent upon realities, the other upon semblances: the one aims to *be* virtuous, the other to *appear* so. Nor is a mind inflated with vanity more disqualified for right action than just speculation, or better disposed to the pursuit of truth, than the practice of virtue. To such a mind the simplicity of truth is disgusting. Careless of the improvement of mankind, and intent only upon astonishing with the appearance of novelty, the glare of paradox will be preferred to the light of truth; opinions will be embraced, not because they are just, but because they are new; the more flagitious, the more subversive of morals, the more alarming to the wise and good, the more welcome to men who estimate their literary powers by the mischief they produce, and who consider the anxiety and terror they impress as the measure of their renown. Truth is simple and uniform, while error may be infinitely varied; and as it is one thing to start paradoxes, and another to make discoveries, we need the less wonder at the prodigious increase of modern philosophers.

We have been so much accustomed to consider extravagant self-estimation merely as a *ridiculous* quality, that many will be surprised to find it treated as a vice, pregnant with serious mischief to society. But to form a judgment on its influence on the manners and happiness of a nation, it is necessary to look only at its effects in a family; for bodies of men are only collections of individuals, and the greatest nation is nothing more than an aggregate of a number of families. Conceive of a domestic circle, in which each member is elated with a most extravagant opinion of himself, and a proportionable contempt of every other; is full of little contrivances to catch applause, and whenever he is not praised is sullen and disappointed. What a picture of disunion, disgust, and animosity would such a family present! How utterly would domestic affection be extinguished, and all the purposes of domestic society be defeated! The general prevalence of such dispositions must be accompanied by an equal proportion of general misery. The tendency of pride to produce strife and hatred is sufficiently apparent from the pains men have been at to contract a system of politeness, which is nothing more than a sort of mimic humility, in which the sentiments of an offensive self-estimation are so far disguised and suppressed, as to make them compatible with the spirit of society; such a mode of behaviour as would naturally result from an attention to the apostolic injunction: 'Let nothing be done through strife or vain glory; but in lowliness of mind let each esteem others better than themselves.' But if the semblance be of such importance, how much more useful the reality! If the mere garb of humility be of such indispensable necessity, that without it society could not subsist, how much better still would the harmony of the world be preserved, were the condescension, deference, and respect, so studiously displayed, a true picture of the heart?

The same restless and eager vanity which disturbs a family, when it is permitted, in a great national crisis, to mingle with political affairs, distracts a kingdom; infusing into those intrusted with the enaction of laws, a spirit of rash innovation and daring empiricism, a disdain of the established usages of mankind, a foolish desire to dazzle the world with new and untried systems of policy, in which the precedents of antiquity, and the experience of ages are only consulted to be trodden under foot; and into the executive department of government, a fierce contention for pre-eminence, an incessant struggle to supplant and destroy, with a propensity to calumny and suspicion, proscription, and massacre.

We shall suffer the most eventful season ever witnessed in the affairs of men to pass over our heads to very little purpose, if we fail to learn from it some awful lessons on the nature and progress of the passions. The true light in which the French revolution ought to be contemplated, is that of a grand experiment on human nature. Among the various passions which that revolution has so strikingly displayed, none is more conspicuous than vanity; nor is it

[illegible] without [illegible] in the [illegible] [illegible] [illegible] power, the [illegible] never before [illegible] in man [illegible] the greatest [illegible] was never before presented [illegible] [illegible] [illegible] by their birth [illegible] [illegible] [illegible] of parties, [illegible] forms of power [illegible] of degradation from [illegible] that [illegible] it was still [illegible] a general [illegible] the [illegible] the [illegible], and [illegible] of a torrent.

[illegible] pride and [illegible] from an excessive self-estimation [illegible] next to be considered, whether Providence has supplied any medicine to correct it; for the reflection on our excellencies, whether real or imaginary, is always attended with pleasure to the possessor: it is a disease deeply seated in our nature.

Suppose there were a great and glorious Being always present with us, who had given us existence, with numberless other blessings, and on whom we depended each instant, as well for every present enjoyment as for every future good: suppose again we had incurred the just displeasure of such a Being by ingratitude and disobedience, yet that in great mercy he had not cast us off, but assured us he was willing to pardon and restore us on our humble entreaty and sincere repentance; say, would not an habitual sense of the presence of this Being, self-reproach for having displeased him, and an anxiety to recover his favor, be the most effectual antidote to pride? But such are the leading discoveries made by the Christian revelation, and such the dispositions which a practical belief of it inspires. Humility is the first-fruit of religion. In the mouth of our Lord there is no maxim so frequent as the following: 'Whosoever exalteth himself shall be abased, and he that humbleth himself shall be exalted.' Religion, and that alone, teaches *absolute* humility; by which I mean a sense of our absolute nothingness in the view of infinite greatness and excellence. That sense of inferiority which results from the comparison of men with each other is often an unwelcome sentiment forced upon the mind, which may rather embitter the temper than soften it: that which devotion impresses is soothing and delightful. The devout man loves to lie low at the footstool of his Creator, because it is there he attains the most lively perceptions of the divine excellence, and the most tranquil confidence in the divine favor. In so august a presence he sees all distinctions lost, and all beings [illegible], as it were, [illegible] the same level.* He looks at his superiors without envy, and [illegible] his inferiors without contempt: and when from this elevation he descends to mix in society, the conviction of superiority, which must in many instances be felt, is a calm inference of the understanding, and no longer a busy, importunate passion of the heart.

'The wicked,' says the Psalmist, 'through the pride of their countenance, will not seek after God. God is not in all their thoughts.' When we consider the incredible vanity of the atheistical sect, together with the settled malignity and unrelenting rancour with which they pursue every vestige of religion, is it uncandid to suppose that its humbling tendency is the principal cause of their enmity; that they are eager to discard a Deity from the minds of men, that they may occupy the void; to crumble the throne of the Eternal into dust, that they may elevate themselves on its ruins; and that as their licentiousness is impatient of restraint, so their pride disdains a superior?

We mentioned a ferocity of character as one effect of sceptical impiety. It is an inconvenience attending a controversy with those with whom we have few principles in common, that we are often in danger of reasoning inconclusively, for the want of its being clearly known and settled what our opponents admit and what they deny. The persons, for example, with whom we are at present engaged, have discarded humility and modesty from the catalogue of virtues; on which account, we have employed the more time in evincing their importance: but whatever may be thought of humility as a virtue, it surely will not be denied, that inhumanity is a most detestable vice; a vice however, which scepticism has a most powerful tendency to inflame.

As we have already shown that pride hardens the heart, and that religion is the only effectual antidote—the connexion between irreligion and inhumanity is in this view obvious. But there is another light in which this part of the subject may be viewed, in our opinion, much more important, though seldom adverted to. The supposition that man is a moral and accountable being, destined to survive the stroke of death, and to live in a future world in a never ending state of happiness or misery, makes him a creature of incomparably more *consequence* than the opposite supposition. When we consider him placed here by an Almighty ruler, in a state of probation, and that the present life is his period of trial, the first link in a vast and interminable chain which stretches into eternity, he assumes a dignified character in our eyes. Every thing which relates to him becomes interesting; and to trifle with his happiness is felt to be the most unpardonable levity. If such be the destination of man, it is evident that in the qualities which fit him for it his principal dignity consists: his moral greatness in his true greatness. Let the sceptical principles be admitted, which represent him, on the contrary, as the offspring of chance, connected with no superior power, and sinking into annihilation at death, and he is a contemptible creature, whose existence and

* *Æquo pulsat pede pauperum tabernas regumque turres.*

happiness are insignificant. The characteristic difference is lost between him and the brute creation, from which he is no longer distinguished, except by the vividness and multiplicity of his perceptions.

If we reflect on that part of our nature which disposes us to humanity, we shall find that, where we have no particular attachment, our sympathy with the sufferings and concern for the destruction of sensitive beings, are in proportion to their supposed importance in the general scale; or, in other words, to their supposed capacity of enjoyment. We feel, for example, much more at witnessing the destruction of a man, than of an inferior animal, because we consider it as involving the extinction of a much greater sum of happiness. For the same reason he who could shudder at the slaughter of a large animal, will see a thousand insects perish without a pang. Our sympathy with the calamities of our fellow-creatures is adjusted to the same proportions; for we feel more powerfully affected with the distresses of fallen greatness than with equal or greater distresses sustained by persons of inferior rank; because, having been accustomed to associate with an elevated station, the idea of superior happiness, the loss appears the greater, and the wreck more extensive. But the disproportion in importance between man and the meanest insect, is not so great as that which subsists between man considered as *mortal* and *immortal*; that is as between man as he is represented by the system of scepticism, and that of divine revelation: for the enjoyment of the meanest insect bears some proportion, though a very small one, to the present happiness of man; but the happiness of time bears none at all to that of eternity. The sceptical system, therefore, sinks the importance of human existence to an inconceivable degree. From these principles result the following important inference—that to extinguish human life by the hand of violence, must be quite a different thing in the eyes of a sceptic, from what it is in the eyes of a christian. With the sceptic it is nothing more than diverting the course of a little red fluid, called blood; it is merely lessening the number by one of many millions of fugitive contemptible creatures. The christian sees in the same event an accountable being cut off from a state of probation, and hurried, perhaps unprepared, into the presence of his Judge, to hear that final, that irrevocable sentence, which is to fix him for ever in an unalterable condition of felicity or woe. The former perceives in death nothing but its physical circumstances; the latter is impressed with its moral consequences. It is the moral relation which man is supposed to bear to a superior power, the awful idea of accountability, the influence which his present dispositions and actions are conceived to have upon his eternal destiny, more than any superiority of intellectual powers abstracted from these considerations, which invest him with such mysterious grandeur, and constitute the firmest guard on the sanctuary of human life. This reasoning, it is true, serves more *immediately* to show how the disbelief of a future state endangers the security of life; but, though this be its *direct* consequence, it extends by analogy much further, since he who has learned to sport with the *lives* of his fellow-creatures will feel but little solicitude for their welfare in any other instance; but, as the greater includes the less, will easily pass from this to all the inferior gradations of barbarity.

As the advantage of the armed over the unarmed is not seen till the moment of attack, so in that tranquil state of society in which law and order maintain their ascendency, it is not perceived, perhaps not even suspected, to what an alarming degree the principles of modern infidelity leave us naked and defenceless. But let the state be convulsed, let the mounds of regular authority be once overflowed, and the still small voice of law drowned in the tempest of popular fury (events which recent experience shows to be possible), it will then be seen that atheism is a school of ferocity; and that having taught its disciples to consider mankind as little better than a nest of insects, they will be prepared in the fierce conflicts of party to trample upon them without pity, and extinguish them without remorse.

It was late before the atheism of Epicurus gained footing at Rome; but its prevalence was soon followed by such scenes of proscription, confiscation, and blood, as were *then* unparalleled in the history of the world; from which the republic being never able to recover itself, after many unsuccessful struggles, exchanged liberty for repose, by submission to absolute power. Such were the effects of atheism at Rome. An attempt was made to establish a similar system in France, the consequences of which are too well known to render it requisite for us to shock your feelings by a recital. The only doubts that can arise is, whether the barbarities which stained the revolution in that unhappy country, are justly chargeable on the prevalence of atheism. Let those who doubt of this recollect that the men who by their activity and talents, prepared the minds of the people for that great change, *Voltaire*, *D'Alembert*, *Diderot*, *Rousseau*, and others, were avowed enemies of revelation; that in all their writings the diffusion of scepticism and revolutionary principles went hand in hand, that the fury of the most sanguinary parties was especially pointed against the christian priesthood and religious institutions, without once pretending, like other persecutors, to execute the vengeance of God (whose name they never mentioned) upon his enemies; that their atrocities were committed with a wanton levity and brutal merriment; that the reign of atheism was avowedly and expressly the reign of terror; that in the full madness of their career, in the highest climax of their horrors, they shut up the temples of God, abolished his worship, and proclaimed death to be an eternal sleep; as if by pointing to the silence of the sepulchre, and the sleep of the dead, these ferocious barbarians meant to apologize for leaving neither sleep, quiet, nor repose, to the living.

As the heathens fabled that Minerva issued full armed from the head of Jupiter, so no sooner were the speculations of atheistical philo-

sophy matured, than they gave birth to a ferocity which converted the most polished people in Europe into a horde of assassins; the seat of voluptuous refinement, of pleasure, and of arts, into a theatre of blood.

Having already shown that the principles of infidelity facilitate the commission of crimes, by removing the restraints of fear; and that they foster the arrogance of the individual, while they inculcate the most despicable opinion of the species; the inevitable result is, that a haughty self-confidence, a contempt of mankind, together with a daring defiance of religious restraints, are the natural ingredients of the atheistical character; nor is it less evident that these are, of all others, the dispositions which most forcibly stimulate to violence and cruelty.

We may, therefore regard it as a maxim never to be effaced or forgotten, that atheism is an inhuman, bloody, ferocious system, equally hostile to every useful restraint, and to every virtuous affection; that leaving nothing above us to excite awe, nor around us to awaken tenderness, it wages war with heaven and with earth; its first object is to dethrone God, its next to destroy man.

There is a third vice not less destructive to society than either of those which have been already mentioned, to which the system of modern infidelity is favourable; that is unbridled sensuality, the licentious and unrestrained indulgence of those passions which are essential to the continuation of the species. The magnitude of these passions, and their supreme importance to the existence as well as the peace and welfare of society, have rendered it one of the first objects of solicitude with every wise legislator, to restrain them by such laws, and to confine their indulgence within such limits as shall best promote the great ends for which they were implanted.

The benevolence and wisdom of the Author of Christianity, are eminently conspicuous in the laws he has enacted on this branch of morals; for while he authorizes marriage, he restrains the vagrancy and caprice of the passions, by forbidding polygamy and divorce; and well knowing that offences against the laws of chastity usually spring from an ill-regulated imagination, he inculcates purity of heart. Among innumerable benefits which the world has derived from the Christian religion, a superior refinement in the sexual sentiments, a more equal and respectful treatment of women, greater dignity and permanence conferred on the institution of marriage, are not the least considerable; in consequence of which, the purest affections, and the most sacred duties, are grafted on the stock of the strongest instincts.

The aim of all the leading champions of infidelity is to rob mankind of these benefits, and throw them back into a state of gross and brutal sensuality. In this spirit, Mr. Hume represents the private conduct of the profligate Charles, whose debaucheries polluted the age, as a just subject of panegyric. A disciple in the same school had the unblushing effrontery to stigmatize marriage as the worst of all monopolies; and, in a narrative of his licentious amours, made a formal apology for departing from his principles, by submitting to its restraints. The popular productions on the continent, which issue from the atheistical school, are incessantly directed to the same purpose.

Under every possible aspect in which infidelity can be viewed, it extends the dominion of sensuality: it repeals and abrogates every law by which divine revelation has, under such awful sanctions, restrained the indulgence of the passions. The disbelief of a supreme omniscient Being, which it inculcates, releases its disciples from an attention to the *heart*, from every care but the preservation of outward decorum; and the exclusion of the devout affections, and an unseen world, leaves the mind immersed in visible sensible objects.

There are two sorts of pleasures, corporeal and mental. Though we are indebted to the senses for all our perceptions *originally*, yet those which are at the furthest remove from their *immediate impressions*, confer the most elevation on the character, since in proportion as they are multiplied and augmented, the slavish subjection to the senses is subdued. Hence the true and only antidote to debasing sensuality, is the possession of a fund of that *kind of enjoyment* which is independent of the corporeal appetites. Inferior in the perfection of several of his senses to different parts of the brute creation, the superiority of man over them all consists in his superior power of multiplying by new combinations his mental perceptions, and thereby of creating to himself resources of happiness separate from external sensation.

In the scale of enjoyment, the first remove from sense are the pleasures of reason and society; at the next are the pleasures of devotion and religion. The former, though totally distinct from those of sense, are yet less perfectly adapted to moderate their excesses than the last, as they are in a great measure conversant with visible objects. The religious affections and sentiments are, in fact, and were intended to be, the *proper antagonist* of sensuality; the great deliverer from the thraldom of the appetites, by opening a spiritual world, and inspiring hopes and fears, and consolations and joys, which bear no relation to the material and sensible universe. The criminal indulgence of sensual passions admits but of two modes of prevention; the establishment of such laws and maxims in society as shall render lewd profligacy impracticable or infamous, or the infusion of such principles and habits as shall render it distasteful. Human legislators have encountered the disease in the first, the truths and sanctions of revealed religion in the last, of these methods: to both of which the advocates of modern infidelity are equally hostile.

From the records of revelation, we learn that marriage, or the *permanent union* of the sexes, was ordained by God, and existed under different modifications in the early infancy of mankind, without which they could never have emerged from barbarism. For conceive only what eternal discord, jealousy, and violence would ensue, were the objects of the tenderest affections secured to their possessor by no law

or tie of moral obligation: were domestic enjoyments disturbed by incessant fear, and licentiousness inflamed by hope. Who could find sufficient tranquillity of mind to enable him to plan or execute any continued scheme of action, or what room for arts or sciences, or religion, or virtue, in that state in which the chief earthly happiness was exposed to every lawless invader; where one was racked with an incessant anxiety to keep what the other was equally eager to acquire? It is not probable in itself, independent of the light of scripture, that the benevolent Author of the human race ever placed them in so wretched a condition at first; it is certain they could not remain in it long without being exterminated. Marriage, by shutting out these evils, and enabling every man to rest secure in his enjoyments, is the great civilizer of the world: with this security, the mind is at liberty to expand in generous affections, has leasure to look abroad, and engage in the pursuits of knowledge, science, and virtue.

Nor is it in this way only that marriage institutions are essential to the welfare of mankind. They are sources of tenderness as well as the guardians of peace. Without the permanent union of the sexes, there can be no permanent families: the dissolution of nuptial ties involves the dissolution of domestic society. But domestic society is the seminary of social affections, the cradle of sensibility, where the first elements are acquired of that tenderness and humanity which cement mankind together; and which, were they entirely extinguished, the whole fabric of social institutions would be dissolved.

Families are so many centres of attraction, which preserve mankind from being scattered and dissipated by the repulsive power of selfishness. The order of nature is evermore from particulars to generals. As in the operations of intellect we proceed from the contemplation of individuals to the formation of general abstractions, so in the developement of the passions in like manner, we advance from private to public affections; from the love of parents, brothers, and sisters, to those more expanded regards which embrace the immense society of human kind.

In order to render men benevolent, they must first be made tender: for benevolent affections are not the offspring of reasoning; they result from that culture of the heart, from those early impressions of tenderness, gratitude, and sympathy, which the endearments of domestic life are sure to supply, and for the formation of which it is the best possible school.

The advocates of infidelity invert this eternal order of nature. Instead of inculcating the private affections, as a discipline by which the mind is prepared for those of a more public nature, they set them in direct opposition to each other, they propose to build general benevolence on the destruction of individual tenderness, and to make us love the whole species more, by loving every particular part of it less. In pursuit of this chimerical project, gratitude, humility, conjugal, parental, and filial affection, together with every other social disposition, are reprobated—virtue is limited to a passionate attachment to the general good. It is natural to ask, when all the tenderness of life is extinguished, and all the bands of society are untwisted, from whence this ardent affection for the general good is to spring?

When this savage philosophy has completed its work, when it has taught its disciples to look with perfect indifference on the offspring of his body, and the wife of his bosom, to estrange himself from his friends, insult his benefactors, and silence the pleadings of gratitude and pity; will he, by thus divesting himself of all that is human, be better prepared for the disinterested love of his species? Will he become a philanthropist only because he has ceased to be a man? Rather, in this total exemption from all the feelings which humanize and soften, in this chilling frost of universal indifference, may we not be certain selfishness unmingled and uncontrolled, will assume the empire of his heart; and that, under pretence of advancing the general good, an object to which the fancy may give innumerable shapes, he will be prepared for the violation of every duty, and the perpetration of every crime? Extended benevolence is the last and most perfect fruit of the private affections; so that to expect to reap the former from the extinction of the latter, is to oppose the means to the end; is as absurd as to attempt to reach the summit of the highest mountain without passing through the intermediate spaces, or to hope to attain the heights of science by forgetting the first elements of knowledge. These absurdities have sprung, however, in the advocates of infidelity, from an ignorance of human nature, sufficient to disgrace even those who did not style themselves philosophers. Presuming, contrary to the experience of every moment, that the affections are awakened by *reasoning*, and perceiving that the general good is an incomparably greater object *in itself* than the happiness of any limited number of individuals, they inferred nothing more was necessary than to exhibit it in just dimensions, to draw the *affections* towards it, as though the fact of the superior populousness of China to Great Britain, needed but to be known to render us indifferent to our domestic concerns, and lead us to direct all our anxiety to the prosperity of that vast, but remote empire.

It is not the province of reason to awaken new passions, or open new sources of sensibility; but to direct us in the attainment of those objects which nature has already rendered pleasing, or to determine among the interfering inclinations and passions which sway the mind, which are the fittest to be preferred.

Is a regard to the general good, then you will reply, to be excluded from the motives of action? Nothing is more remote from our intention: but as the nature of this motive has in our opinion, been much misunderstood by some good men, and abused by others, of a different description, to the worst of purposes, permit us to declare in a few words, what appears to us, to be the truth on this subject.

The welfare of the whole system of being, must be allowed to be, *in itself*, the object of all

others the most worthy of being pursued; so that could the mind distinctly embrace it and discern at every step *what action* would infallibly promote it, we should be furnished with a sure criterion of right and wrong, an unerring guide, which would supersede the use and necessity of all inferior rules, laws, and principles.

But this being impossible, since the good of the *whole* is a motive so loose and indeterminate, and embraces such an infinity of relations, that before we could be certain what action it prescribed, the season of action would be past; to weak, short-sighted, mortals, Providence has assigned a sphere of agency less grand, and extensive indeed, but better suited to their limited powers, by implanting certain *affections* which it is their duty to cultivate, and suggesting particular rules to which they are bound to conform. By these provisions the boundaries of virtue are easily ascertained, at the same time that its ultimate object, the good of the whole is secured; for, since the happiness of the entire system results from the happiness of the several parts, the affections, which confine the attention *immediately* to the latter, conspire in the end to the promotion of the former; as the labourer, whose industry is limited to a corner of a large building, performs his part towards rearing the structure much more effectually than if he extended his care to the whole.

As the interest, however, of any limited number of persons may not only contribute, but, may possibly be directly opposed to the general good (the interest of a family, for example, to that of a province, or of a nation to that of the world), Providence has so ordered it, that in a well-regulated mind there springs up, as we have already seen, besides particular attachments, *an extended regard to the species*, whose office is two-fold: not to *destroy* and *extinguish* the more private affections, which is mental parricide; but first, as far as is consistent with the claims of those who are immediately committed to our care, *to do good to all men*; secondly, to exercise a jurisdiction and control over the private affections, so as to prohibit their indulgence, whenever it would be attended with *manifest detriment* to the whole. Thus every part of our nature is brought into action; all the practical principles of the human heart find an element to move in, each in its different sort and manner conspiring, without mutual collisions, to maintain the harmony of the world, and the happiness of the universe.

Three circumstances attending the promulgation of modern infidelity, which at the time, were equally new and alarming, are worthy of peculiar consideration.

1. It was the first attempt ever witnessed on an extensive scale to establish *the principles of Atheism*; the first effort which history has recorded to disannul and extinguish the belief of all superior powers; the consequence of which, had it succeeded, would have placed mankind in a situation never before experienced, not even during the ages of Pagan darkness. The system of Polythism was as remote from modern infidelity as from true religion. Amidst that rubbish of superstition, the product of fear, ignorance, and vice, which had been accumulating for ages, some faint embers of sacred truth remained unextinguished; the interposition of unseen powers in the affairs of men was believed and revered, the sanctity of oaths was maintained, the idea of *revelation* and of *tradition* as a source of religious knowledge, was familiar; a useful persuasion of the existence of a future world was kept alive, and the greater gods were looked up to as the guardians of the public welfare, the patrons of those virtues which promote the prosperity of states, and the avengers of injustice, perfidy, and fraud.

Of whatever benefit superstition might formerly be productive, by the scattered particles of truth which it contained, these advantages can now only be reaped from the soil of true religion; nor is there any alternative left, than the belief of Christianity, or absolute Atheism. In the revolution of the human mind, exploded *opinions* are often revived, but an exploded superstition never recovers its credit. The pretension to divine revelation is so august and commanding, that when its falsehood is once discerned, it is covered with all the ignominy of detected imposture; it falls from such a height, (to change the figure,) that it is inevitably crumbled into atoms. Religions, whether false or true, are not creatures of arbitrary institution. After discrediting the principles of piety, should our modern free-thinkers find it necessary, in order to restrain the excesses of ferocity, to seek for a substitute in some popular superstition; it will prove a vain and impracticable attempt: they may recal the names, restore the altars, and revive the ceremonies, but to re-kindle the spirit of heathenism, will exceed their power; because it is impossible to enact ignorance by law, or to repeal by legislative authority, the dictates of reason, and the light of science.

2. The efforts of infidels to diffuse the principles of infidelity among the common people is another alarming symptom peculiar to the present time. Hume, Bolingbroke, and Gibbon, addressed themselves solely to the more polished classes of the community, and would have thought their refined speculations debased by an attempt to enlist disciples from among the populace. Infidelity has lately grown condescending: bred in the speculations of a daring philosophy, immured at first in the cloisters of the learned, and afterwards nursed in the lap of voluptuousness and of courts; having at length reached its full maturity, it boldly ventures to challenge the suffrages of the people, solicits the acquaintance of peasants and mechanics, and seeks to draw whole nations to its standard. It is not difficult to account for this new state of things: while infidelity was rare, it was employed as the instrument of literary vanity; its wide diffusion having disqualified it for answering that purpose, it is now adopted as the organ of political convulsion. Literary distinction is conferred by the approbation of a few: but the total subversion and overthrow of society demands the concurrence of millions.

3. The infidels of the present day are the first sophists who have presumed to innovate in the very *substance* of morals. The disputes on

moral questions, hitherto agitated amongst philosophers, have respected the *grounds* of duty, not the *nature of duty itself*; or they have been merely metaphysical, and related to the *history* of moral sentiments in the mind, the sources and principles from which they were most easily deduced; they never turned on the quality of those dispositions and actions which were to be denominated virtuous. In the firm persuasion that the love and fear of the Supreme Being, the sacred observation of promises and oaths, reverence to magistrates, obedience to parents, gratitude to benefactors, conjugal fidelity, and parental tenderness, were primary virtues, and the chief support of every commonwealth, they were unanimous. The curse denounced upon such as remove ancient land-marks, upon those who call good evil, and evil good, put light for darkness, and darkness for light, who employ their faculties to subvert the eternal distinctions of right and wrong, and thus to poison the streams of virtue at their source, falls with accumulated weight on the advocates of modern infidelity, and on them alone.

By permitting to a certain extent the prevalence of infidelity, Providence is preparing new triumphs for religion. In asserting its authority, the preachers of the gospel have hitherto found it necessary to weigh the prospects of immortality against the interests of time; to strip the world of its charms, to insist on the deceitfulness of pleasure, the unsatisfying nature of riches, the emptiness of grandeur and the nothingness of a mere worldly life. Topics of this nature will always have their use; but it is not by such representations alone that the importance of religion is evinced. The prevalence of impiety has armed us with new weapons in its defence.

Religion being primarily intended to make men 'wise unto salvation,' the support it ministers to social order, the stability it confers on government and laws, is a subordinate species of advantage which we should have continued to enjoy without reflecting on its cause, but for the developement of deistical principles, and the experiment which has been made of their effects in a neighbouring country. It had been the constant boast of infidels, that their system, more liberal and generous than Christianity, needed but to be tried to produce an immense accession to human happiness; and Christian nations, careless and supine, retaining little of religion but the profession, and disgusted with its restraints, lent a favourable ear to these pretensions. God permitted the trial to be made. In one country, and that the centre of Christendom, revelation underwent a total eclipse, while atheism, performing on a darkened theatre its strange and fearful tragedy, confounded the first elements of society, blended every age, rank and sex, in indiscriminate proscription and massacre, and convulsed all Europe to its centre; that the imperishable memorial of these events might teach the last generations of mankind to consider religion as the pillar of society—the safe-guard of nations—the parent of social order, which alone has power to curb the fury of the passions, and secure to every one his rights; to the laborious, the reward of their industry—to the rich, the enjoyment of their wealth—to nobles, the preservation of their honors, and to princes the stability of their thrones.

We might ask the patrons of infidelity, what fury impels them to attempt the subversion of Christianity. Is it that they have discovered a better system? To what virtues are their principles favourable? Or is there one which Christians have not carried to a higher perfection than any of which their party can boast? Have they discovered a more excellent rule of life, or a better hope in death than that which the scriptures suggest? Above all, what are the pretensions on which they rest their claims to be the guides of mankind, or which embolden them to expect we should trample upon the experience of ages, and abandon a religion which has been attested by a train of miracles and prophecies, in which millions of our forefathers have found a refuge in every trouble, and consolation in the hour of death; a religion which has been adorned with the highest sanctity of character, and splendour of talents, which enrols amongst its disciples the names of Bacon, Newton, and Locke, the glory of their species, and to which these illustrious men were proud to dedicate the last and best fruits of their immortal genius?

If the question at issue is to be decided by argument, nothing can be added to the triumph of Christianity; if by an appeal to authority, what have our adversaries to oppose to these great names? Where are the infidels of such pure, uncontaminated morals, unshaken probity, and extended benevolence, that we should be in danger of being seduced into impiety by their example? Into what obscure recesses of misery, into what dungeons have their philanthropists penetrated, to lighten the fetters and relieve the sorrows of the helpless captive? What barbarous tribes have their Apostles visited? What distant climes have *they* explored, encompassed with cold, nakedness, and want, to diffuse principles of virtue, and blessings of civilization? Or will they rather choose to wave their pretensions to this extraordinary, and in their eyes, eccentric species of benevolence, (for infidels, we know, are sworn enemies to enthusiasm of every sort) and rest their character on their political exploits; on their efforts to re-animate the virtue of a sinking state, to restrain licentiousness to calm the tumults of popular fury; and, by inculcating the spirit of justice, moderation and pity for fallen greatness, to mitigate the inevitable horrors of revolution? Our adversaries will at least have the discretion, if not the modesty, to secede from the test.

More than all, their infatuated eagerness, their parricidal zeal to extinguish a sense of Deity, must excite astonishment and horror. Is the idea of an Almighty and perfect Ruler unfriendly to any passion which is consistent with innocence, or an obstruction to any design which it is not shameful to avow. Eternal God! on what are thine enemies intent? What are those enterprizes of guilt and horror, that, for the safety of their performers, require to be enveloped in a darkness which the eye of heaven must not pierce! Miserable men! Proud of

being the offspring of chance; in love with universal disorder; whose happiness is involved in the belief of there being no witness to their designs, and who are at ease only because they suppose themselves inhabitants of a forsaken and fatherless world

Having been led by the nature of the subject to consider chiefly the manner in which sceptical impiety affects the welfare of states, it is the more requisite to warn you against that most fatal mistake of regarding religion as an engine of policy; and to recall to your recollection that the concern we have in it is much more as *individuals* than as *collective bodies*, and far less temporal than eternal. The happiness which it confers in the present life comprehends the blessings which it scatters by the way in its march to immortality. That future condition of being which it ascertains, and for which its promises and truths are meant to prepare us, is the ultimate end of human societies, the final scope and object of present existence; in comparison of which all the revolutions of nations, and all the vicissitudes of time, are light and transitory. 'Godliness has, it is true, the promise of the life that now is; but chiefly of that which is to come.' Other acquisitions may be requisite to make men great; but, be assured, the religion of Jesus is alone sufficient to make them good and happy. Powerful sources of consolation in sorrow, unshaken fortitude amidst the changes and perturbations of the world, humility remote from meanness, and dignity unrestrained by pride, contentment in every station, passions pure and calm, with habitual serenity, the full enjoyment of life, undisturbed by the dread of dissolution or the fear of an hereafter, are its invaluable gifts. To these enjoyments, however, you will necessarily continue strangers, unless you resign yourselves wholly to its power; for the consolations of religion are reserved to reward, to sweeten, and to stimulate obedience. Many, without renouncing the profession of Christianity, without formally rejecting its distinguishing doctrines, live in such an habitual violation of its laws, and contradiction to its spirit, that, conscious they have more to fear than to hope from its truth, they are never able to contemplate it without terror. It haunts their imagination, instead of tranquillizing their hearts, and hangs with depressing weight on all their enjoyments and pursuits. Their religion, instead of comforting them under their troubles, is itself their greatest trouble, from which they seek refuge in the dissipation and vanity of the world, until the throbs and tumults of conscience force them back upon religion. Thus suspended betwixt opposite powers, the sport of contradictory influences, they are disqualified for the happiness of both worlds; and neither enjoy the pleasures of sin, nor the peace of piety. Is it surprising to find a mind thus bewildered in uncertainty, and dissatisfied with itself, courting deception and embracing with eagerness every pretext to mutilate the claims and enervate the authority of Christianity; forgetting that it is of the very essence of the religious principle to preside and control, and that it is impossible to 'serve God and mammon?' It is this class of professors who are chiefly in danger of being entangled in the snares of infidelity.

The champions of infidelity have much more reason to be ashamed than to boast of such converts. For what can be a stronger presumption of the falsehood of a system, than that it is the opiate of a restless conscience; that it prevails with minds of a certain description, not because they find it true, but because they feel it necessary; and that in adopting it they consult less with their reason than with their vices and their fears? It requires but little sagacity to foresee that speculations which originate in guilt must end in ruin. Infidels are not themselves satisfied with the truth of their system: for had they any settled assurance of its principles, in consequence of calm dispassionate investigation, they would never disturb the quiet of the world by their attempts to proselyte; but would lament their own infelicity, in not being able to perceive sufficient evidence for the truth of religion, which furnishes such incentives to virtue, and inspires such exalted hopes. Having nothing to substitute in the place of religion, it is absurd to suppose that, in opposition to the collective voice of every country, age, and time, proclaiming its necessity, solicitude for the welfare of mankind impels them to destroy it.

To very different motives must their conduct be imputed. More like conspirators than philosophers, in spite of the darkness with which they endeavour to surround themselves, some rays of unwelcome conviction will penetrate, some secret apprehensions that all is not right will make themselves felt, which they find nothing so effectual to quell as an attempt to enlist fresh disciples, who, in exchange for new principles, impart confidence, and diminish fear. For the same reason it is seldom they attack Christianity by argument: their favourite weapons are ridicule, obscenity, and blasphemy; as the most miserable outcasts of society are, of all men, found most to delight in vulgar merriment and senseless riot.

Jesus Christ seems to have 'his fan in his hand, to be thoroughly purging his floor;' and nominal christians will probably be scattered like chaff. But has *real* Christianity any thing to fear? Have not the degenerate manners and corrupt lives of multitudes in the visible church been, on the contrary, the principal occasion of scandal and offence? Infidelity, without intending it, is gradually removing this reproach: possessing the property of attracting to itself the morbid humours which pervade the church, until the christian profession, on the one hand, is reduced to a sound and healthy state, and scepticism, on the other, exhibits nothing but a mass of putridity and disease.

In a view of the final issue of the contest, we should find little cause to lament the astonishing prevalence of infidelity, but for a solicitude for the rising generation, to whom its principles are recommended by two motives, with young minds the most persuasive; the love of independence, and the love of pleasure. With respect to the first, we would earnestly entreat the young to remember that, by the unanimous consent of all ages, modesty, docility, and reverence to su-

perior years, and to parents above all, have been considered as their *appropriate virtues*, a guard assigned by the immutable laws of God and nature on the inexperience of youth; and with respect to the second, that Christianity prohibits no pleasures that are innocent, lays no restraints that are capricious; but that the sobriety and purity which it enjoins, by strengthening the intellectual powers, and preserving the faculties of mind and body in undiminished vigour, lay *the surest* foundation of present peace and future eminence. At such a season as this, it becomes an urgent duty on parents, guardians, and tutors, to watch, not only over the morals, but the principles of those committed to their care; to make it appear that a concern for their eternal welfare is their chief concern; and to imbue them early with that knowledge of the evidences of Christianity, and that profound reverence for the Scriptures, that, with the blessing of God (which, with submission, they may then expect), 'may keep them from this hour of temptation that has come upon all the world, to try them that dwell on the earth.'

To an attentive observer of the signs of the times it will appear one of the most extraordinary phenomena of this eventful crisis, that, amidst the ravages of atheism and infidelity, real religion is evidently on the increase. 'The kingdom of God,' we know, 'cometh not with observation;' but still there are not wanting manifest tokens of its approach. The personal appearance of the Son of God was announced by the shaking of nations; his spiritual kingdom, in all probability, will be established in the midst of similar convulsions and disorders. The blasphemous impiety of the enemies of God, as well as the zealous efforts of his sincere worshippers, will doubtless be overruled to accomplish the purposes of his unerring providence: while, in inflicting the chastisements of offended Deity on corrupt communities and nations, infidelity marks its progress by devastation and ruin, by the prostration of thrones and concussion of kingdoms; thus appalling the inhabitants of the world, and compelling them to take refuge in the church of God, the true sanctuary; the stream of divine knowledge, unobserved, is flowing in new channels, winding its course among humble valleys, refreshing thirsty deserts, and enriching with far other and higher blessings than those of commerce, the most distant climes and nations, until, agreeably to the prediction of prophecy, the 'knowledge of the Lord shall fill and cover the whole earth.'

Within the limits of this discourse it would be impracticable to exhibit the evidences of christianity, nor is it my design; but there is one consideration, resulting immediately from my text, which is entitled to great weight with all who believe in the one living and true God as the sole object of worship. The Ephesians, in common with other Gentiles, are described in the text as being, previous to their conversion, 'without God in the world;' that is, without any just and solid acquaintance with his character, destitute of the knowledge of his will, the institutes of his worship, and the hopes of his favour; to the truth of which representation whoever possesses the slightest acquaintance with pagan antiquity must assent. Nor is it a fact less incontestable, that, while human philosophy was never able to abolish idolatry in a single village, the promulgation of the gospel overthrew it in a great part (and that the most enlightened) of the world. If our belief in the unity and perfections of God, together with his moral government, and exclusive right to the worship of mankind, be founded in truth, they cannot reasonably be denied to be truths of the first importance, and infinitely to outweigh the greatest discoveries in science; because they turn the hopes, fears, and interests of man into a totally different channel from that in which they must otherwise flow. Wherever these principles are first admitted, there a new dominion is erected, and a new system of laws established.

But since all events are under divine direction, is it reasonable to suppose that the great Parent, after suffering his creatures to continue for ages ignorant of his true character, should at length, in the course of his providence, fix upon falsehood, and that alone, as the effectual method of making himself known; and that what the virtuous exercise of reason in the best and wisest men was never permitted to accomplish, he should confer on fraud and delusion the honour of effecting? It ill comports with the majesty of truth, or the character of God, to believe that he has built the noblest superstructure on the weakest foundation; or reduced mankind to the miserable alternative either of remaining destitute of the knowledge of himself, or of deriving it from the polluted source of impious imposture. We therefore feel ourselves justified on this occasion, in adopting the triumphant boast of the great apostle: 'Where is the wise, where is the scribe, where is the disputer of this world? Hath not God made foolish the wisdom of this world? For after that, in the wisdom of God, the world by wisdom knew not God, it pleased God by the foolishness of preaching to save them that believe.'—R. Hall.

Infanticide, the murder of infants, although one of the most horrible and unnatural of crimes, has (to the disgrace of our species) been found to exist as a regular and systematic custom among whole tribes of the eastern nations. The exposure of deformed children among the Spartans, indeed, the sacrifices to Moloch among the Ammonites, the 300 young nobles to Saturn at Carthage, and various other similar occurrences, are abundant evidences of the existence of infanticide in the ancient world. But it was reserved for the discoveries of modern times to find tribes of human beings regularly destroying all their female children, the mothers themselves being generally their executioners.

Some years ago it was reported by Mr. Duncan, then resident at Benares, that a sect of Hindoos in that neighbourhood, called Ràjkùmàrs, were in the habit of destroying all their female infants. Mr. Duncan at length succeeded in persuading this deluded tribe to relinquish their barbarous habit; and so effectually that no instance has since been discovered of an infringement of the written penal obligation that

the chiefs and other individuals of that tribe then voluntarily entered into. As well as the Ràj-kùmàrs, other sects of Hindoos, in the vicinity of Benares, were found to have been in similar habits, though to a less extent, and they executed a similar deed of renunciation.

Among the military tribe of Jàrejàhs infanticide was found so common, that a Jàrejàh female was very rarely seen or heard of. The men of this tribe procured wives from others who reared their daughters. The number of infants, thus sacrificed, amounted, by one computation, to 30,000 annually, in the peninsula of Guzerat alone: but this colonel Walker deemed an exaggeration. To render the deed more horrible, the mother was commonly the executioner of her own offspring; for, although women of rank had attendants and slaves to perform the office, the far greater number executed it with their own hands. Colonel Walker at length, however, prevailed on this tribe formally to relinquish and renounce by deed the practice of infanticide.

INFANTRY. This word is said to take its origin from one of the infantas of Spain, who, finding that the army commanded by the king, her father, had been defeated by the Moors, assembled a body of foot soldiers, and with them engaged and totally routed the enemy. In memory of this event, and to honor the foot soldiers, who were not before held in much consideration, they received the name of infantry. Dr. Robertson, however, well observes, in his View of the State of Europe prefixed to the History of Charles V., that it is to the Swiss discipline that Europe is indebted for the early establishment of infantry in her armies. The arms and discipline of the Swiss, he observes, were different from those of other European nations. During their long and violent struggles in defence of their liberties against the house of Austria, whose armies, like those of other considerable princes, consisted chiefly of heavy-armed cavalry, the Swiss found that their poverty, and the small number of gentlemen residing in their country, at that time barren and ill cultivated, put it out of their power to bring into the field any body of horse capable of facing the enemy. Necessity compelled them to place all their confidence in infantry; and, in order to render it capable of withstanding the shock of cavalry, they gave the soldiers breast-plates and helmets, as defensive armour, together with long spears, halberts, and heavy swords, as weapons of offence. They formed them into large battalions, ranged in deep and close array, so that they might present on every side a formidable front to the enemy. The men at arms could make no impression on the solid strength of such a body. It repulsed the Austrians in all their attempts to conquer Switzerland. It broke the Burgundian gendarmerie, which was scarcely inferior to that of France, either in number or reputation; and, when first called to act in Italy, it bore down, by its irresistible force, every enemy that attempted to oppose it. These repeated proofs of the decisive effects of infantry, exhibited on such conspicuous occasions, restored that service to reputation, and gradually re-established the opinion which had been long exploded, of its superior importance in the operations of war. But the glory the Swiss had acquired having inspired them with such high ideas of their own prowess and consequence as frequently rendered them mutinous and insolent, the princes who employed them became weary of depending on the caprice of foreign mercenaries, and began to turn their attention towards the improvement of their national infantry.

The German powers, having the command of men whom nature has endowed with that steady courage and persevering strength which form them to be soldiers, soon modelled their troops in such a manner that they vied with the Swiss both in discipline and valor.

The French monarchs, though more slowly and with greater difficulty, accustomed the impetuous spirit of their people to subordination and discipline; and were at such pains to render their national infantry respectable, that, as early as the reign of Louis XII., several gentlemen of high rank had so far abandoned their ancient ideas as to condescend to enter into their service.

The Spaniards, whose situation made it difficult to employ any other than their national troops in the southern parts of Italy, which was the chief scene of their operations in that country, not only adopted the Swiss discipline, but improved upon it, by mingling a proper number of soldiers, armed with heavy muskets, in their battalions; and thus formed that famous body of infantry which, during a century and a half, was the admiration and terror of all Europe.

The Italian states gradually diminished the number of their cavalry, and, in imitation of their more powerful neighbours, brought the strength of their armies to consist in foot-soldiers. From this period the nations of Europe have carried on war with forces more adapted to every species of service, more capable of acting in every country, and better fitted both for making conquests, and for preserving them.

INFANTRY, HEAVY-ARMED, among the ancients, were such as wore a complete suit of armour, and engaged with broad shields and long spears. They were the flower and strength of the Grecian armies, and had the highest rank of military honor.

INFANTRY, LIGHT, among the moderns, have only been in use since the middle of the seventeenth century. They have no camp equipage to carry, and their arms and accoutrements are much lighter than those of the infantry. Light infantry are the eyes of a general, and wherever there is found light cavalry, there should be light infantry. They should be accustomed to the pace of four miles an hour, as their usual marching pace, and be able to march at five miles an hour upon particular occasions. Every regiment has a company of light infantry, whose station is on the left of the regiment, the right being occupied by the grenadiers.

INFARCTION, *n. s.* Lat. *in* and *farcio*. Stuffing; constipation.

INFATUATE, *adj.* } Lat. *infatuo*, from *in*
INFATUA'TION, *n. s.* } and *fatuus*; Fr. *infatuer*. To strike with folly; to deprive of understanding; deprivation of reason.

INFAUSTING, *n. s.* Lat. *infaustus*. The

act of making unlucky. An odd and inelegant word.

INFEA'SIBLE, *adj.* In and feasible. Impracticable; not to be done.

INFECT', *v. a.* Infec'tion, *n. s.* Infec'tious, *adj.* Infec'tiously, *adv.* Infec'tiousness, *n. s.* Infec'tive, *adj.* Fr. *infecter*; Lat. *infectus*. To act upon by contagion; to affect with communicated qualities; to hurt by contagion; to taint; to poison; to pollute; to fill with something contagious. Infection, taint; poison; morbid miasma. Infectious, influencing by communication. Infective, having the quality of acting by contagion.

Infection, in medicine. See Contagion.

INFECUND, *adj.* Infecun'dity, *n. s.* Lat. *infœcundus*. Unfruitful; unproductive; infertile.

INFELICITY, *n. s.* Fr. *infelicité*; Lat. *infelicitas*. Unhappiness; misery; calamity.

INFER', *v. a.* In'ference, *n. s.* Infer'ible, *adj.* Fr. *inferer*; Lat. *infero*. To induce; to bring on; to offer, or produce. Inference, a conclusion drawn from previous arguments. Inferible, deducible from the premises.

INFERIÆ, sacrifices offered by the Greeks and Romans to the Dii manes, or the souls of deceased heroes (See Manes), or even any relation or person whose memory was held in veneration.

INFERIOR'ITY *n. s.* Infe'rior, *adj.* & *n. s.* Infer'nal, *adj.* Infer'nal-stone, *n. s.* Fr. *inferieur*; Lat. *inferior*. Lower state of dignity, place, or value: lower in excellence; subordinate; inferior, one in a lower rank: infernal, hellish; detestable. Infernal-stone, or the lunar caustic, is prepared from an evaporated solution of silver, or from crystals of silver: it is a very powerful caustic, eating away the flesh and even the bones to which it is applied.

Infernal Regions. See Elysium, Hell, and Tartarus.

INFERTILE, *adj.* Infertil'ity, *n. s.* Fr. *infertile*; Lat. *in* and *fertilis*. Unfruitful; unproductive: want of fertility.

INFEST', *v. n.* Fr. *infester*; Lat. *infesto*. To harass; to disturb; to plague.

INFESTIVITY, *n. s.* In and festivity. Mournfulness; want of cheerfulness.

INFESTRED, *adj.* In and fester. Rankling; inveterate. Obsolete.

INFEUDATION, *n. s.* Lat. *in* and *feudum*. The act of putting one in possession of a fee or estate.

IN'FIDEL, *n. s.* Infidel'ity *n. s.* Fr. *infidelle*; Lat. *infidelis*. An unbeliever; generally applied to one who rejects Christianity: infidelity, want of faith; disbelief in revealed religion: treachery; breach of contract or trust. See p. 1.

IN'FINITE, *adj.* In'finitely, *adv.* In'finiteness, *n. s.* Infinitesi'mal, *adj.* Infin'itive, *adj.* Infin'itude, *n. s.* Infin'ity, *n. s.* Fr. *infini*; Lat. *infinitus*. Unbounded; unlimited; without end; to a great degree. Infinitesimal, infinitely divided. Infinitive, in grammar, affirms or intimates the intention of affirming, which is one use of the indicative; but then it does not do it absolutely.—Clarke. Infinitude, infinity; immensity; boundlessness: used in an hyperbolical sense for an endless number.

Infinite signifies that which has neither beginning nor end; in which sense God alone is infinite. Infinite is likewise applied to that which has had a beginning, but will have no end, as angels and human souls. This makes what the schoolmen call infinitum a parte post.

Infinite Quantities. The very idea of magnitudes infinitely great, or such as exceed any assignable quantities, does include a negation of limits; yet if we nearly examine this notion, we shall find that such magnitudes are not equal among themselves, but that there are really, besides infinite length and infinite area, three several sorts of infinite solidity; all of which are quantitates sui generis, and that those of each species are in given proportions. Infinite length, or a line infinitely long, is to be considered either as beginning at a point, and so infinitely extended one way, or else both ways, from the same point; in which case the one, which is a beginning infinity, is the one-half of the whole, which is the sum of the beginning and ceasing infinity; or, as may be said, of infinity a parte ante, and a parte post, which is analogous to eternity in time and duration, in which there is always as much to follow as is past, from any point or moment of time; nor does the addition or subduction of infinite length, or space of time, alter the case either in infinity or eternity, since both the one and the other cannot be any part of the whole.

Infinitesimals, *n. s.* Among mathematicians, are defined to be infinitely small quantities. In the method of infinitesimals, the element by which any quantity increases or decreases, is supposed to be infinitely small; and is generally expressed by two or more terms, some of which are infinitely less than the rest; which being neglected, as of no importance, the remaining terms form what is called the difference of the proposed quantity. The terms that are neglected in this manner, as less than the other terms of the elements, are the very same which arise in consequence of the acceleration or retardation of the generating motion during the infinitely small time in which the element is generated; so that the remaining terms express the elements, that would have been produced in that time, if the generating motion had continued uniform: therefore those differences are accurately in the same ratio to each other, as the generating motions or fluxions. And hence, though in this method infinitesimal parts of the elements are neglected, the conclusions are accurately true, without even an infinitely small error, and agree precisely with those that are deduced by the method of fluxions. See Fluxions.

INFIRM', *adj.* & *v. a.* Infirm'ary, *n. s.* Infirm'ity, *n. s.* Infirm'ness, *n. s.* Fr. *infirme*; Latin *infirmus*. Weak; feeble; disabled in body; weak of mind; not stable or solid: to weaken, or enfeeble. Infirmary, a house for the reception of the sick. Infirmity, weakness of sex, age, or temper; failing; fault; disease or malady. Infirmness, weakness.

INFIX', *v. a.* Lat. *infixus.* To drive in; to set; to fasten.

INFLAME', *v. a.* & *v. n.* Infla'mer, *n. s.* Inflammabil'ity, *n. s.* Inflam'mable, *adj.* Inflam'mableness, *n. s.* Inflamma'tion, *n. s.* Inflam'matory, *adj.* Lat. *inflammo.* In its literal sense, to kindle or set on fire: to heat the body morbidly; figuratively, to kindle any passion; to enrage; provoke; aggravate; to grow hot: an angry inflamer, the thing or person that inflames: inflammable, inflammability, having the quality of catching fire: inflammation, the act of setting on fire; the state of being on fire; fervor of mind: inflammatory, having the power of inflaming. In chirurgery inflammation is when the blood is obstructed so as to crowd in a greater quantity into any particular part, and give it a greater color and heat than usual.—Quincy.

Inflammation, in medicine. See Medicine.

INFLATE', *v. a.* Infla'tion, *n. s.* Lat. *inflatus.* To swell with wind; to fill with air; the state of being swelled with wind; flatulence; applied figuratively to a turgid style of composition.

INFLECT', *v. a.* Inflec'tion, *n. s.* Inflec'tive, *adj.* Lat. *inflecto.* To bend; to turn: to modulate the voice; to vary a noun or verb in its terminations: inflective, having the power of bending or turning.

INFLEXIBIL'ITY, *n. s.* Inflex'ibleness, *n. s.* Inflex'ible, *adj.* Inflex'ibly, *adv.* Fr. *inflexibilité*; Lat. *in* and *flexibilis.* Stiffness; quality of resisting flexure; obstinacy: inflexible, unyielding; immoveable; not to be turned or changed: inflexibly, inexorably; without relaxation or intermission.

INFLEXION. Point of, in the theory of lines: that point in which the direction of the curve changes from concavity to convexity, and *vice versâ.* It is particularly called *punctum inflexionis,* at the first turning, and *punctum regressionis,* when the curve returns. These points are of much interest in the theory of functions.

INFLICT', *v. a.* Inflict'er, *n. s.* Inflic'tion, *n. s.* Inflic'tive, *adj.* Fr. *infliger*; Lat. *infligo.* To impose as a punishment: inflicter, he who punishes: infliction, the act used; the punishment itself: inflictive, that imposes a punishment.

IN'FLUENCE, *n. s.* & *v. a.* In'fluent, *adj.* Influen'tial, *adj.* In'flux, *n. s.* Influx'ious, *adj.* Fr. *influence*; Lat. *influo, influxus.* Power of the celestial aspects operating upon terrestrial bodies and affairs. Ascendant power; power of directing or modifying. It was anciently followed by *into*; now, less properly, by *upon.* To act upon with directive or impulsive power; to modify to any purpose; to guide or lead to any end. Influent, flowing in: influential, exerting power: influx, the act of flowing in; infusion; influence; power: influxious, influential: the force of influence, in its figurative sense, appears to arise from the idea of something flowing in with irresistible force and carrying all before it.

INFOLD', *v. a.* In and fold. To involve; to inwrap; to inclose with involutions.

INFO'LIATE, *v. a.* Lat. *in* and *folium.* To cover with leaves. Not much used, but elegant.

INFORM', *v. a.* & *v. n.* Infor'mal, *adj.* Infor'mant, *n. s.* Informa'tion, *n. s.* Inform'er, *n. s.* Infor'mity, *n. s.* Infor'mous, *adj.* Fr. *informer*; Lat. *informo, in* and *forma.* To animate; to actuate by vital powers; to instruct; to supply with new knowledge; to acquaint. Before the thing communicated was anciently put *with*; now generally *of*; sometimes *in.* It also signifies to offer an accusation to a magistrate; to give intelligence. Informal, without rule; irregular. Informant, informer, one who gives information or accusation; a teacher. Information, intelligence given; charge or accusation exhibited; the act of informing. Informity, shapelessness. Informous, shapeless.

Information, in law, is nearly the same in the crown office as what in other courts is called a declaration. See Prosecution. Informations are of two sorts, first, those which are partly at the suit of the king and partly at that of a subject; and secondly, such as are only in the name of the king. The former are usually brought upon penal statutes, which inflict a penalty upon conviction of the offender, one part to the use of the king, and another to the use of the informer. By the statute 31 Eliz. c. 5, no prosecution upon any penal statute, the suit and benefit whereof are limited in part to the king and in part to the prosecutor, can be brought by any common informer after one year is expired since the commission of the offence; nor on behalf of the crown, after the lapse of two years longer; nor, where the forfeiture is originally given only to the king, can such prosecution be had after the expiration of two years from the commission of the offence. The informations that are exhibited in the name of the king alone are also of two kinds: first, those which are truly and properly his own suits, and filed ex officio by his own immediate officer, the attorney-general; second, those in which, though the king is the nominal prosecutor, yet it is at the relation of some private person or common informer; and they are filed by the king's coroner and attorney in the court of king's bench, usually called the master of the crown office, who is for this purpose the standing officer of the public. The objects of the king's own prosecutions, filed ex officio by his own attorney-general, are properly such enormous misdemeanors as peculiarly tend to disturb or endanger his government, or to molest or affront him in the regular discharge of his royal functions. For offences (says Blackstone) so high and dangerous, in the punishing or preventing of which a moment's delay would be fatal, the law has given to the crown the power of an immediate prosecution, without waiting for any previous application to any other tribunal; which power is necessary, not only to the ease and safety, but even to the very existence, of the executive magistrate. The objects of the other species of informations, filed by the master of the crown office upon the complaint or relation of a private subject, are any gross and notorious misdemeanors, riots, batteries, libels, and other immoralities of an atrocious kind, not

peculiarly tending to disturb the government (for those are left to the care of the attorney-general), but which, on account of their magnitude or pernicious example, deserve the most public animadversion. And when an information is filed, either thus, or by the attorney-general ex-officio, it must be tried by a petit jury of the county where the offence arises: after which, if the defendant be found guilty, he must resort to the court for his punishment. See a history and vindication of this mode of prosecution in *Blackstone's Commentary*, vol. IV.

An INFORMER, informator, in law, is a person who informs against, or prosecutes, in any of the king's courts, those that offend against any law or penal statute. See INFORMATION. Informers were very numerous both in Greece and Rome. Wicked princes rewarded and countenanced this mischievous tribe; but Titus set on foot a most diligent search after them, and punished such as he found with death or banishment, Trajan also is praised by Pliny for a similar conduct. See SPY.

INFOR'MIDABLE, *adj.* Lat. *in* and *formidabilis*. Not to be feared; not to be dreaded.

INFOR'TUNATE, *adj.* Fr. *infortune*; Lat. *infortunatus*. Unhappy. See UNFORTUNATE, which is commonly used.

INFRACT', *v. a.* INFRAC'TION, *n. s.* INFRAN'GIBLE, *adj.* INFRINGE', *v. a.* INFRINGE'MENT, *n. s.* INFRIN'GER, *n. s.* } Latin, *infractus*, *infringo*. To break: the act of breaking; a breach or violation of treaty. Infrangible, not to be broken. Infringe to violate; to destroy; to hinder; to break laws or contracts. Infringement, a breach. Infringer, one who breaks engagements.

INFRE'QUENT, *adj.* INFRE'QUENCY, *n. s.* } Latin, *infrequentia*. Uncommon: rarity.

INFRIG'IDATE, *v. a.* Lat. *in* and *frigidus*. To chill; to make cold.

INFU'RIATE, *adj.* Lat. *in* and *furia*. Enraged; raging.

INFUSCA'TION, *n. s.* Lat. *infuscatus*. The act of darkening or blackening.

INFUSE', *v. a.* INFU'SIBLE, *adj.* INFU'SION, *n. s.* INFU'SIVE, *adj.* } Fr. *infuser*; Lat. *infusus*. To pour in; to instil; to pour into the mind; to inspire; to steep in any hot fluid without boiling; to saturate with an infusion: infusible, that can be infused; that is insoluble; not fusible; that cannot be melted: infusion, the act of pouring; instilling a suggestion or whisper; the act of infusing. Infusive, an old word, having the power of infusion.

IN'GATE, *n. s.* In and gate. Entrance; passage in. An old word.

INGATH'ERING, *n. s.* In and gathering. The act of getting in the harvest.

INGEM'INATE, *v. a.* INGEMINA'TION, *n. s.* } Lat. *igemino*. To double or repeat. Repetition or reduplication.

INGEN'DERER, *n. s.* From ingender. He that generates. See ENGENDER.

INGEN'ERABLE, *adj.* INGEN'ERATE, *adj.* INGEN'ERATED, *adj.* } Lat. *ingeneratus*. Not to be produced or brought into being; inborn; innate; inbred; unbegotten.

INGENHOUZ (John), M.D., a celebrated Dutch natural philosopher, was born at Breda in 1730, and brought up to the study of medicine in his native city. In 1767 he made a voyage to this country, to learn the Suttonian method of inoculation, and became acquainted with Sir John Pringle, president of the Royal Society, through whose recommendation he was employed in 1768 to inoculate the imperial family of Austria. His services on this occasion were rewarded with a pension of 600 florins. He afterwards engaged in medical practice near London, and in various chemical and philosophical researches, accounts of which he inserted in the Philosophical Transactions, and other works of science. He was the author of Experiments on Vegetables, 8vo.; New Experiments and Observations on different Subjects relating to Natural Philosophy, 2 vols. 8vo.; and an Essay on the Food of Plants. Dr. Ingenhouz died September 7th, 1799, at Bowood in Wiltshire, the seat of the marquis of Lansdowne.

INGE'NIOUS, *adj.* INGE'NIOUSLY, *adv.* INGE'NIOUSNESS, *n. s.* INGENU'ITY, *n. s.* IN'GENITE, *adj.* INGEN'UOUS, *adj.* INGEN'UOUSLY, *adv.* INGEN'UOUSNESS, *n. s.* IN'GENY, *n. s.* } Fr. *ingenieux*; Sp. *ingenioso*; Latin, *ingenium*, *ingenuus*, *ingenitas*. Witty; inventive; possessed of genius; mental; intellectual: ingeniousness, subtilty; strength of genius: ingenuity, openness; candor; (more properly ingenuousness); wit; invention: ingenite, native; ingenerate: ingenuous, fair; candid; open; free-born; not of servile extraction. Ingeny, genius; wit: not in use.

INGEST', *v. a.* INGES'TION, *n. s.* } Lat. *ingestus*. To throw into the stomach.

INGLIS (Sir James), a Scottish poet, who flourished in the sixteenth century. He was educated at St. Andrew's, went to Paris, and returned in the minority of James V, into whose favor he ingratiated himself by his poetry, having written sundry tragedies, comedies, and other poems, that were much applauded. He joined the French faction against the English; and in some skirmishes preceding the fatal battle of Pinkie, so distinguished himself, that he was knighted on the field. After that battle he retired into Fife, and amused himself with his favorite studies; and in 1548 published at St. Andrew's his Complaint of Scotland. He appears from this poem to have read more of Greek and Latin authors than was usual at that period, and to have been well skilled in mathematics and philosophy. He died at Culross in 1554.

INGLIS ISLAND, an island on the north coast of New Holland, near the western entrance into the gulf of Carpentaria. It is twelve miles long, and from one to three miles in breadth, and of considerable elevation, the size and foliage of its trees indicate fertility.

INGLO'RIOUS, *adj.* INGLO'RIOUSLY, *adv.* } Lat. *in* and *gloria*. Void of honor; mean; with ignominy; without glory.

INGOLSTADT, a town and fortress of the Bavarian states on the Danube. It has monuments of count Tilly, the Bavarian general in the war against Gustavus Adolphus; and Eckius, the opponent of Luther. A university was founded

here in 1472, and continued till 1800, when it was transferred to Landshut. The town has several privileges, but little trade; its only manufacture of consequence is woollens. Thirty-five miles south-west of Ratisbon, and forty-three north of Munich.

IN'GOT, *n. s.* Fr. *lingot*, from the Span. *ingotte*, prefixing the article, or from Dut. *ingegoten*, melted. A mass of metal.

INGRAFF', *v. a.* } Fr. *greffer*; Greek INGRAFT'MENT, *n. s.* } γραφω. To propagate trees by insition; to plant the sprig of one tree in the stock of another; as, he ingrafted an apple upon a crab: to plant or introduce any thing not native; to fix deep; to settle: ingraftment, the act, or the thing ingrafted.

INGRAILED, in heraldry. See HERALDRY.

INGRATE', *adj.* } Fr. *ingrat*; Lat. *in-* INGRATE'FUL, *adj.* } *gratus*. Ingrate is pro- INGRA'TIATE, *v. a.* } per, but ingrateful less INGRAT'ITUDE, *n. s.* } proper than ungrateful; ungrateful; unthankful; unpleasing to the sense: ingratiate, to put in favor; to recommend to kindness. It has *with* before the person whose favour is sought: ingratitude, retribution of evil for good: unthankfully.

INGRE'DIENT, *n. s.* Fr. *ingredient;* Lat. *ingrediens*. Component part of a body consisting of different materials. It is commonly used of the simples of a medicine.

IN'GRESS, *n. s.* } Lat. *ingressus*. Entrance; INGRES'SION, *adj.* } power of entrance; ingression, the act of entering.

IN'GUINAL, *adj.* Fr. *inguinal;* Lat. *inguen*. Belonging to the groin.

INGULF', *v. a.* Fr. *engolfer*. To swallow up in an abyss; to cast into a gulf.

INGULPHUS, abbot of Croyland, and author of the history of that abbey, was born in London, about A.D. 1030. He was educated at Westminster; and when he visited his father, who belonged to the court of Edward the Confessor, his learning engaged the attention of queen Edgitha. From Westminster he went to Oxford, where he studied rhetoric, and the Aristotelian philosophy, in which he made greater proficiency than any of his contemporaries. When he was about the age of twenty-one he was introduced to William duke of Normandy, who visited the court of England in 1051, appointed him his secretary, and carried him with him into his own dominions. He soon became his chief favorite, and the dispenser of all preferments. This excited the envy and hatred of the courtiers; to avoid the effects of which, he obtained leave to go in pilgrimage to the Holy Land. With a company of fifty horsemen he joined Sigifrid duke of Mentz, who, with many German nobles, clergy, &c., was preparing for a pilgrimage to Jerusalem. When all united, they formed a company of 7000 pilgrims. In their way they spent some time at Constantinople, performing their devotions in the several churches. In their passage through Lycia they were attacked by a tribe of Arabs, who killed, wounded, and plundered many of them of a prodigious mass of money. Those who escaped, after visiting Jerusalem, embarked on board a Genoese fleet and returned to Rome; where, after the usual devotions, they separated, and returned each to his own country. Ingulphus now became a monk in the abbey of Fontenelle, in Normandy; in which, after some years, he was advanced to the office of prior. When William was preparing for his expedition into England, in 1066, he was sent by his abbot with 100 merks of money, and twelve young men, nobly mounted, and completely armed, as a present from that abbey. He was very graciously received by the king, who made him governor of the rich abbey of Croyland in Lincolnshire, in 1076; in which he spent the last thirty-four years of his life, governing that society with great prudence, and protecting their possessions from the rapacity of the neighbouring barons by the royal favor. The lovers of English history and antiquities are much indebted to this learned abbot, for his excellent history of the abbey of Croyland, from its foundation, A.D. 664, to 1091, into which he has introduced much of the general history of the kingdom, nowhere else to be found. Ingulphus died of the gout, at his abbey, in 1109, aged seventy-nine.

INGUR'GITATE, *v. a.* } Lat. *ingurgito*. INGURGITA'TION, *n. s.* } To swallow down: the act of swallowing.

INGUS'TABLE, *adj.* Lat. *in* and *gusto*. Not perceptible by the taste.

INHAB'ILE, *adj.* Fr. *inhabile:* Lat. *inhabilis*. Unskilful; unready; unfit; unqualified.

INHAB'IT, *v. a.* & *v. n.* } Lat. *in* and *habito*. INHAB'ITABLE, *adj.* } To occupy; to live INHAB'ITANCE, *n. s.* } or dwell in: inhabit INHAB'ITANT, *n. s.* } able, incapable of af- INHABITA'TION, *n. s.* } fording habitation; INHAB'ITER, *n. s.* } incapable of inhabitants; uninhabitable: inhabitance, inhabitation, place of dwelling; the act of inhabiting; quantity of inhabitants: inhabiter, a dweller.

INHALE', *v. a.* Lat. *inhalo*. To draw in with air; to inspire: opposed to exhale or expire.

INHARMO'NIOUS, *adj.* In and harmonious. Unmusical; not sweet of sound.

INHERE', *v. n.* } Lat. *inhaero*. To exist INHE'RENT, *adj.* } in something else so as INHER'IT, *v. a* } to be inseparable from INHER'ITABLE, *adj.* } it: inborn, innate: in- INHER'ITANCE, *n. s.* } herit, to receive, pos- INHER'ITOR, *n. s.* } sess, or hold, by inheri- INHER'ITRIX, *n. s.* } tance: which is patri- INHER'ITRESS, *n. s.* } mony; hereditary pos- INHE'SION, *n. s.* } session; the reception of possession: inheritor, an heir; one who receives by succession: inheritrix, inheritress, a woman that inherits; an heiress: inhesion, a state of existing in something else.

INHERITANCE, in English law, is an estate in lands or tenements, descending to a man and his heirs; and the word inheritance is not only intended where a man has lands or tenements by descent of heritage; but also every fee-simple or fee-tail, which a person has by purchase, may be said to be an inheritance, because his heirs may inherit it. Lit. sect. 9. One may also have inheritance by creation; as in case of the king's grant of peerage, by letters patent, &c See FEE SIMPLE.

Inheritances are also *corporeal* or *incorporeal*. Corporeal inheritances relate to houses, lands, &c., which may be touched or handled; and incorporeal inheritances are rights issuing out of, annexed to, or exercised with, corporeal inheritances; as advowsons, tithes, annuities, offices, commons, franchises, privileges, services, &c. 1 Inst. 9. 49.

There is also *several inheritance*, which is, where two or more hold lands severally; if two men have lands given to them and the heirs of their two bodies, these have a joint estate during their lives; but their heirs have several inheritances. Without blood, none can inherit; therefore he who hath the whole and entire blood shall have an inheritance before him who hath but part of the blood of his ancestor. 3 Rep. 41. The law of inheritance prefers the first child before all others; the male before the female; and of males the first born, &c. And as to inheritances, if a man purchases lands in fee, and dies without issue, those of the blood of the father's side shall inherit, if there be any; and, for want of such, the lands shall go to the heirs of the mother's side: but, if it come to the son by descent from the father, the heirs of the mother shall not inherit it. Plowd. 132. Lit. 4. 12. Goods and chattels cannot be turned into an inheritance. 3 Inst. 19. 126.

INHERSE', *v. a.* In and herse. To inclose in a funeral monument.

INHIB'IT, *v. a.* } Fr. *inhiber*; Lat. *inhibeo*.
INHIBIT'ION, *n. s.* } To restrain, hinder, impede, or check: a prohibition or embargo.

INHOLD', *v. a.* In and hold. To have inherent; to contain in itself.

INHOS'PITABLE, *adj.* } Fr. *inhospitalité*;
INHOS'PITABLY, *adv.* } *in* and *hospes*. Af-
INHOS'PITABLENESS, *n. s.* } fording no kindness
INHOSPITAL'ITY, *n. s.* } to strangers; unfriendly; uncourteous: want of hospitality.

INHU'MAN, *adj.* } Fr. *inhumain*; Lat. *in-*
INHUMAN'ITY, *n. s.* } *humanus*. Barbarous;
INHU'MANLY, *adv.* } savage; cruel. Inhumanity, barbarity; savageness; want of humanity.

INHU'MATE, *v. a.* } Fr. *inhumer*; Lat. *hu-*
INHUME', *v. a.* } *mo*. To bury; to inter.

INJECT', *v. a.* } Lat. *injicio*. To throw in;
INJECTION, *n. s.* } to dart in, Injection, the act of casting in: any medicine made to be injected by a syringe, or any other instrument, into any part of the body; the act of filling the vessels with wax, or any other proper matter, to show their shapes and ramifications, often done by anatomists.

INJECT'ION, in surgery, the throwing in some liquor or medicine into a vein opened by incision. See ANATOMY and SURGERY.

INIMITABIL'ITY, *n. s.* } Lat. *in* and *imi-*
INIM'ITABLE, *adj.* } *tabilis*. Not to be
INIM'ITABLY, *adv.* } imitated; not to be copied; implying a degree of excellence above imitation, whether in manner, subject, or execution.

INJOIN', *v. a.* Fr. *enjoindre*; Lat. *injungo*. To command; to enforce by authority. See ENJOIN.

INIQ'UITOUS, *adj.* } Fr. *inique*; Lat. *ini-*
INIQ'UITY, *n. s.* } *quitas*, *in æquus*. Injustice; wickedness; crime; unrighteousness.

INIT'IAL, *adj.* } Fr. *initial*, *in-*
INIT'IATE, *v. a.*, *v. n.* & *adj.* } *itier*; Lat. *ini-*
INITIA'TION, *n. s.* } *tium*. Placed at the beginning; incipient; not complete. Initiate, to enter; to instruct in the rudiments; to place in a new state; to perform the first rite. Initiation, the reception of a new comer into any art or state.

INJUCUN'DITY, *n. s.* In and jucundity. Unpleasantness.

INJU'DICABLE, *adj.* } Lat. *in* and *judi-*
INJUDIC'IAL, *adj.* } *cabilis*. Not cogni-
INJUDIC'IOUS, *adj.* } zable by a judge:
INJUDIC'IOUSLY, *adv.* } injudicial, not according to form of law: injudicious, void of judgment: injudiciously, unwisely.

INJUNC'TION, *n. s.* Lat. *injunctus*, *injunctio*. From *injoin*. Command; order; precept.

INJUNCTION, in law, a writ generally grounded upon an interlocutory order or decree out of the court of chancery or exchequer, sometimes to give possession to the plaintiff, for want of the defendant's appearance; sometimes to the king's ordinary court, and sometimes to the court christian, to stop proceedings in a cause, upon suggestion made that the rigor of the law, if it take place, is against equity and conscience in that case, that the complainant is not able to make his defence in these courts, for want of witnesses, &c., or that they act erroneously, denying him some just advantage. The writ of injunction is directed, not only to the party himself, but to his counsellors, attorneys, and solicitors; and if any attorney, after having been served with an injunction, proceeds contrary to it, the court of chancery will commit him to the Fleet for contempt. But if an injunction be granted by the court of chancery in a criminal matter, the court of king's bench may break it, and protect any that proceed in contempt of it. See CHANCERY.

IN'JURE, *v. a.* } Fr. *injurier*; Lat.
IN'JURER, *n. s.* } *in*, privative, and *jus*.
INJU'RIOUS, *adj.* } To hurt unjustly; to
INJU'RIOUSLY, *adv.* } wrong; to annoy, or
INJU'RIOUSNESS, *n. s.* } inconvenience. In-
IN'JURY, *n. s.* } jurer, one who wrongs
INJUS'TICE, *n. s.* } another. Injurious, unjust; mischievous; detracting; wrongful; hurtful. Injury, any iniquity, wrong, mischief, or detriment; annoyance in word or deed.

INK, *n. s.* & *v. a.* } Fr. *encre*; Ital. *inchiostro*;
INK'HORN, *n. s.* } Gr. *εγχεω*. The black liquor
INK'MAKER, *n. s.* } with which we write. Ink
INK'Y, *adj.* } is used for any liquor with
INK'STAND, *n. s.* } which persons write: as, red ink; green ink. Ink, to daub with ink: inkhorn, a portable case for the instruments of writing, made of horn: inky, consisting of, resembling, or black as, ink: ink-stand, the case which holds or contains the ink.

INK is a name given to every pigment used for writing or printing. There are two kinds of common black ink, viz. writing ink and printers' ink; besides the red and other colored inks, Indian ink, and the sympathetic inks.

Prior to the invention of printing, when the entire literature of the world was deposited in

MSS., the manufacture of a black and durable ink must evidently have been of the first importance. Accordingly we find that the most ancient MSS. are the most beautiful for color even at the present day. We have in fact no ink equal to that of the ancients, as may be readily seen by comparing the rolls and records that have been written from the fifteenth century to the end of the seventeenth, with the writings we have remaining of various ages from the fifth to the twelfth centuries. Notwithstanding the superior antiquity of the latter, they are in excellent preservation; but we frequently find the former, though of more modern date, so much defaced that they are scarcely legible. The ancient inks appear to have been solutions of gum and lamp-black, whereas the modern inks are almost always made of copperas and galls; which produces nothing like so fine a color, though it obviates an objection to which lamp-black inks are liable, viz. that they are easily discharged without destroying the paper. Besides their black inks, however, the ancients used various other colors, as red, gold, and silver, purple, &c. Green ink was frequently used in Latin MSS., especially in the latter ages; and it was frequently employed in signatures by the guardians of the Greek emperors, till their wards were of age. Blue or yellow ink was seldom used except in MSS.; 'but,' says Mr. Astle, 'the yellow has not been much in use, as far as we can learn, these 600 years.' Some kinds of characters, particularly the metallic, were burnished. Wax was used by the Latins and Greeks as a varnish, but especially by the former, and particularly in the ninth century.

A very excellent modern receipt for ink is the following:—Take one pound and a half of bruised Aleppo galls, and put them in six quarts of rain water; add eight ounces of green copperas, eight ounces of gum-Arabic, and three ounces of roch alum; mix them well together and shake them frequently, and in a fortnight the ink will be fit for use. It is, indeed, rather pale at first, but soon appears of a fine and durable black. The following method is recommended by Dr. Black in his lectures:—'Take powdered galls three ounces: logwood shavings and vitriolated iron, of each one ounce; water from two to three pints, according to the degree of strength required for the ink. Before the boiling is finished throw in half an ounce of gum-arabic, and when it is dissolved, strain the liquor.' As a means of preserving the ink from mould Dr. Black directs about a quarter of an ounce of spirit of wine to be added, and likewise a little powdered cloves ground in a mortar with a little of the ink.

As the durability of records and other valuable writings depends much upon the goodness of the ink employed, some of the first chemists have thought the manufacture well worth their utmost attention. Of these Dr. Lewis and M. Ribaucourt are the most celebrated. Dr. Lewis recommends that a decoction of logwood should be used instead of water, as it greatly improves both the beauty and deepness of the black, without disposing it to fade. He adds that the addition of gum-arabic is not only useful, by keeping the coloring matter suspended in the fluid, but also by preventing the ink from spreading, by which means a greater quantity of it is collected on each stroke of the pen. Sugar, which is sometimes added to ink, is found to be much less effectual than gums, and to have the inconvenience of preventing the drying of the ink. The color of ink is greatly injured by keeping the ink in vessels made of copper or lead, and probably of any other metal, excepting iron. Dr. Lewis, therefore, recommends the following as the best proportions of the ingredients for ink. One part of green vitriol, one part of powdered logwood, and three parts of powdered galls. The best menstruum appears to be vinegar or white wine, though for common use water is sufficient. If the ink be required to be of a full color, a quart, or at most three pints, of liquor may be allowed to three ounces of galls, and to one ounce of each of the other two ingredients. Half an ounce of gum may be added to each pint of the liquor. The ingredients may be all put together at once in a convenient vessel, and well shaken four or five times each day. In ten or twelve days the ink will be fit for use, though it will improve by remaining longer on the ingredients. Or it may be made more expeditiously, by adding the gum and vitriol to a decoction of galls and logwood in the menstruum. In some attempts made by the doctor to endow writing ink with the great durability of that of the ancients, as well as the properties which it has at present, he first mixed both lamp-black and ivory-black with solution of gum-arabic, made of such consistence as just to flow sufficiently from the pen. The liquors wrote of a fine black color; but, when dry, part of the color could be rubbed off, especially in moist weather, and a pencil dipped in water washed it away entirely. I tried, says he, solutions of the animal glues with the same effect. Though the oily mixtures answered better than those with simple gums or glues, it was apprehended that their being dischargeable by water would render them unfit for the purposes intended. The only way of obviating this imperfection appeared to be, by using a paper which should admit the black liquid to sink a little into its substance. Accordingly I took some of the more sinking kinds of paper, and common paper made damp as for printing; and had the satisfaction to find, that neither the oily nor the simple gummy mixture spread upon them so much as might have been expected, and that the characters were as fixed as could be desired, for they could not be washed out without rubbing off part of the substance of the paper itself. But a further improvement may yet be made, namely, that of uniting the ancient and modern inks together; or using the common vitriolic ink instead of water, for tempering the ancient mixture of gum and lamp-black. By this method it should seem that the writings would have all the durability of those of former times, with all the advantage that results from the vitriolic ink fixing itself in the paper.

A durable ink may also, he says, be made by washing paper, parchment, &c., with the Prussic acid, which will not in the least injure either of these substances. The materials thus prepared,

may be written on with common ink, and a ground of Prussian blue will be formed beneath every stroke, which will remain long after the black has decayed by the influence of the air, or been destroyed by acids.

M. Ribaucourt gives these directions for the composition of good ink:—

Take eight ounces of powdered Aleppo galls; four ounces of chip logwood; four ounces of sulphate of iron; three ounces of powdered gum-arabic; one ounce of sulphate of copper; and one ounce of sugar-candy. Boil the galls and logwood together in twelve pounds of water for one hour, or till half the liquid has evaporated. Strain the decoction through a hair sieve, or linen cloth, and then add the other ingredients. Stir the mixture till the whole is dissolved, more especially the gum; after which, leave it to subside for twenty-four hours. Then decant the ink, and preserve it in bottles of glass or stone ware, well corked.

Van Mons applied the discoveries of Proust to the preparation of common writing ink. He found that the sulphate of iron, calcined to whiteness, always gives a most beautiful black precipitate. By the following mixture he obtained excellent ink: galls four ounces; sulphate of iron, calcined to whiteness, two ounces and a half; and two pints of water. The whole must be left to macerate cold for twenty-four hours: then add gum-arabic ten drachms, and preserve it in a stone jar open, or covered merely with paper. Chaptal also employed the calcined sulphate, in connexion with the decoction of gall-nuts, and logwood.

Mr. Desormeaux, jun., an ink manufacturer in Spitalfields, has given the following in the Philosophical Magazine:—Boil four ounces of logwood about an hour in six beer quarts of water, adding boiling water from time to time; strain while hot; and, when cold, add water enough to make the liquor five quarts. Into this put one pound avoirdupois of blue galls coarsely bruised; four ounces of sulphate of iron calcined to whiteness; three ounces of coarse brown sugar; six ounces of gum-arabic; and a quarter of an ounce of acetate of copper, triturated with a little of the decoction to a paste, and then thoroughly mixed with the rest. This is to be kept in a bottle uncorked about a fortnight, shaking it twice a-day, after which it may be poured from the dregs, and corked up for use.

On many occasions it is of importance to employ an ink indestructible by any process that will not equally destroy the material on which it is applied. Mr. Close has recommended for this purpose twenty-five grains of copal in powder dissolved in 200 grains of oil of lavender, by the assistance of gentle heat, and then mixed with two grains and a half of lamp-black, and half a grain of indigo; or 120 grains of oil of lavender, seventeen grains of copal, and sixty grains of vermilion. A little oil of lavender, or of turpentine, may be added, if the ink be found too thick. Mr. Sheldrake suggests, that a mixture of genuine asphaltum dissolved in oil of turpentine, amber varnish, and lamp-black, would be superior.

Mr. Haussman has given some *composition inks* for marking pieces of cotton or linen, previous to their being bleached, which are capable of resisting every operation in the processes both of bleaching and dyeing, and, consequently, might be employed in marking linen for domestic purposes. One of these consists of asphaltum dissolved in about four parts of oil of turpentine, and mixed with lamp-black, so as to make an ink of a proper consistence for printing with types. Another is the blackish sulphate left after expelling oxygen gas from oxide of manganese with a moderate heat, being dissolved and filtered, the dark grey pasty oxide left on the filter is to be mixed with a very little solution of gum-tragacanth, and the cloth marked with this is to be dipped in a solution of potash or soda, mild or caustic, in about ten parts of water. Nitrate of silver for a surface impregnated with carbonate of soda, and muriate of gold for one impregnated with protomuriate of tin, form good indelible inks.

The following is the receipt for the *chemical indelible ink*, sold for the purpose of marking linen:—The linen, that the black color may be produced and fixed, is first moistened with a solution of four drachms of soda in one ounce of soft water, with one grain of saffron, and fifteen grains of gum-arabic. The constituents of the ink are, one scruple of lunar caustic, one drachm and a half of distilled water, or, if common soft water be used, two drops of nitrous acid should be added to the solution. The mordant with which the linen has been moistened, being suffered perfectly to dry by a gentle heat, the part where the linen has been moistened is written upon with a clean pen dipped in the ink.

Good *printers'* ink is a black paint, smooth and uniform in its composition, of a firm black color, and possessing a singular aptitude to adhere to paper impregnated with moisture.

The consistence and tenacity of the oil in this composition are greatly increased, and its greasiness diminished by means of fire. Linseed oil or nut oil is made choice of for this use. It is said that the other expressed oils cannot be sufficiently freed from this unctuous quality.

Ten or twelve gallons of the oil are set over the fire in an iron pot, capable of holding at least half as much more; for the oil swells up greatly, and its boiling over into the fire would be very dangerous. When it boils it is kept stirring with an iron ladle; and, if it do not itself take fire, it is kindled with a piece of flaming paper or wood; for simple boiling, without the actual ascension of the oil, does not communicate a sufficient degree of the drying quality required. The oil is suffered to burn for half an hour or more, and the flame being then extinguished, by covering the vessel close, the boiling is afterwards continued with a gentle heat, till the oil appears of a proper consistence, in which state it is called varnish. Several other additions are made to the oil during the boiling; such as crusts of bread, onions, and sometimes turpentine. These are kept secret by the preparers. The intention of them is more effectually to destroy part of the unctuous quality of oil, to give it more body to enable it to adhere better to the wetted paper, and to spread on types neatly and uniformly.

Lamp-black is the common material to give the black color, of which two ounces and a half are sufficient for sixteen ounces of the varnish. Vermilion is a good red. They are ground together on a stone with a muller, in the same manner as oil paints.

The ink used by copper-plate printers differs in the oil, which is not so much boiled. This would render it less disposed to enter the cavities of the engraving, and more difficult either to be spread or wiped off. The black is likewise of a different kind. Instead of lamp-black, the Frankfort black is used, which is a residual or denser charcoal, said to be made from vine twigs. This is softer and less gritty than the ivory or other blacks prepared among us, and it is said, that lamp-black gives always a degree of toughness to the ink, which the Frankfort black does not; but the goodness of the color seems to be the leading inducement for the use of the latter. A pale or brown black can be much more easily endured in a book, than in the impression of an engraving.

A strong decoction of Brasil wood, with as much alum as it can dissolve, and a little gum, forms a good red ink. These processes consist in forming a lake, and retarding its precipitation by the gum.

Red ink may be also made of vermilion, by beating together the glaire of four eggs, a teaspoonful of white sugar, or sugar candy, powdered, and as much spirit of wine, till they be of the consistence of oil; and then adding such a proportion of vermilion as will produce a red color of sufficient strength; the mixture should be kept in a small phial, or well-stopped ink bottle, and well shaken before it be used. Gum-water is often used instead of the glaire of eggs; but thin size made of isinglass, with a little honey, is much better for the purpose. A more durable red ink may be made by tempering the solution of copal with red sulphuret of mercury: e. g. take 120 grains of oil of lavender, seventeen grains of powdered copal, and sixty grains of red sulphuret of mercury, dissolve the copal in the oil, and then mix the sulphuret with the solution upon a smooth surface.

Blue ink may be made by diffusing Prussian blue or indigo through strong gum-water. *Yellow* ink may be made by a solution of gamboge in gum-water. Most of the common water-colored cakes, diffused in water, will make sufficiently good-colored inks for most purposes. Inks of other colors may be made from a strong decoction of the ingredients used in dyeing, mixed with a little alum and gum-water.

The *Indian* ink is used in China for writing with a brush, and for painting upon the soft flexible paper of Chinese manufacture. It is ascertained, as well from experiment as from information, that the cakes of this ink are made of lamp-black and size, or animal glue, with the addition of perfumes or other substances not essential to its quality as an ink. The fine soot from the flame of a lamp or candle, received by holding a plate over it, mixed with clean size from shreds of parchment or glove leather not dyed, will make an ink equal to that imported.

Sympathetic inks are those with which a person may write, and yet nothing appear on the paper after it is dry, till some other means are used, such as holding the paper to the fire, rubbing it over with some other liquor, &c. These kinds of ink may be divided into seven classes, according to the means used to make them visible; viz. 1. Such as become visible by passing another liquor over them, or by exposing them to the vapor of that liquor. 2. Those that do not appear so long as they are kept close, but soon become visible on being exposed to the air. 3. Those which become visible by being exposed to the fire. 4. Such as become visible by heat, but disappear again by cold or the moisture of the air. 5. Those which become visible by being wetted with water. 6. Such as appear of various colors, red, yellow, blue, &c. I. The first class contains four kinds of ink, viz. solutions of lead, bismuth, gold, and green vitriol. The first two become visible in the same manner, viz. by the contact of sulphureous liquids or fumes. For the first a solution of common sugar of lead in water will answer as well as more troublesome preparations. On writing with this solution with a clean pen, the writing when dry will be totally invisible; but if it be wetted with a solution of hepar sulphuris, or of ointment, dissolved by quick-lime; or if it be exposed to the strong vapors of these solutions, but especially to the vapor of volatile tincture of sulphur; the writing will appear of a brown color, more or less deep according to the strength of the sulphureous fume. By the same means what is written with the solution of bismuth in spirit of nitre will appear of a deep black. The sympathetic ink prepared from gold depends on the property by which that metal precipitates from its solvent on the addition of a solution of tin. Write with a solution of gold in aqua regia, and let the paper dry gently in the shade, nothing will appear for the first seven or eight hours. Dip a pencil or a small fine sponge in the solution of tin, and, drawing it lightly over the invisible characters, they will immediately appear of a purple color. Characters written with a solution of green vitriol, carefully depurated, will likewise be invisible when the paper is dry; but, if wetted with an infusion of galls, they will immediately appear as if written with common ink; if, instead of this infusion, a solution of the phlogisticated alkali, impregnated with the coloring matter of Prussian blue, the writing will appear of a very deep blue. To the second class belong the solutions of all those metals which were supposed to attract phlogiston from the air, such as lead, bismuth, silver, &c. The sympathetic ink of gold already mentioned belongs also to this class; for, if the characters written with it are long exposed to the air, they become by degrees of a deep violet color, nearly approaching to black. In like manner a solution of silver in aqua fortis is invisible when newly dried, but when exposed to the sun appears of a grey color like slate. To this class also belong solutions of lead in vinegar; copper in aquafortis; tin in aqua regia; emery, and some kinds of pyrites, in spirit of salt; mercury in aquafortis; or iron in vinegar. Each of these has a particular color when exposed to the air; but they have the dis-

agreeable property of corroding the paper, so that after some time the characters appear like holes cut out of the paper. The third class, comprehending all those that become visible by being exposed to the fire, is very extensive, as it contains all those colorless liquors in which the matter dissolved is capable of being reduced, or of reducing the paper, into a sort of charcoal by a small heat. A very easily procured ink of this kind is oil of vitriol diluted with as much water as will prevent it from corroding the paper. Letters written with this fluid are perfectly invisible when dry, but instantly appear as black as if written with the finest ink on being held near the fire. Juice of lemons or onions, a solution of sal ammoniac, green vitriol, &c., will answer the same purpose, though not so easily, or with so little heat. The fourth class comprehends only solutions of regulus of cobalt in spirit of salt. The fifth class comprehends such inks as become visible when characters written with them are wetted with water. They are made of all such substances as deposit a copious sediment when mixed with water, dissolving only imperfectly in that fluid. Of this kind are dried alum, sugar of lead, vitriol, &c. Characters may be made to appear of a fine crimson, purple, or yellow, by writing on paper with solution of tin in aqua regia, and then passing over it a pencil dipt in a decoction of cochineal, Brasil-wood, logwood, yellow wood, &c. If a weak infusion of galls be used, the writing will be invisible till the paper be moistened with a weak solution of sulphate of iron. It then becomes black, because these ingredients form ink. If paper be soaked in a weak infusion of galls, and dried, a pen dipped in the solution of sulphate of iron will write black on that paper, but colorless on any other paper. Diluted prussiate of potash affords blue letters when wetted with the solution of sulphate of iron. The solution of cobalt in aqua regia, when diluted, affords an ink which becomes green when held to the fire, but disappears again when suffered to cool. This has been used in fanciful drawings of trees, the green leaves of which appear when warm, and vanish again by cold. If the heat be continued too long after the letters appear, it renders them permanent. If oxide of cobalt be dissolved in acetic acid, and a little nitre added, the solution will exhibit a pale rose color when heated, which disappears on cooling. A solution of equal parts of sulphate of copper and muriate of ammonia, gives a yellow color when heated, that disappears when cold.

When writing with common ink has been effaced by means of aqueous chlorine, the vapor of sulphuret of ammonia, or immersion in water impregnated with this sulphuret, will render it again legible. Or, if the paper that contained the writing be put into a weak solution of prussiate of potash, and when it is thoroughly wet a little sulphuric acid be added to the liquor, so as to render it slightly acidulous, the same purpose will be answered.

INK'LE, *n. s.* A kind of narrow fillet; a tape.

INK'LING, *n. s.* This word is derived by Skinner from inklincken, to sound within. This sense is still retained in Scotland: as, I heard not an inkling. Hint; whisper; intimation.

IN'LAND, *adj.* & *n. s.* } Fr. *lande*; Italian
IN'LANDER, *n. s.* } *landa*; Belgic *landt*.
Interior; lying remote from the sea; midland parts: one who dwells remote from the sea.

INLAND NAVIGATION.

INLAND NAVIGATION. The importance of this species of conveyance, as affording an easy and cheap means of transit for merchandise, and produce of every description, has long been admitted. Canals also promote the interests of agriculture in a very material degree; and, by facilitating the intercourse between the various and remote parts of a country, give an increased impetus to civilisation and the arts; and whilst thus dispensing benefits on every hand, to the various classes of the community, contribute, in the most essential manner, to national security. The importance of inland navigation seems to have been understood by the most flourishing nations of antiquity; as well as in modern times;—indeed canals were formed in various parts of the continent of Europe, long prior to their appearance in this country.

Herodotus relates that the Cnidians, a people of Caria in Asia Minor, designed to cut through the Isthmus which joins this peninsula to the continent; but were superstitious enough to give up the undertaking because they were interdicted by an oracle. Several kings of Egypt attempted to join the Red Sea to the Mediterranean. Cleopatra was exceedingly fond of this project. Solyman II., emperor of the Turks, employed 50,000 men in this great work. The canal was completed under the caliphate of Omar, but was afterwards allowed to fall into disrepair; so that it is now difficult to discover any traces of it. Both the Greeks and Romans intended to make a canal across the Isthmus of Corinth, which joins the Morea and Achaia, in order to make a navigable passage by the Ionian Sea into the Archipelago. Demetrius, Julius Cæsar, Caligula, and Nero, made several unsuccessful efforts to open this passage. But, as the ancients were entirely ignorant of the use of water-locks, their whole attention was employed in making level cuts, which is probably the principal reason why they so often failed in their attempts. Charlemagne formed a design of joining the Rhine and the Danube, in order to make a communication between the ocean and the Black Sea, by a canal from the river Almutz, which discharges itself into the Danube, to the Reditz, which falls into the Maine; and this last falls into the Rhine near Mayence: for this purpose he employed a prodigious number of workmen; but he met with so many obstacles from different quarters, that he was obliged to give up the attempt.

Without, however, going further into the history of early canal navigation, we may in the first instance examine the best mode of cutting

a canal and passing barges from one level to another; as a reference to our treatise on HYDROSTATICS will show that the particles of which water is composed invariably tend to a state of equilibrium. The canal locks that we shall have occasion to describe combine advantages of a most important nature over the ordinary arrangements.

The particular operations necessary for making artificial canals depend upon a variety of circumstances. The situation of the ground, the vicinity or connexion with rivers, the ease or difficulty with which a proper quantity of water can be obtained; these, and many other circumstances, necessarily produce great variety in the structure of these hydraulic works, and augment or diminish the labor and expense of executing them. When the ground is naturally level, and unconnected with rivers, the execution is easy, and the navigation is not liable to be disturbed by floods; but when the ground rises and falls, and cannot be reduced to a level, artificial methods of raising and lowering vessels must be employed; which likewise vary according to circumstances.

Temporary sluices are sometimes employed for raising boats over falls or shoals in rivers by a very simple operation. Two posts or pillars of mason work, with grooves, are fixed, one on each bank of the river, at some distance below the shoal. The boat having passed these posts, planks are let down across the river by pulleys into the grooves, by which the water is dammed up to a proper height for allowing the boat to pass up the river over the shoal.

The Dutch and Flemings at this day sometimes (when obstructed by cascades) form an inclined plane or rolling bridge upon dry land, along which their vessels are drawn from the river below the cascade into the river above it. This, it is said, was the only method employed by the ancients, and is still used by the Chinese, who are said to be entirely ignorant of the nature and utility of locks. These rolling bridges consist of a number of cylindrical rollers which turn easily on pivots, and a mill is commonly built near by, so that the same machinery may serve the double purpose of working the mill and drawing up vessels.

A lock is a basin placed lengthways in a river or canal, lined with walls or masonry on each side, and terminated by two gates, placed where there is a natural fall; and so constructed that, the basin being filled with water by an upper sluice to the level of the water above, a vessel may ascend through the upper gate; or, the water in the lock being reduced to the level of the water at the bottom of the cascade, the vessel may descend through the lower gate; for, when the waters are brought to a level on either side, the gate on that side may be easily opened. But, as the lower gate is strained in proportion to the depth of water it supports, when the perpendicular height of the water exceeds twelve or thirteen feet, more locks than one become necessary. Thus, if the fall be twenty feet, two locks are required, each having eight feet and a half fall; and, if the fall be twenty-six feet, three locks are necessary, each having eight feet eight inches fall. The side walls of a lock ought to be very strong. Where the natural foundation is very bad, they should be founded on piles and platforms of wood: they should likewise slope outwards, in order to resist the pressure of the earth from behind.

We may now describe the double canal lock designed by Mr. Gower of Ipswich for the Regent's Canal Company, by means of which twice the facility of transit is obtained with only half the expenditure of water.

A and B, plate INLAND NAVIGATION, fig. 1. are locks having a communication by means of sluices W and x in the middle pier. Now admitting lock A shall be full, and lock B empty, at the same time that two barges shall arrive, the one going down and the other up the stream; the barge going down will naturally enter the lock A, which is ready for her reception; while the other will enter B. The sluices and gates being now shut, let the middle pier sluices be opened, so that the water may flow from the lock A into B, whereby the barge in A will be lowered, and the barge in B raised, till both are on a level; at which time the barge in A will be half up, and the barge in B half down. Now shut the pier sluices W and x, and open the side sluices y and z, whereby lock A will continue to empty, and B to fill, till the water in each obtain the level of the lower and upper canal: the gates C and D being then opened, each barge is at liberty to depart the one up and the other down the stream; the time employed to pass them being no more than the time employed in passing one barge through a single lock; and, to perform this double duty, only one full lock of water has been withdrawn from the upper level of the canal. Figs. 2 and 3 are vertical and transverse sections of the same lock.

We have now to examine a canal lock in which no waste of water occurs. The model is in the possession of Mr. Partington of the London Institution. It was originally suggested by Mr. Bogaerts, and consists of a double lock-pit and tank capable of displacing, and as such of elevating the water and barge in which it floats. It is represented at fig. 4. A B C D are the upper and lower water-levels. The plunger is shown separately at fig. 5. If we now suppose the plunger in its proper situation, and the end E depressed, the water will be forced along the under-ground communication beneath, and the barge will be raised from the lower to the upper level at D. The principal novelty in this contrivance remains to be noticed. The plunger, fig. 5, is hollow, and filled with water, and as soon as it is turned a little out of its horizontal direction, the water, as is shown at H, enters the side of the vessel that is then immersed, and forms an exact balance for the quantity that has been displaced in the lock-pit.

If, on the contrary, the navigator wishes to depress a barge, or carry it from a high to a low level, he has only to open the gates and admit the vessel, which will sink the moment the plunger is raised.

Mr. Woodhouse has a patent for improvements in canals. They are divided by the patentee under four heads; the first consists in the

INLAND NAVIGATION.

Fig. 1

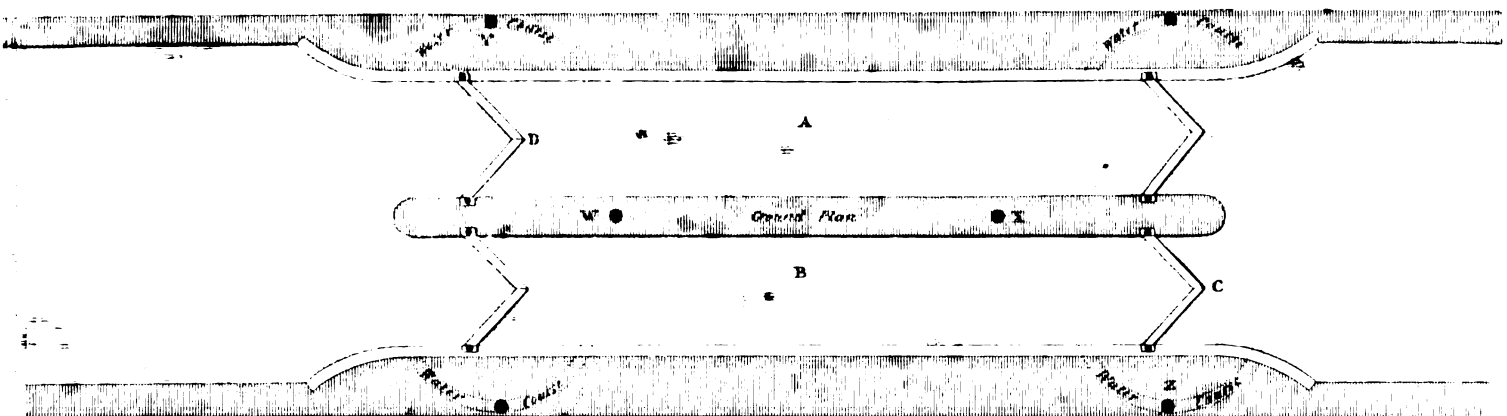


Fig. 2

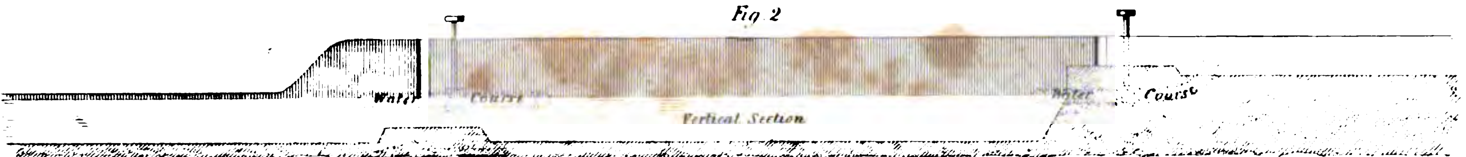


Fig. 4.

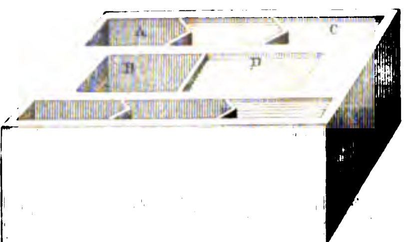


Fig. 5.

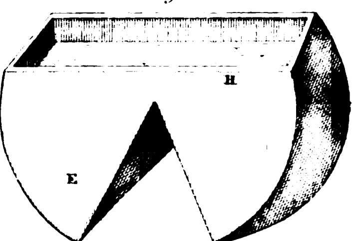
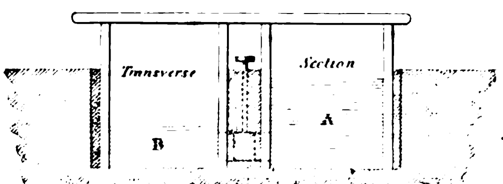


Fig. 3



J. Shury Sculp

London, Published by Thomas Tegg & Son, 73, Cheapside

application of certain contrivances for weighing boats, &c., whether they are laden or empty. An horizontal frame of timber is to be erected over a lock, of a sufficient height above the surface of the canal to admit boats to pass under it, and of competent strength to support the weight of the boats with their cargoes. Upon this frame weighing machines of the best construction are to be placed, such as are capable of sustaining the said boats, &c. Let the weighing machines be so arranged that chains or bars, depending from the short ends of levers, may form two parallel rows, at such a distance asunder as to admit the vessels intended to be weighed to pass between them. Across the bottom of the lock as many pieces of timber or iron are placed as there are pairs of chains or bars depending from the levers of the weighing-machines. If these cross-pieces be timber, they must be loaded with metal, so as just to sink in water. To each end of these cross-pieces a strong chain must be fastened, and each of the chains depending from the machines must terminate in a strong hook, and be furnished with an adjusting screw or wedge, capable of lengthening or shortening the bars or chains.

When a vessel is to be weighed, it must swim into the lock, and the cross-pieces drawn up by their chains until they come into contact with the bottom of the vessel. The chains of the cross-pieces are then to be hooked to the depending bars, and to be made tight by adjusting screws or wedges. A sufficient quantity of water is then let out of the lock into a side pond (where it is preserved), to leave the vessel suspended on the machines. To ascertain the whole weight sustained, the main levers must be connected by means of a bar, and weights suspended from it will give the result.

Secondly. The next object of this patent is that of conveying vessels from one level to another without locks. For this purpose the upper and lower levers are to be brought to within such a distance of each other as shall be somewhat more than the length of the vessel to be conveyed. Each of the levers are to terminate in two canals, wide enough to admit the boat; and the space between the two levers must be divided lengthways into two spaces by a partition of timber, of a sufficient strength, and carried with the ends and side walls a sufficient height above the top level, to fix the machinery upon, turning a proper arch or arches in the end wall next the lower canal, for the vessel to swim underneath. Each of these spaces must be sufficiently large to admit a water-tight vessel called a conductor, capacious enough to swim the vessel in. Each of the conductors must be furnished with a stop-gate or paddle at each end; and the ends of the upper and lower canals must also have stop-gates. The two conductors must be suspended by a competent number of ropes or chains, one end of each to be made fast to strong pieces of iron or timber fastened to the sides of the conductors, and meeting over the centre, and the other ends fastened to two drums or wheels upon horizontal shafts. A counterbalance to the weight of the ropes is effected by their coiling on the drums, and, the height of the lift being given, the diameter of the drum to produce the effect is easily found.

The ends of the canals must be truly made and covered with leather, which is to be stuffed between the leather and wood, to form an elastic body; so that when the ends of the conductors are forced against them, by a spring or any other contrivance, they may be water-tight. To pass a boat from the lower to the upper level, open the gate in the lower conductor, and the corresponding one in the lower canal, and swim the boat into the conductor, which will displace a quantity of water from it, equal in weight to the weight of the vessel and cargo; so that the conductor with its contents is always of the same weight. When the vessel is in the conductor, and the gates shut, the apparatus is to be set in motion by a pinion acting in a wheel fixed on the axis of the drum, or by any other mechanical contrivance; and the top conductor being, with the water in it, equal to the weight of the lower one, will descend, and the bottom conductor, with the vessel in it, will rise; when it arrives at the upper level the top conductor will have descended to the lower level. Hence one vessel may be lowered in one conductor, while another is rising in the other, since the equilibrium is not destroyed by the vessel entering the conductor. It may be expedient to give the descending conductor more weight than the ascending one, to produce motion in the apparatus with more ease, which may be effected by not suffering the descending conductor to be quite so low as to bring the surface of he water in it to the level of the water in the lower canal, so that when the gates are opened a small quantity of water will run out of the conductor into the lower canal. The strength of this apparatus, and number of ropes, will depend upon the weight of the vessel.

Thirdly. Another object of this patent is the application of a telegraph or signal to the purposes of canal navigation, which is intended to produce a very considerable saving of water in passing locks, when they are so far distant from each other that the lock-keepers cannot see the boats from one lock to another; for it takes no more water to pass a given number of boats up the locks, and as many down, provided they pass alternately, than it would to pass them in succession, in either direction, by the assistance of the telegraph. The telegraph or signal may be a straight piece of timber, with a board framed into the upper end of it about eighteen inches long, and one foot broad, having a round hole cut through it about eight inches in diameter, a frame being fixed in the ground to receive this piece of timber, when raised perpendicularly, and in which frame it will turn round; therefore, when the first lock-keeper has a boat in view upon the canal, he turns the flat side ot the board towards the next lock, which informs the next lock-keeper that there is a boat coming in that direction: the middle lock-keepers are furnished with two telegraphs or signals to give information each way.

Fourthly. The last thing mentioned in the specification, is a method of raising a sunken vessel; which is done by mooring two 'oaded

vessels alongside that which is sunk, with two or more pieces of timber, long enough to project over each side of the loaded boats, half the breadth of the boat, with a pulley or roller fixed at each end of the timbers, for one or more ropes or chains to pass over, one end to be fastened to the sunken boat, and the other to an empty boat on the outside of each of the loaded boats. When all the chains are made fast, by unloading the loaded boats into the empty ones, the sunken boat will thereby be raised.

Within the last fifty years a great number of canals have been cut in various parts of England, which have greatly contributed to the improvement of the country, and the facilitating of commercial intercourse between the trading towns. The first of these, in point of date, is the Sankey Canal, the act of parliament for which was obtained in 1755. It was cut to convey coals from the coal-pits at St. Helen's to the River Mersey, and so to Liverpool, and is in length twelve miles.

But the canals of the late duke of Bridgewater, the great father of inland navigation in this country, are of much greater importance, both for the extent and the natural difficulties that were surmounted by the fertile genius of that extraordinary mechanic, Mr. Brindley. Of these great works the first was begun in 1758, at Worsley Mills, about seven miles from Manchester, where a basin is cut, containing a great body of water, which serves as a reservoir to the navigation. The canal runs through a hill, by a subterranean passage large enough for the admission of long flat-bottomed boats, towed by hand-rails on each side, nearly three-quarters of a mile, to the duke's coal works. There the passage divides into two channels, one of which goes 500 yards to the right, and the other as many to the left. In some places the passage is cut through solid rock, in others arched over with brick. Air funnels, some of which are thirty-seven yards perpendicular, are cut out at certain distances through the rock to the top of the hill. At Bartonbridge, three miles from the basin, is an aqueduct, which, for upwards of 200 yards, conveys the canal across a valley, and the navigable river Irwell. There are three arches over this river, the centre one sixty-three feet wide, and thirty-eight feet high above the water, which will admit the largest barges to go through with masts and sails standing. The whole of the navigation is more than twenty-nine miles; it falls ninety-five feet, and was finished in five years.

The *Grand Trunk*, or *Staffordshire* Canal, was begun in 1776, under the directions of Mr. Brindley, in order to form a communication between the Mersey and the Trent, and, in consequence, between the Irish Sea and the German Ocean. It was completed in 1777, after the death of Mr. Brindley, who died in 1772, by his brother-in-law Mr. Henshall. Its length is twenty-two miles, it is twenty-nine feet broad at the top, twenty-six at the bottom, and five deep. It is carried over the river Dove by an aqueduct of twenty-three arches, and over the Trent by one of six. At the hill of Harecastle, in Staffordshire, it is conveyed through a tunnel more than seventy yards below the surface of the ground, and 2880 yards in length. In the same neighbourhood there is another subterraneous passage of 350 yards, and at Preston-on-the-Hill another, 1241 yards in length. From the neighbourhood of Stafford a branch goes off from this canal, and joins the Severn near Bewdley: two other branches go, the one to Birmingham, and the other to Worcester. The Braunston, or Grand Junction Canal (so called from its uniting the inland navigation of the central counties), extends from the Thames at Brentford to the Oxford Canal, at Braunston, in Northamptonshire.

The first part of the course of the *Barnsley* Canal is south, and the remainder west, about fifteen miles in length, in the West Riding of Yorkshire; its western end is considerably elevated above the sea. The principal object of it seems to be the export of coals and paving-stones, and forming a short communication with Rotherham and Sheffield (by the Dearne and Dove Canal, with which it connects at Eyming Wood near Barnsley), and Leeds, Wakefield, Halifax, Manchester, Liverpool, &c. It commences in the lower part of the Calder River, or Ayr and Calder navigation, a little below Wakefield, makes a turn when it arrives at the Dearne River, and terminates at Barnby Bridge near Cawthorn; there is a branch of two miles and a half to Haigh Bridge, and rail-way branches to Barnsley Town, and to Silkstone. From the Calder to the junction of the Dearne and Dove Canal, about nine miles, is a rise of 120½ feet; this is effected by three locks together, near Agbridge, having a low level or side cut brought up to near the upper pound, with a steam engine for pumping up the water again, which is let down by the lockage; by thirteen other locks near Watton, and a long side-cut, from which engines pump up the water to supply the pound above these; and near Bargh Bridge, by four other locks, a side cut and engine. On the Haigh Bridge branch there are also seven locks together, with a low side-cut, and a steam engine for pumping up the water required for lockage. At Eym is an aqueduct bridge.

The *Basingstoke* Canal was first proposed in 1772, as an extension of, or appendage to, the canal intended for shortening the course of the navigation of the river Thames, between Reading and Maidenhead; but it was some years before the first act for this was obtained in 1778. The general direction of this canal is nearly west, by rather a crooked course of thirty-seven miles in length, in the counties of Surrey and Hants; the summit-pound thereof of twenty-two miles in length is upon a high level, near the south-east branch of the grand ridge on its north side. The principal objects thereof seem the import of coals, and export of timber and agricultural produce, from and to the Thames. It commences in the Wey River at Westley, about two miles from its junction with the Thames, and terminates at Basingstoke. The first fifteen miles from the Wey River it has a rise of 195 feet by twenty-nine locks to Dadbrook, (the part at each lock being about seven feet), from whence to Basingstoke it is level. At Grewell is a tunnel,

part of which intersects the chalk strata about three-quarters of a mile in length.

The *Glamorganshire* Canal has for its objects the export of the produce of the immense iron, coal, and lime works in the neighbourhood of the Merthyr Tydvil, &c., and the supply of the rapidly increasing population thereof; at Eglwysila the Aberdare Canal joins, and the Cardiff and Merthyr rail-way runs by its side, and joins it at those two places. Its northern end is considerably elevated. Cardiff and Caerphilly are considerable towns on or near the line; it commences in a sea-basin or dock, in the Severn, at the lower-layer near Cardiff, and terminates at Cyfartha, a little above Merthyr, where are the immense iron-works of Mr Crawshay; it has a rail-way branch from Merthyr to Dowlais and Penydarren iron-works. From the tide-way at Lower-layer to Merthyr is a rise of nearly 600 feet, and, during a part of this distance, the canal skirts precipitous mountains at the height of nearly 300 feet above the river Taaf, which it closely accompanies through its whole length. The floating-dock at Lower-layer is sixteen feet deep, in which a great number of ships, of 300 tons burden, can lie constantly afloat, and load or unload, either at the spacious warehouses on its banks, or from, or to, the boats belonging to this canal, or the trams used on the Cardiff and Merthyr rail-road, that here commences. There is a large aqueduct bridge over the Taaf at Gellygare. This company was authorised to raise £100,000, and to the powers for raising the last £10,000 this singular condition was annexed, viz. that the whole concern should be completed in two years, after which no further money should be applied, except for repairs. At Cyfartha there is a famous water-wheel, made of cast-iron, fifty feet in diameter; the water being conveyed thereto for a great distance in an iron aqueduct.

The general direction of the *Brecknock* and *Abergavenny* Canal is about north-west, thirty-three miles in length, in the counties of Monmouth and Brecknock in South Wales; it begins a few miles from the coast, and soon after comes near and follows the course of the Uske River, no part of it being very greatly elevated. Its objects are the exportation of coals, iron, and other mineral products of the country round Abergavenny, by means of the Monmouthshire Canal, and the supply of Pontypool, Abergavenny, Crickhowel, and Brecon towns, that are near its course. It commences in the Monmouthshire Canal, one mile from Pontypool, and terminates at Brecon: it has rail-way branches to Abergavenny, Wain Dew collieries, &c., and to Llangroiney. From the Monmouthshire Canal, the first fourteen miles and a-half are level, to three miles above the Abergavenny branch, whence to Brecon is eighteen miles and a-half, with a rise of sixty-eight feet. Near its commencement it crosses the little river Avon, on an aqueduct, and shortly afterwards passes a tunnel of 220 yards in length.

The *Derby* Canal runs nearly north for about nine miles in the county of Derby; it is not greatly elevated above the level of the sea. Its objects are the supply of Derby, and the export of coals and iron. It commences in the Trent River at Swarkstone Bridge, crosses and intersects the Trent and Mersey Canal, and terminates at Little Eaton, nearly four miles above Derby, from which town a cut of eight miles and a-half goes off to a place between Sandiacre and Long Eaton, and there joins the Erewash Canal. The canal is forty-four feet wide at top, twenty-four at bottom, and five feet deep, except the upper level next Little Eaton, which is made six feet deep to retain the water of wet seasons like a reservoir: the locks are ninety feet long, and fifteen feet wide withinside.

The general direction of the *Droitwich* Canal is about north-east, for five miles and three-quarters, in the county of Worcester; it is not greatly elevated above the sea; its objects are the export of salt and the import of coals, of which many thousand tons are annually imported, and used in the boiling of salt, except what the town of Droitwich consumes. It commences in the river Severn at Hawford, and terminates at Chapel Bridge in Droitwich; it has a rise of fifty-nine feet and a half by eight locks. This canal was executed by Mr. Brindley, and it is said to present a pattern to canal-makers by the neatness and regularity of its curves, and the stability and excellency of all its works. The proprietors were authorised to raise £33,400, the amount of shares being £100. Owing to the overflowings of the copious salt-springs near Droitwich, this canal presents the curious spectacle of a salt-water canal, in the interior of the country, in which no river-fish can live.

The *Shrewsbury* Canal commences in Castle Foregate basin, at Shrewsbury, and terminates in the Shropshire Canal above Wrockandire-wood plain near Oaken Gates. From Shrewsbury to Langdon, nearly twelve miles, is level; thence to near Wombridge, four miles and a quarter, is a rise of seventy-nine feet, by locks; thence is an inclined plane of seventy-five feet rise, and nearly one-eighth of a mile in length, to the Ketley Canal; thence to the Shropshire Canal, one mile and one-eighth, is level. The locks on this canal are contrived in two divisions by doors, which draw up, out of a recess formed for them below the locks, so that a long narrow canal boat of the usual construction, or two or four smaller and narrow flat-bottomed boats adapted to the inclined plane, can pass the same without unnecessary waste of water. Near Atcham is a tunnel of 970 yards in length, and ten feet wide, which has a towing path three feet wide through it, constructed of wood, and supported on bearers from the wall, so as not to diminish the water-way. At Long is a long embankment and aqueduct bridge, or rather trough of cast-iron, over the Tern River, sixty two yards long, and sixteen feet above the level meadows; at Roddington is another embankment and a common aqueduct bridge, twenty-one feet above the surface of the Roden River, over which the canal passes; and at Pimley there is another embankment and aqueduct of less height and width than the former ones. At Wombridge there is a double inclined plane of 223 yards in length, and seventy-five feet perpendicular rise, up one of which empty or partly laden boats are drawn by the aid of a steam-engine, or by the descent of a loaded boat

at the same time on the other, as we have before described.

The general direction of the *Grand Western* Canal, is nearly north-east for about thirty-five miles, in the counties of Devon and Somerset: it crosses the south-western branch of the grand-ridge; its objects being a connexion between the southern coast and the Bristol Channel, the supply of the country with coals, deals, &c., and the export of farming produce. It commences in the tide-way of the river Exe at the town of Topsham, and terminates in the Tone River at Taunton Bridge; it has a cut of about seven miles to Tiverton, and other short ones to Cullumpton and Wellington.

The *Thames* and *Severn* Canal commences in the Stroudwater Canal at Wallbridge near Stroud, and terminates in the Thames and Isis Navigation at Lechlade: it has a branch of about one mile in length to the town of Cirencester. From the Stroudwater Canal to Sapperton or Salperton, seven miles and three-eighths, is a rise of 243 feet by twenty-eight locks; thence the summit pound continues through the tunnel, two miles and three-eighths, to near Coates, and level; thence to the Thames and Isis navigation, twenty miles and three-eighths, is a fall of 134 feet by fourteen locks. The first four miles of this canal, from Stroud to Brinscomeport basin, is of the same width and depth as the Stroudwater Canal, and is navigated by the Severn boats; the remainder of the line is forty-two feet wide at top, thirty at bottom, and five feet deep; at Brinscombeport, goods going eastward are removed into barges eighty feet long and twelve wide, which carry seventy tons each. The famous tunnel on this canal at Sapperton is 4300 yards long, the arch being fifteen feet wide in the clear, and 250 feet beneath the highest point of the hill, which proved to be hard rock, much of which required blasting, and some of it was so solid as to need no arch of masonry to support it; the other parts are arched above, and have inverted arches in the bottom; the cost of excavating this tunnel, in 1788, amounted to eight guineas per cubic yard.

The general direction of the *Peak Forest* Canal and rail-way is nearly south-east for twenty-one miles, in the counties of Chester and Derby; its southern end is very considerably elevated, and terminates on, or very near to, the grand ridge; its principal object is the export of the Peak-Forest lime, and of coals from the neighbourhood of this canal. It commences in the Manchester Ashton and Oldham Canal, at Duckenfield, and the canal terminates at the basin and lime-kilns in Chapel-Milton, whence a rail-road proceeds to Loadsknowl lime-stone quarries in the Peak. The line of the canal is fifteen miles in length, and of the rail-way six miles; there is a cut of half a mile to Whaley Bridge, and a rail-way branch of one mile and a half to Marple. Over the Mersey River, near Marple, is a grand aqueduct bridge of three arches, each sixty feet span and seventy-eight feet high, the whole height of the structure being nearly 100 feet, which was built in 1799. Mr. Outram was the engineer, and the works were completed on the 1st of May 1800.

The *Oxford* Canal commences in the Thames and Isis navigation at Badcock's garden on the west side of Oxford, and terminates in the Coventry Canal at Longford. At Hillmorton and at Napton are short cuts of about half a mile each, to the steam engines belonging to this company. From the Thames and Isis at Oxford to Banbury, twenty-seven miles and a quarter, is rise of 118 feet by eighteen locks (including two weir-locks and an entrance lock from the Isis) thence to Claydon, seven miles and a quarter, is a rise of seventy-seven feet and one-third by twelve locks; thence (through the Fenny Compton tunnel) the summit pound continues to Marston-doles wharf ten miles and three-quarters, and level; thence to Napton on the hill, two miles, is a fall of fifty-five feet and a quarter by nine locks; thence to Hillmorton, sixteen miles and three-quarters (in which the Warwick and Napton and the Grand-Junction join), is a level; thence in half a mile is a fall of nineteen feet by three locks; thence to the Coventry Canal at Longford, twenty-six miles and a half, is level. This canal is twenty-eight feet wide at top, sixteen feet at bottom, and four feet and a half deep, except the summit-pound, which is made six feet deep in order to act as a reservoir; the locks are seventy-four feet and three-quarters long, and seven feet wide. The Fenny Compton tunnel is 1188 yards long, nine feet and one-third wide, and fifteen feet and a half high. At Newbold is a tunnel 125 yards long, made under the church yard and street, sixteen feet high, and twelve feet and a half wide, with a towing path through it. At Wolfhamcote, also, there is a short tunnel. At Pedlars Bridge near Brinklow is an aqueduct bridge of twelve arches, of twenty-two feet span each. At Cosford on the Swift River, and at Clifton on the Avon, are others of two arches each; at Wolfhamcote, Adderbury, and Hampton Gay, are other smaller aqueducts.

The general direction of the *Dorset* and *Somerset* Canal is nearly south for about forty miles in the counties of Wilts, Somerset, and Dorset: the middle part of it is on a high level, and crosses the south-western branch of the grand ridge. Its principal objects are the supply of the manufacturing towns and neighbourhood through which it passes with coals, from the mines bordering on Mendip, and the opening of an inland communication between the Bristol Channel, the Severn, the Thames, and the southern coast of the island. The commencement is in the Kennett and Avon Canal at Widbrook, near Bradford, and the termination in the Stour River near Gains-cross in Shillingstone-Okeford; from near Frome a branch of about nine miles proceeds to Nettlebridge collieries in Midsummer-Norton.

The *Hereford* and *Gloucester* Canal has for its object the export of coals from the neighbourhood of Newent, and of the cyder and agricultural products of the country. It commences in the tide-way of the Severn River at Gloucester, crosses Alney Isle and another branch of the Severn to Lassington, and terminates near the Wye River at Byster's gate in Hereford: it has a short cut to Newent. From the Severn to Ledbury the distance is eighteen miles, with a rise of 195½ feet; thence to Monkhide is eight miles and a half on the summit level; thence to Withington Marsh it is three miles, with a fall of thirty feet; and thence to Hereford, six miles, it

is level. Newent cut is level. On this line are three considerable tunnels, that at Oxenhal is 2192 yards in length; at Cannon-Frome is one of 1320 yards; and near Hereford another of 440 yards in length. Mr. Joseph Clowes was the engineer: in July, 1796, this canal was finished, from the Severn to Newent, and in March, 1798, the Oxenhal tunnel was finished, and the navigation extended to Ledbury, and coals were in consequence reduced in price at that town from 24s. to 13s. 6d. per ton.

The situation of the *Coventry* Canal is high, particularly the eastern part, which crosses the grand ridge near Bedworth, without a tunnel, and its Seeswood branch does the same. Its general objects are, the line of communication between London, Birmingham, Manchester, Liverpool, &c.; the export of coals from the numerous mines near it; and the supply of Coventry. It commences in the Birmingham and Fazely Canal at Fazely, and terminates in the Oxford Canal at Longford; its detached part, of five miles and a half in length, commences at the termination of the Birmingham and Fazely Canal at Whittington Brook, and terminates in the Trent and Mersey Canal at Fradley Heath; near to Whittington Brook it connects with the Wyrley and Essington Canal, and at Marston Bridge the line is joined by the Ashby-de-la-Zouch Canal. There is a cut of about one mile in length to Griff collieries; another to several collieries by different branches near Seeswood Pool and Bedworth, five or six miles in length: there is also a cut of half a mile from the line to Bedworth; the branch to Coventry is four miles and three-quarters in length; and there is a rail-way branch to Oldbury coal-works. The detached part is level with the Trent and Mersey Canal, which level continues (through five miles and a half of the Birmingham and Fazely) to the commencement of the line of this canal at Fazely; thence to Atherstone, a distance of about ten miles, the rise is ninety-six feet, by means of thirteen locks; thence to the Oxford Canal, about twelve miles, is level; so is the cut to Coventry, and those to Griff, Seeswood Pool, Bedworth, &c. The last or highest level of this canal forms, with part of the Oxford and Ashby canals, the longest level that is to be found in Britain, being upwards of eighty-two miles, including side branches.

The objects of the *Worcester* and *Birmingham* Canal are the export of coals, and a more direct communication between Birmingham and the Severn. It commences in the Severn at Diglis, just below Worcester, and terminates in the old Birmingham and Fazely canals, at their junction at Farmer's Bridge at the upper end of Birmingham. From the Severn to Tardebig, fifteen miles, is a rise of 428 feet, by seventy-one locks; thence to the Birmingham Canal, fourteen miles, is level. The width of the canal at top is forty-two feet, and the depth is six feet; the locks are eighty feet long and fifteen feet wide. At Worcester there is a very fine basin for the canal boats. There are four or five principal, and several smaller culverts: the principal tunnel at West Heath is 2700 yards long, eighteen feet high, and eighteen feet and a half wide within the arch; the depth of water therein is seven feet and a half: at Tardebig is another of 500 yards in length; at Shortwood is another of 400 yards in length; at Oddingley one of 120 yards; and at Edgbaston another of 110 yards in length: four of these tunnels are upon the summit-pound.

The *Warwick* and *Birmingham* Canal commences in the Warwick and Napton Canal, in Budbrook parish near Warwick, and terminates in the Digbeth cut of the Birmingham and Fazely Canal at Digbeth near Birmingham. From the Warwick and Napton Canal, about half a mile, to near Budbrook Town, is level; thence two miles and a half, to Hatton, is a rise of about twenty locks; thence to the Stratford branch, about five miles, is level; thence to Knowle Common, about four miles and a half, is level; thence to Knowle Wharf, one mile, is a fall of about seven locks; thence to near Deritend, about ten miles, is level; thence to the Digbeth branch of Birmingham and Fazely, one mile and a half, is a rise of about five locks. At Haseley there is a tunnel of 300 yards in length; at Henhood Wharf there is an aqueduct over the Blythe River; near Flint Green another over the Cole River; and near its termination at Digbeth another over the Red River.

We may now furnish a list of the ascertained levels of the principal canals, in reference to the summit of the Birmingham canal, between Wolverhampton and Smithwick.

	Above summit of Birm. Canal.	Below summit of Birm. Canal.
1. *Birmingham Canal Navigation:*	Feet. In.	Feet. In.
Commencement at Autherley		132 0
Summit at Wolverhampton		0 0
Fall at Smethwick, and then level to Birmingham		19 10
Junction of branch to Digbeth, lower end of the town		100 3
And junction with Warwick Canal		136 7
Salford Bridge—Berwood Common		171 5
Curdworth—Dunton		188 11
Fazely and Whittington Brook		264 10
2. *Ashby-de-la-Zouch.*		
Commencement in Coventry Canal at Griff, and level to Hinckley and Ashby Wolds		168 9

	Above summit of Birm. Canal.	Below summit of Birm. Canal.
	Feet. In.	*Feet. In.*
Summit at Ashby-de-la-Zouch		28 9
Cloud Hill—Staunton—Ticknall		112 9
3. *Ashton-under-Line.*		
Junction with Rochdale Canal		315 4
Clayton, and branch to Stockport level		224 10
Ashton-under-Line—Duckenfield Bridge		152 10
Branches to Fairbottom and Hollinwood		106 7
Werneth colliery branch		76 7
4. *Avon River.*		
At Bath Old Bridge		439 11
At Bristol		474 11
5. *Bradford Canal.*		
Junction with Leeds and Liverpool Canal at Windhill		239 5
Bradford		158 5
6. *Bridgewater's (Duke of).*		
Mersey at Runcorn, high water		474 11
Do. low water		485 11
Preston Brook—Manchester, and Leigh branch		390 11
7. *Coventry.*		
Fradley Heath, and Whittington Brook		264 10
Glascote, Grendon, and Polesworth		250 4
Atherstone, Nuneaton, Bedworth, and Coventry		163 9
8. *Derby Canal.*		
Junction with Grand Trunk Canal		349 0
Derby		337 0
Little Eaton		320 0
Branch to join Erewash Canal		364 0
9. *Douglas (Lower).*		
Junction with Leeds and Liverpool Canal at Brier's Mill		420 11
Ribble River, near Hasketh		469 0
10. *Droitwich.*		
Severn at Hawford		442 10
Droitwich		383 4
11. *Dudley.*		
Junction with Worcester Canal at Lelly Oak, and level to Leasowes, and Blowers's Green		19 10
Netherton		31 0
Black Delph—Pensnett Chace		116 0
Junction with Birmingham Canal at Tipton Green		0 0
12. *Grand Junction Canal.*		
Commencement in Oxford Canal at Braunston		149 10
Junction of Grand Union Canal, and Daventry branch		113 10
Junction of Northampton branch		173 10
Wolverton level, and junction of Buckingham branch		251 4
Junction of Aylesbury branch		138 10
Tring summit, and branch to Wendover		93 10
Bull's Bridge, and Paddington branch		398 10
High-water mark in the Thames at Brentford		488 10
Branch to Daventry rises		59 10
Branch to Northampton and New River there		291 10
Branch to Buckingham		234 4
Branch to Aylesbury		234 10
Branch to Wendover		93 10
Branch to Paddington		398 10
13. *Grand Trunk.*		
Duke of Bridgewater's Canal at Preston Brook		390 11
Summit of Canal at Etruria		64 9
Junction of Staffordshire and Worcestershire Canal at Heywood		232 6
Junction of Coventry Canal at Fradley Heath		264 10
Junction of Derby Canal		349 0

	Above summit of Birm. Canal.		Below summit of Birm. Canal.	
	Feet.	In.	Feet.	In.
River Trent at Shardlow and Wilden Ferry				
Branch from summit to Uttoxeter, v.z. to Leek and Stanley Moor	10	2		
Froghall (and Caldon rail-way, which rises 649 feet)			50	7
Uttoxeter			182	7
14. Grand Union and Union Canals.				
Junction with Grand Junction Canal near Long Buckby			113	10
Summit			59	7
Foxton, and junction with Union Canal			134	7
West Bridge, at Leicester			294	7
15. Huddersfield.				
Junction with Ashton Canal at Duckenfield Bridge.			152	10
Summit at Saddleworth	181	10		
Huddersfield			254	1
16. Kennett and Avon Canal				
River Avon at Bath			439	11
Sidney Gardens, Bath			373	5
Bradford, Wilts, and Semington Junction			363	5
Foxhanger			307	5
Devizes			68	5
Summit at Brimslade			35	5
Crofton Engine			74	5
Kennett River at Newbury			245	5
17. Kennett River.				
At Newbury, and Junction with Canal			245	5
Thames at Reading			387	5
18. Leicester Navigation.				
West Bridge, Leicester			294	7
Junction of Melton Navigation			316	1
Mount Sorrel			329	11
Loughborough, and Loughborough Canal			344	7
To Thringston Bridge, Charnwood Forest, and to Barrow Hill (part by a railway).			159	7
19. Loughborough Navigation.				
Junction with Leicester Navigation			344	7
River Trent, near Sawley			385	7
20. Melton Navigation.				
Junction with Leicester Navigation			316	1
Ratcliffe			300	2
Melton Mowbray			245	2
21. North Wilts.				
Junction with Wilts and Berks Canal (at the summits)			162	11
Do. with Thames and Severn Canal, at Latton near Cricklade			221	11
22. Oxford Canal.				
Junction with Coventry Canal at Longford			168	9
Hill Morton—Union of Grand Junction Canal at Braunston			149	10
Summit at Claydon			94	7
Banbury			171	11
Aynho Wharf			207	8
Heyford Warren			231	10
Hampton Gay			262	10
Isis at Godstone			282	9
Oxford			286	5
River Isis at Oxford			289	11
23. Peak Forest Canal.				
Junction with the Ashton-under-line Canal			152	10
Priestfield	59	2		
Chapel Milton	188	2		
24. Ramsden's Canal.				
Junction at Huddersfield			254	1
River Calder, at Cooper's Bridge			310	10

	Above summit of Birm. Canal.		Below summit of Birm. Canal.	
	Feet.	*In.*	*Feet.*	*In.*
25. *Staffordshire and Worcestershire.*				
Severn at Stourport			436	8
Kidderminster			373	1
Stewpony and Stourbridge Canal			298	2
Bumble Hole			229	2
Summit and junction with Birmingham Canal at Autherey			132	0
Penkridge			179	0
Heywood			232	6
26. *Stourbridge.*				
Junction with Dudley Canal at Black Delph			116	0
Stourbridge			260	0
Stewpony and junction of Staffordshire and Worcestershire Canal			298	2
27. *Stratford.*				
Junction with Worcester Canal at King's Norton			19	10
Cut to join the Warwick Canal			136	7
Preston, Wooton, Wawden, and Edstone Valley, Wilmcote			242	7
Stratford			333	7
Surface water of the River Avon			354	7
28. *Stroud.*				
Junction with Thames and Severn near Stroud			361	0
Severn at Framilodd			463	5
29. *Thames and Severn.*				
Junction with Stroud Canal, near Stroud			361	0
Summit, Siddington and Cirencester			119	9
Cricklade			221	11
Lechlade and River Thames			250	3
30. *Thames River.*				
At Lechlade			250	3
At Oxford			289	11
At Abingdon and at Culham			330	11
At Reading			387	5
At Brentford			488	10
31. *Warwick Canal.*				
Junction at Digbeth near Birmingham			136	7
Summit at Bordesley and Knowle			94	7
Hatton			136	7
Warwick, and junction of Napton Canal			282	7
32. *Warwick and Napton Canal.*				
Junction near Warwick			282	7
Leamington			296	7
Summit at Napton and Oxford Canals			149	10
33. *Western Junction proposed Canal.*				
Aylesbury branch of Grand Junction Canal			234	10
Thames at Culham, near Abingdon			330	11
34. *Wilts and Berks.*				
Kennett and Avon Canal at Semington			363	5
Chippenham (a level branch)			308	11
Colne (ditto)			292	11
Summit, South Marston, and North Wilts Canal			162	11
River Wantage			234	5
Abingdon and River Thames			330	11
35. *Worcester.*				
Commencement at Birmingham—level to Tardeby			19	10
Lowesmere and Worcester			403	10
Severn at Diglis			447	10
Branch to Droitwich			383	4
36. *Wyrl and Evrington.*				
Commencement near Wolverhampton	0	0	0	0

	Above summit of Birm. Canal.		Below summit of Birm. Canal.	
	Feet.	*In.*	*Feet.*	*In.*
Junction with detached part of Coventry Canal, near Huddlesford			264	10
Branch to Wyrley bank	36			
Branch to Easington Collieries	60			
37. *Rochdale.*				
Manchester—Knott Mill			390	11
Ashton Canal			315	4
Failsworth			134	11
Rochdale			14	11
Summit at Dean Head	130	0		
Dob Royal			32	11
Todmorden			56	11
Sowerby Wharf			217	11
River Calder			227	11

The new *Grand Ship* canal from London to Portsmouth, suggested by Mr. Cundy, may be thus briefly described, though the advantages that are likely to be derived from its complete adoption are of so important a character as to place it, in point of national importance, far beyond any of those that have hitherto been examined.

This canal, and the several works connected therewith, are intended to accommodate vessels of the largest dimensions, when fully loaded, so as to enable them to pass each other; for this purpose twenty-eight feet depth of water will be required, and about 150 feet in width, with about four locks, 300 feet in length and sixty-four in breadth, up to the summit level.

The canal will commence with two branches at Rotherhithe, nearly opposite the London and West India Docks, near the Victualling Office, and will proceed from thence in a south-west direction, to Walworth Common, by the foot of Brixton Hill, to Streatham Common; then between the towns of Mitcham and Tooting, to Malden, Ewel, Epsom, Leatherhead, and Dorking, over Homewood Common, down the vale to Ockley, and the Roman turnpike gate, a little below Slinfold, Newbridge, Pulborough, by Hardham, Greatham, Amberley, Burkham, Arundel (and a small branch to Arundel Bay), and lastly to Chichester, Emsworth, Langston Harbour, South Sea Common, and Spithead.

From the river Thames, on the line of Malden, the ground is remarkably level, and composed of stiff loam or brick earth; from Malden to Epsom there will be extra cutting through a chalky under-stratum to Leatherhead; from Leatherhead to Dorking it is nearly a level, under the winding of the hills in Michelham Vale, through chalky under-stratum, and a stiff loamy soil; in passing Dorking to Homewood Common there will be considerable extra cutting, on the average from 120 to 130 feet deep, for about four miles, partly through a bed or deposit of sandstone, chalk, and strong brick earth; from thence it will fall into the vale of the River Arun, by Bare Farm to Ockley Church, and then procced to Newbridge and the tide-way at Pulborough; from thence the ground is level, through a strong stiff clayey and sandstone soil, and will pass below Arundel, in a direct line to Chichester, Emsworth, and Spithead.

The line of canal is remarkably straight, and will take a direction so fortunately as not to deteriorate any town or village in its course, running through a considerable portion of common and open lands; and thus rendering a work of this magnitude less objectionable than any similar plan hitherto projected.

It has not escaped the projectors, that such a measure might at first sight appear seriously inconvenient to public travelling; care, however, has been taken to avoid that concurrence as much as possible, and, where it could not be prevented, arrangements are proposed which it is conceived will fully obviate this objection and secure the convenience of the traveller.

As this canal is intended to be cut through the general level of the earth, it will receive an abundant supply of water flowing from its innumerable springs and tributary streams, as feeders from the Mole, the Way, and the Arun, and which will overflow its banks at the appropriate places provided for that purpose, at the summit level and on the line of canal.

The water will have no perceptible current in the canal; yet it will be purified and changed every day by the flowing of the springs and other streams. No mill-stream, dam, or river will be obstructed by this canal, as they will be provided for by cast iron tunnels, passing under its bed, so that the rivers, &c., may continue their present course.

General Estimate of the Expense of the Ship Canal.

	£	s.	d.
To the excavation of the canal at £30,000 per mile, seventy-eight miles, twenty-eight feet deep, and 150 feet wide top water	2,340,000	0	0
To excavating the basins, at the two extremities of the canal, with dock gates, brick and stone work, &c.	100,000	0	0
To masons, bricklayers, carpenters, smiths, foundry works to locks, bridges, tunnels, embankments, punts, &c.	471,000	0	0

	£.	s.	d.
To purchase of land, timber houses, goodwill, leases, &c.	250,000	0	0
To extra cutting from Dorking to Ockley	600,000	0	0
Contingencies, and for extra cutting from Epsom to Dorking, and from Arundel to Chichester, and Spithead, puddling, &c.	215,420	0	0
	£3,979,420	0	0

A canal forming a junction between the rivers *Forth and Clyde*, was begun in 1768, and finished in 1790, when, on the 28th of July, a hogshead of the water of the Forth was poured into the Clyde as a symbol of their junction. This canal in its dimensions is much superior to any work of the same nature in England. It is thirty-five miles in length, in the course of which navigation the vessels are raised, by means of twenty locks, to the height of 155 feet above the level of the sea; proceeding afterwards on the summit of the country for eighteen miles, it then descends by nineteen other locks into the Clyde. It is carried over thirty-six rivers and rivulets, and two great roads, by thirty-eight aqueducts of hewn stone. By one of these, 400 feet in length, it passes the Kelvin, near Glasgow, at the height of 70 feet above the bed of the river in the valley below. It crosses the great road from Edinburgh to Glasgow by a fine aqueduct bridge, and is carried over the water of Logie by another aqueduct bridge, the arch of which is ninety feet broad. The great utility of this communication between the eastern and western seas to the trade of Great Britain and Ireland must be evident from the consideration that it shortens the distance between them by the shortest passage, that of the Pentland Firth, nearly 600 miles.

We have already entered so fully into the local history of canals in this country that our limits will permit but a brief notice of the great northern canal which unites the eastern and western oceans by *Inverness* and Fort-William. In 1773 Mr. Watt was appointed by the trustees for certain forfeited estates in Scotland, to make a survey of the central highlands. Mr. Watt, in his report to that public body, recommended, amongst other improvements for the highlands, the formation of the Crinan Canal, which has long since been executed, and also of the Caledonian Canal, from Inverness to Fort-William.

In the Parliamentary Reports the *Caledonian Canal* is generally laid out in three districts, viz. the Clachnaharry or eastern district, comprehending the works from Loch Beauly to Fort-Augustus; the middle district, extending to the west end of Loch Lochy; and the Corpach or western district, from Loch Lochy to Loch Eil, or the western sea. With regard to the middle district, we observe that hitherto the sum annually allowed for this work does not admit of every part being carried on with equal vigor. The works of this compartment have, therefore, been almost wholly confined to excavating the ground; it being of importance to have the eastern end opened to Loch Ness, and the western division to Loch Lochy, before much was done to the masonry of the central parts; in order to facilitate the transport of materials from the respective seas. This is now accomplished.

The extent of the navigation comprehended in the middle district is about twelve miles. The whole height, from the Beauly Firth or the east sea to Loch Oich, the summit level of the canal, is stated at about ninety-four feet; and, as fifty-three feet of this has been overcome in rising to Lock Ness, it appears that about forty-one feet will form the rise of the lockage of the middle district, while the fall on the western side to Loch Eil is only ninety feet. This is to be overcome by a chain of four locks at Fort-Augustus, and one at Callachie, nearly three miles westward, independently of the regulating lock within half a mile of Loch Oich. The lock at Callachie is curiously situate, being founded and built upon a dike or stratum of rock, called *Grey Wacke* by mineralogists, which runs across the moor, and is indeed the only piece of rock on this part of the line of the canal. It is just large enough for the site of the lock, and was preferred to a gravel as a foundation. This rock being very compact, it rendered an inverted arch for the lock unnecessary.

From Loch Lochy to Loch Eil the distance is about eight miles, on which the canal works may now be considered as finished, having kept pace with those of the eastern district. The works of this compartment, both in regard to masonry, excavation, and embankment, have been more expensive than those of the eastern division; in particular, the deep cutting at Moy, Strone, and Muirshearlich, and excavating the sites of the locks and basin for shipping at Corpach in rock. But, perhaps, if all the expense of the foundations and earth work on the Beauly Firth are taken into account, they may be found to have been as expensive, if not more so, than the blasting of rocks on the Corpach district.

In our progress towards the western sea-lock of Loch Eil, after passing through the aqueduct of the Lower Banavieburn, we reach the famous chain or suite consisting of eight locks, not unaptly termed 'Neptune's Staircase.' This majestic chain of locks was finished, excepting the gates, in 1811. The cost of these locks may be stated at about £50,000. They occupy a range of 500 yards, and rise altogether about sixty feet perpendicular. The common void or cavity of the lock-chambers is forty feet in width, and the depth twenty feet; the bottom, forming an inverted arch, gives the whole a very grand appearance, presenting the greatest mass of masonry any where to be found, as applicable to the purposes of a canal. After passing this interesting part of the work, the canal gets easily along Corpach Moss (to the House of Corpach, the former seat of the Camerons of Loch Eil). Here a doubled lock is situate, connected with a basin for shipping, measuring 250 yards in length by 100 yards in breadth, which joins the sea lock, and so communicates with the Western Ocean by two mounds projecting about

350 yards into Loch Eil, and completing the inland navigation of the Caledonian Canal from sea to sea.

It appears, from the the first report of the commissioners for making the Caledonian Canal, that the sum of £6052 10*s.* 10¾*d.* had been expended in the preparatory measures for this great undertaking. In the session of parliament, 1804, another act was passed, entitled 'An Act for making further Provision for making and maintaining an Inland Navigation, commonly called the Caledonian Canal, from the eastern to the western Sea, by Inverness and Fort William in Scotland.' By this additional act a further provision of £50,000 was made for this undertaking.

In the month of June,1804, the commissioners resolved that Mr. Jessop should again visit the line of the intended navigation in concert with Mr. Telford, that they might jointly inspect the progress of the works already commenced, and re-examine all the particulars of the former survey; that they might determine the position of each lock on the whole line of the canal, and, as far as possible, fix the situation, dimensions, and construction of the bridges, culverts, and other necessary works; and that they might take into consideration the manner in which it would be most convenient to connect the line of the canal with the several lochs or lakes forming part of the intended navigation; and also fix and arrange the price of labor, and the mode in which the several works would be most advantageously let or contracted for.

During the year 1803 the operations were merely of a preparatory nature, and the number of workmen did not exceed 150. But in the year following they were increased to upwards of 900, when it became neeessary to appoint resident engineers, particularly at the extremities of the line, to which the first works were entirely confined. For this highly important charge Mr. Matthew Davidson, who had acquired much experience at the works upon the Elsemere Canal, particularly at the great aqueduct of Pontycycelte in Denbighshire, was appointed to the eastern division, and Mr. John Telford took charge at the western end.

The *Grand Canal*, in Ireland, was commenced soon after the year 1753. The general direction of this canal is nearly west, for sixty-one miles and a half, through Dublin, Kildare, and King's counties: it passes a low part of the grand ridge of Ireland, on the Bog of Allen. Its objects are, the supply of Dublin with coals, &c.; the varied produce of the banks of the Shannon; and opening an inland communication through the country. It commences in a grand basin in Dublin (which connects with the Liffey River and the new docks), and terminates in the Shannon River at Tarmonbury, near Moy's Town; it has collateral branches to the Boyne River at Edenderry, to the Barrow River at Monestraven, and also at Portarlington; there are also branches to Naastown and to Johnstown. This canal is five feet deep; the locks are eighty feet long and sixteen wide in the clear, and are built of hewn stone. In the year 1770 this canal had proceeded from Dublin into the Bog of Allen, when, owing to mismanagement, it stood still for several years; and it was not until the beginning of 1804 that the whole line was finished and opened. The sums of the public money which have been granted by the parliaments to aid this work are immense; between 1753 and 1771 they amounted to £78,231.

The French at present have many fine canals: that of *Briare* was begun under Henry IV., and finished under the direction of cardinal Richelieu in the reign of Louis XIII. This canal makes a communication betwixt the Loire and the Seine by the river Loing. It extends eleven French great leagues from Briare to Montargis. It enters the Loire a little above Briare, and terminates in the Loing at Cepoi. There are forty-two locks on this canal.

The canal of *Orleans*, for making another communication between the Seine and the Loire, was begun in 1675, and finished by Philip of Orleans, regent of France, during the minority of Louis XV., and is furnished with twenty locks. It goes by the name of the 'Canal of Orleans;' but it begins at the village of Combleux, which is a short French league from the town of Orleans.

But the greatest and most useful work of this kind is the junction of the ocean with the Mediterranean by the canal of *Languedoc*. It was proposed in the reigns of Francis I. and Henry IV., and was undertaken and finished under Louis XIV. It begins with a large reservoir 4000 paces in circumference, and twenty-four feet deep, which receives many springs from the mountain Noire. This canal is about sixty-four leagues in length, is supplied by a number of rivulets, and is furnished with 104 locks, of about eight feet rise each. In some places it passes over bridges of vast height; and in others it cuts through solid rocks for 1000 paces. At one end it joins the river Garonne near Tholouse, and terminates at the other in the lake Tau, which extends to the port of Cette. It was planned by Francis Riquet in 1666, and finished before his death, which happened in 1680.

Of the canal of Languedoc, M. Say remarks in one of his recent works, that it cost £1,250,000 sterling, and that its annual returns at present do not exceed £15,000; that is, less than 1¼ per cent. on the capital expended.

In the Dutch, Austrian, and French Netherlands, there is a very great number of canals; that from *Bruges* to *Ostend* carries vessels of 200 tons.

The Chinese have also a great number of canals; that which runs from *Canton* to *Pekin* extends about 825 miles in length, and was executed about 800 years ago.

In Spain the canal at *Zaragoza* begins at Segovia sixteen leagues north of Madrid, and is separated from the southern canal by the chain of mountains at Guadazama. From Segovia, quitting the Eresma, it crosses the Pisuerga near Valladolid, at the junction of that river with the Duero; then leaving Palencia, with the Carrion to the right, till it has crossed the river below Herrera, it approaches once more the

Pisuerga; and near Herrera, twelve leagues of Reinosa, there is a fall of 1000 Spanish feet. At Reinosa is the communication with the canal of Arragon, which unites the Mediterranean to the Bay of Biscay; and from Reinosa to the Suanzes, which is three leagues, there is a fall of 3000 feet. Above Palencia is a branch going westward, through Beceril de Campos, Rio Seco, and Benevente, to Zamora, making this canal of Castille, in its whole extent, 140 leagues.

The *Holstein* Canal, which joins the Baltic to the German Ocean, is a most important national work. The idea of this junction was conceived under Frederick IV., duke of Schleswig Holstein, but was not undertaken till the Russian government agreed to co-operate in promoting its success. It was begun in the spring of the year 1777, and was carried on by contractors, who engaged, for a certain yearly sum, to complete a certain portion of it. This canal, the whole length of which, from Kieler-Ford to Rendsburg, is equal to 10,650 poles of sixteen feet each, proceeds on a level with the Baltic to the first lock at Holtenach, where it rises eight feet six inches. It then proceeds to the second lock at Knop, 745 poles distant from Kieler-Ford, which has a rise of eight feet six inches, and then continues to near Suensdorf, where the third lock is situated, having a rise of the same height. Here the upper canal begins, and proceeds for the distance of 2413 poles, between Schwartenbec and Wittenbec to the fourth lock at the Upper Eyder, near Schinkel. This upper canal, which serves as a reservoir, has an influx of water from the neighbouring lakes sufficient for the purposes of navigation, and is twenty-five feet six inches higher than the level of the Baltic. At the fourth lock the canal falls seven feet four inches two lines; proceeds 1438 poles in the Eyder to the fifth lock at Nedderholten, where there is also a fall of the same height; and, having continued by Seestede to Steinwarp, 2901 poles, little more art is employed, because the Eyder between that place and Rendsburg has almost naturally the sufficient depth and breadth. A sixth lock is constructed at Rendsburg, as the tide flows up there in the Eyder, and makes, with the ebb, a difference of one foot seven inches. The breadth of this canal at the bottom is fifty-four feet, and at the surface of the water ninety feet. It is nine feet deep, and navigable for ships of from 150 to 160 tons burden. The locks, therefore, between the gates are 100 feet in length and twenty-seven feet in breadth. Along the banks there is a path ten feet broad, and another of twelve feet for the horses which are employed to draw the vessels.

Inland navigation has not been entirely unattended to in Sweden. The canal of *Trolhaetta* has been worked with great labor, assisted by the powerful force of gunpowder, through the midst of rocks. The object was to open a communication between the North Sea and the Lake Wenner by forming a new channel where the Gotha is rendered unnavigable by cataracts. The length of this canal, in which there are nine locks, is nearly three miles, the width thirty-six feet, and the depth in some places above fifty. 'It is not easy,' says a late judicious traveller, 'for any one to form any idea of the difficulties that were to be surmounted in the formation of this wonderful canal, unless he were an eye-witness. It was undertaken and begun by Charles XII.; formed part of a grand plan meditated by Gustavus Vasa, and attempted by some of his successors, for joining the Baltic from the North Sea, by means of a communication cut through the kingdom. If a canal should be extended by the Lake of Wenner, by Oerebo, to the Lake of Hielmar, the Swedes may then, by a conjunction of this lake with that of Maelar, through the sluices of Arboga, transport all kinds of merchandise in the same vessel from Gothenburg to Stockholm. Thus a passage would be opened between the North Sea and the Baltic; and, among other advantages, the duties of the Sound would be avoided. The canal of Trolhaetta may justly be considered as, in some respects, characteristical of the Swedish nation, for it represents them as they are, prone to the conception of grand enterprises, and distinguished by mechanical invention.

The *Great American Canal* was begun in 1817, and is the longest canal in existence, and though upon a small scale, as to breadth and depth, is, we believe, in point of pecuniary outlay, the greatest work of the kind ever executed. It is 335 miles in length, forty feet wide at the surface of the water, twenty-eight at the bottom, and four feet deep, and will cost about five millions of dollars (£1,100,000), or £3,000 per mile on an average. Such a vast undertaking, completed in the short period of seven years, by a state (New York) with 1,368,000 inhabitants, affords a striking proof of the energy and enterprise generated by free institutions. It is a work worth a thousand Escurials and Versailleses, because it creates wealth, while these only consume it; and it is a monument of public spirit and national prosperity, while these are only monuments of idle magnificence, vain glory, and despotic oppression.

The canal, which extends from Black Rock, at the east end of Lake Erie, to Albany on the Hudson, will render their river the chief, almost the sole outlet, and New York the great emporium of a fertile country extending along the lakes, much larger than the British Isles, and fast filling with inhabitants. Proceeding eastward from Lake Erie the canal rises forty-eight feet, and from the summit level falls 601 feet to the Hudson, making an aggregate rise and fall of 649 feet, which is effected by seventy-seven locks. Two levels or reaches extend over sixty-five and seventy miles without lockage, a circumstance, perhaps, without a parallel, except in China. The stimulus it gives to improvement is already seen in the villages and towns which are springing up with astonishing rapidity along its whole course. Passage-boats and batteaux already ply on the canal. The former, which are generally of a size to carry ninety passengers, travel at the rate of 100 miles in twenty-four hours, and the charge is but three half-pence or two pence per mile.

INLAPIDATE, *v. a.* Lat. *in* and *lapido*. To make stony; to turn to stone.

Some natural spring waters will *inlapidate* wood; so that you shall see one piece of wood, whereof the part above the water shall continue wood, and the part under the water shall be turned into a kind of gravelly stone. *Bacon.*

INLAY', *v. a.* & *n. s.* To diversify with different bodies inserted into the ground or substratum; to variegate: inlay, wood formed for inlaying.

They are worthy
To *inlay* heaven with stars.
Shakspeare. Cymbeline.

Look, how the floor of heaven
Is thick *inlaid* with patens of bright gold.
A sapphire throne, *inlaid* with pure
Amber, and colours of the show'ry arch.
Milton.

Sea girt isles,
That like to rich and various gems *inlay*
The unadorned bosom of the deep. *Id.*
Under foot the violet,
Crocus, and hyacinth, with rich *inlay*
Broidered the ground. *Id.*

Here clouded canes 'midst heaps of toys are found,
And *inlaid* tweezer-cases strow the ground. *Gay.*
This gorgeous arch, with golden worlds *inlay'd*,
Built with divine ambition.
Young's Night Thoughts.

INLAW', *v. a.* In and law. To clear of outlawry or attainder.

It should be a great incongruity to have them to make laws, who themselves are not *inlawed*.
Bacon.

IN'LET, *n. s.* In and let. Passage; place of ingress; entrance.

Doors and windows, *inlets* of men and of light, I couple together; I find their dimensions brought under one. *Wotton.*

She through the porch and *inlet* of each sense
Dropt in ambrosial oils till she revived. *Milton.*
Inlets among the broken lands and islands.
Ellis.

I desire any one to assign any simple idea, which is not received from one of these *inlets*.
Locke.

A fine bargain indeed, to part with all our commodious ports, which the greater the *inlets* are so much the better, for the imaginary pleasure of a straight shore. *Bentley.*

IN'LY, *adj.* & *adv.* } From in. Internal:
IN'MATE, *n. s.* } within; secretly in the
IN'MOST, *adj.* } heart. Inmate, one who dwells in the same house with others. Inmost, deepest within; remotest from the surface.

And they were *inly* glad to fille his purse,
And maken him gret festes at the hale.
Chaucer. The Freres Tale.

Her heart with joy unwonted *inly* swelled,
As feeling wond'rous comfort in her weaker eld.
Spenser.

Tis you must dig with mattock and with spade,
And pierce the *inmost* centre of the earth.
Shakspeare.

Did'st thou but know the *inly* touch of love
Thou would'st as soon go kindle fire with snow,
As seek to quench the fire of love with words.
Id.

I've *inly* wept,
Or should have spoke ere this. *Id. Tempest.*

Inmates are those that be admitted to dwell for their money jointly with another man, though in several rooms of his mansion-house, passing in and out by one door. *Cowel.*

So spake the enemy of mankind, inclosed
In serpent, *inmate* bad! and toward Eve
Addressed his way. *Milton.*
There he dies, and leaves his race
Growing into a nation; and now grown,
Suspected to a sequent king, who seeks
To stop their overgrowth as *inmate* guests
Too numerous. *Id. Paradise Lost.*

Whereat he *inly* raged, and, as they talked,
Smote him into the midriff with a stone,
That beat out life. *Id.*
These growing thoughts, my mother soon perceiving
By words at times cast forth, *inly* rejoiced. *Id.*
Home is the sacred refuge of our life,
Secured from all approaches but a wife:
If thence we fly, the cause admits no doubt,
None but an *inmate* foe could force us out.
Dryden.

The soldiers shout around with generous rage;
He praised their ardour: *inly* pleased to see
His host. *Id. Knight's Tale.*

Rising sighs, and falling tears,
That show too well the warm desires,
That silent, slow, consuming fires,
Which on my *inmost* vitals prey,
And melt my very soul away.
Addison on Italy.

Comparing the quantity of light reflected from the several rings, I found that it was most copious from the first or *inmost*, and in the exterior rings became less and less. *Newton.*

He sends a dreadful groan, the rocks around
Through all their *inmost* hollow caves resound.
Pope.

I go into the *inmost* court. *Gulliver's Travels.*

INN, *n. s.*, *v. n.* & *v. a.* } Sax. inn; Goth.
INN'HOLDER, *n. s.* } *inne.* A house of en-
INN'KEEPER, *n. s.* } tertainment for travellers; a house where students are boarded and taught, whence we still call the colleges of common law, inns of court; anciently used for town houses where great men resided when they attended court: inn, to take or give a temporary lodging. Innholder and innkeeper, the person who has an inn and keeps lodgings and provisions for travellers.

Alla goth to his *inne*; and, as him ought,
Arraied for this in every wise,
As ferforth as hir coming may suffice.
Chaucer. The Man of Lawes Tale

Palmer, quoth he, death is an equal doom
To good and bad, the common *inn* of rest;
But, after death, the trial is to come,
When best shall be to them that lived best.
Faerie Queene.

Now day is spent,
Therefore with me ye may take up your *inn*.
Id.

The West, that glimmers with some streaks of day,
Now spurs the lated traveller apace
To gain the timely *inn*. *Shakspeare. Macbeth.*

Go some and pull down the Savoy; others to the *inns* of court: down with them all. *Id.*

He that ears my land, spares my team, and gives me leave to *inn* the crop. *Id.*

Howsoever the laws made in that parliament did bear good fruit, yet the subsidy bare a fruit that proved harsh and bitter, all was *inned* at last into the king's barn. *Bacon's Henry VII.*

In thyself dwell;
Inn any where: continuance maketh hell.
Donne.

Clergymen must not keep a tavern, nor a judge be an *innkeeper*. *Taylor's Rule of Holy Living.*

How all this is but a fair *inn*,
Of fairer guests, which dwell within.
Sidney.

Like pilgrims to the appointed place we tend;
The world's an *inn*, and death the journey's end.
Dryden.

One may learn more here in one day, than in a year's rambling from one *inn* to another. *Locke.*

Mow clover or rye-grass, and make it fit to *inn*.
Mortimer.

We were not so inquisitive about the *inn* as the *innkeeper*; and, provided our landlord's principles were sound, did not take any notice of the staleness of his provisions. *Addison.*

A factious *innkeeper* was hanged, drawn, and quartered. *Id. Freeholder.*

INNS are licensed and regulated by justices of the peace, who oblige the landlord to enter into recognisances for keeping good order. If a person who keeps a common inn refuses to receive a traveller into his house as a guest, or to find him victuals and lodging on his tendering a reasonable price for them, he is liable to an action of damages, and may be indicted and fined at the king's suit. 'The rates of all commodities sold by inn-keepers,' says Blackstone, 'according to our ancient laws, may be assessed; and inn-keepers not selling their hay, oats, beans, &c., and all manner of victuals, at reasonable prices, without taking any thing for litter, may be fined and imprisoned, &c., by 21 Jac. I. c. 21. Where an inn-keeper harbours thieves, persons of infamous character, or suffers any disorders in his house, or sets up a new inn where there is no need of one, to the hindrance of ancient and well-governed inns, he is indictable and finable: and, by statute, such inn may be suppressed. Action upon the case lies against an inn-keeper, if a theft be committed on his guest by a servant of the inn, or any other person not belonging to the guest; though it is otherwise where the guest is not a traveller, but one of the same town or village, for there the inn-keeper is not chargeable; nor is the master of a private tavern answerable for a robbery committed on his guest: it is said that even though the travelling guest does not deliver his goods, &c., into the inn-keeper's possession, yet, if they are stolen, he is chargeable. An inn-keeper is not answerable for any thing out of his inn, but only for such as are within it; yet where he, of his own accord, puts the guest's horse to grass, and the horse is stolen, he is answerable, he not having the guest's orders for putting such horse to grass. The inn-keeper may justify the stopping of the horse, or any thing of his guest, for his reckoning, and may retain the same till it be paid. Where a person brings his horse to an inn, and leaves him in the stable, the inn-keeper may detain him till such time as the owner pays for his keeping; and, if the horse eats out as much as he is worth, after a reasonable appraisement made, he may sell the horse and pay himself; but when a guest brings several horses to an inn, and afterwards takes them all away except one, this horse so left may not be sold for payment of the debt for the others; for every horse is to be sold, only to make satisfaction for what is due for his own meat.

INNS also signify colleges of municipal or common law: the old English word for houses of noblemen, bishops, and others of extraordinary note, being of the same signification with the French word hotel.

INNS OF CHANCERY were probably so called because anciently inhabited by such clerks as chiefly studied the forming of writs, which regularly belonged to the cursitors, who are officers of chancery. The first of these is Thavie's Inn, begun in the reign of Edward III., and since purchased by the society of Lincoln's Inn. Besides this, there are New Inn, Symond's Inn, Clement's Inn, Clifford's Inn (anciently the house of lord Clifford), Staple Inn (belonging to the merchants of the staple), Lion's Inn (anciently a common inn with the sign of the lion), Furnival's Inn, and Bernard's Inn. These were formerly preparatory colleges for younger students; and many were entered here before they were admitted into the inns of court. Now they are mostly taken up by attorneys, solicitors, &c. They all belong to some of the inns of court, who formerly used to send yearly some of their barristers to read to them.

INNS OF COURT are so called because the students there are to serve and attend the courts of judicature; or because anciently these colleges received none but the sons of noblemen and gentlemen, who were to be qualified to serve the king in his court; as Fortescue affirms. In his time, he says, there were about 2000 students in the inns of court and chancery, all of whom were filii nobilium, or gentlemen born. But this custom has gradually fallen into disuse; so that, in the reign of queen Elizabeth, Sir Edward Coke does not reckon above 1000 students, and the number at present is considerably less; for which judge Blackstone assigns the following reasons: 1. Because the inns of chancery, being now almost totally filled by the inferior branches of the profession, are neither commodious nor proper for the resort of gentlemen of any rank or figure; so that there are very rarely any young students entered at the inns of chancery. 2. Because in the inns of court all sorts of regimen and academical superintendence, either with regard to morals or studies, are found impracticable, and therefore entirely neglected. 3. Because persons of birth and fortune, after having finished their usual courses at the universities, have seldom leisure or resolution sufficient to enter upon a new scheme of study at a new place of instruction; wherefore few gentlemen now resort to the inns of court, but such for whom the knowledge of practice is absolutely necessary, that is, who are intended for the profession. These inns of court, justly famed for the production of men of learning in the law, are governed by masters, principals, benchers, stewards, and other officers; and have public halls for exercises, readings, &c., which the students are obliged to attend and perform for a certain number of years, before they can be admitted to plead at the bar These societies have not, however, any judicial

authority over their members; but instead of this they have certain orders among themselves, which have by consent the force of laws. For lighter offences persons are only excommoned, or put out of commons; for greater, they lose their chambers, and are expelled the college; and, when once expelled out of one society, they are never received by any of the others. The gentlemen in these societies may be divided into benchers, outer barristers, inner barristers, and students. The four principal inns of court are, the Inner Temple and Middle Temple, heretofore the dwelling of the knights templars, purchased by some professors of the common law about 200 years ago; Lincoln's Inn and Gray's Inn, anciently belonging to the earls of Lincoln and Gray. The other inns are the two Serjeants' Inns.

INN, a large river in the south of Germany. The course is chiefly in a north-east direction, having its source in the Swiss canton of the Grisons, where it forms the romantic valleys called the Upper and Lower Engadine. It enters the Tyrol at Martinsbruck, and in a course of 250 miles traverses that province from west to east, and forms for some distance the boundary between it and Bavaria; enters the Bavarian circle of the Iser, and afterwards receives the Salza on the borders of Upper Austria. Here it separates Austria and Bavaria, till its course terminates at Passau, in its junction with the Danube. At Passau it is nearly 900 feet wide.

INNATE', *adj.*
INNA'TED, *adj.*
INNATE'NESS, *n. s.*
} Fr. *inné;* Lat. *innatus.* Inborn; natural; not superadded. Innated is improper

The Drunian hath been cried up for an *innated* integrity, and accounted the uprightest dealer on earth. *Howel.*

I live,
But live to die; and living see nothing
To make death hateful, save an *innate* clinging,
A loathsome yet all invincible
Instinct of life, which I abhor as I
Despise myself, yet cannot overcome—
And so I live. *Milton.*

With eloquence *innate* his tongue was armed;
Though harsh the precept, yet the people charmed. *Dryden.*

Mutual gravitation, or spontaneous attraction, cannot possibly be *innate* and essential to matter. *Bentley.*

Yet well thy soul hath brooked the turning tide
With that untaught *innate* philosophy,
Which, be it wisdom, coldness, or deep pride,
Is gall and wormwood to an enemy,
Byron. Childe Harold.

INNAV'IGABLE, *adj.* Lat. *innavigabilis.* Not to be passed by sailing.

If you so hard a toil will undertake,
As twice to pass the *innavigable* lake. *Dryden.*

IN'NER, *adj.*
IN'NERMOST, *adj.*
} From in. Interior; not outward; remotest from the outward part: more correctly, inmost.

But th' elfin knight with wonder all the way
Did feed his eyes, and filled his *inner* thought. *Spenser.*

This attracts the soul,
Governs the *inner* man, the nobler part;
That other o'er the body only reigns. *Milton*

The kidney is a conglomerated gland, which is to be understood only of the outer part; for the *inner* part, whereof the papillæ are composed, is muscular. *Grew.*

Many families are established in the West Indies, and some discovered in the *inner* parts of America. *Addison's Spectator.*

The reflected beam of light would be so broad at the distance of six feet from the speculum, where the rings appeared, as to obscure one or two of the *innermost* rings. *Newton.*

Thus, seized with sacred fear, the monarch prayed;
Then to his *inner* court the guests conveyed. *Pope.*

IN'NINGS, *n. s.* Lands recovered from the sea.

INNISFALLEN, an island of Ireland, in the lake of Killarney, county of Kerry, and province of Munster: in which are the ruins of a very ancient monastery, founded by St. Finian, the patron saint of these parts, to whom the cathedral of Aghadoe is also dedicated. The remains o. this abbey are very extensive, its situation romantic and retired. Upon the dissolution of religious houses its possessions were granted to captain Robert Collam. The island contains about twelve acres, is agreeably wooded, and has a number of fruit trees. There was formerly a chronicle kept in this abbey, which is often cited by Sir J. Ware and other antiquaries, under the title of the Annals of Innisfallen. Sir J. Ware had a copy of them, of which there is an imperfect transcript among the MSS. of the library of Trinity College, Dublin. Bishop Nicholson, in his Irish historical library, informs us that the duke of Chandos had a complete copy of them down to 1320 in his possession.

INNISHANNON, a town of Ireland, in the county of Cork, Munster, 134 miles from Dublin; situated on the Bandon, six miles from Kinsale. It has a charter school for above thirty boys. A considerable linen manufactory, particularly of bed-ticking for the English market, has of late years been established here, which has considerably increased the trade and population. The river is navigable to Collier's Quay, about half a mile below the town. On the west side of the town is a stone bridge. This place was formerly walled, and of some note, as appears by the foundations of several castles and large buildings discovered in it. The town of Innishannon, together with its ferry, was granted to Philip de Barry by Henry V. by letters patent in 1412. It has two fairs.

INNISKILLING, a borough, market, and post town of Ireland, in the county of Fermanagh, Ulster, lying between three lakes. It is about twenty-four miles east of Ballyshannon, and one hundred north-west of Dublin. It sends one member to the British parliament. Its inhabitants distinguished themselves in several engagements in the wars of Ireland at the Revolution, out of which a regiment of dragoons, bearing the title of the Inniskilliners, was mostly formed. They form the sixth regiment of dragoons in the British army.

IN'NOCENCE, *n. s.*
IN'NOCENCY, *n. s.*
IN'NOCENT, *adj.* & *n. s.*
IN'NOCENTLY, *adv.*
INNOC'UOUS, *adj.*
INNOC'UOUSLY, *adv.*
INNOC'UOUSNESS, *n. s.*
INNOX'IOUS, *adj.*
INNOX'IOUSLY, *n. s.*
INNOX'IOUSNESS, *n. s.*

French, *innocence*; Lat. *in* and *noceo*, *innocens*. Purity; untainted integrity; freedom from guilt; harmlessness; simplicity of heart; sometimes with some degree of weakness; without mischievous intent. Innocent, one free from guilt or harm; a natural; an ideot. Innocuous, harmless in its effects. Innoxious, pure from crimes; free from mischievous effects; without injurious tendency.

All that may confound
Vertue and *innocence* thurgh thy malice
Is bred in thee as nest of every vice.
Chaucer. The Man of Lawes Tale.

Grisildi of this (God wot) ful *innocence*,
That for hire shapen was all this array,—
To fetchen water at a well is went,
And cometh home as sone as ever she may.
Id. The Clerkes Tale.

And whan this Walter saw hire patience,
Hire glad chere, and no Malice at all,
And he so often hadde hire done offence,
And she, ay, sade and constant as a wall,
Continuing ever hire *innocence* over all,—
This sturdy markis gan his herte dresse
To rewe upon hire wifly stedefastnesse.
Chaucer. The Clerkes Tale.

Innocent Paper! whom too cruell hand
Did make the matter to avenge her yre;
And, ere she could thy cause well understand
Did sacrifice unto the greedy fire.
Spenser. Sonnet.

So pure an *innocent* as that same lamb.
Id. Faerie Queene.

Innocents are excluded by natural defects.
Hooker.

It will help me nothing
To plead mine *innocence*; for that dye is on me
Which makes my whit'st part black. *Shakspeare.*

If truth and upright *innocency* fail me,
I'll to the king my master. *Id. Henry IV.*

Thou hast killed the sweetest *innocent*,
That e'er did lift up eye. *Id. Othello.*

If murthering *innocents* be executing,
Why, then thou art an executioner.
Id. Henry VI.

Something
You may deserve of him through me and wisdom,
To offer up a weak, poor, *innocent* lamb,
To appease an angry god. *Id. Macbeth.*

I urge this childhood proof,
Because what follows is pure *innocence*.
Shakspeare.

Good madam, keep yourself within yourself:
The man is *innocent*. *Id. Antony and Cleopatra.*

The blow which shakes a wall, or beats it down, and kills men, hath a greater effect on the mind than that which penetrates into a mud wall, and doth little harm; for that *innocuousness* of the effect makes, that, although in itself it be as great as the other, yet 'tis little observed. *Digby on Bodies.*

Innoxious flames are often seen on the hair of men's heads and horses' manes. *Digby.*

Balls at his feet lay *innocently* dead. *Cowley.*

Simplicity and spotless *innocence*. *Milton.*

Animals that can *innoxiously* digest these poisons, become antidotal to the poison digested.
Browne's Vulgar Errours.

We may safely use purgatives, they being benign, and of *innoxious* qualities. *Id.*

Whether quails, from any peculiarity of constitution, do *innocently* feed upon hellebore, or rather sometimes but medically use the same. *Browne.*

What comfort does overflow the devout soul, from a consciousness of its own *innocence* and integrity!
Tillotson.

We laugh at the malice of apes, as well as at the *innocence* of children. *Temple.*

The peasant, *innocent* of all these ills,
With crooked ploughs the fertile fallows tills,
And the round year with daily labour fills.
Dryden.

The most dangerous poisons, skilfully managed, may be made not only *innocuous*, but of all other medicines the most effectual. *Grew.*

The air was calm and serene; none of those tumultuary motions and conflicts of vapours, which the mountains and the winds cause in ours; 'twas suited to a golden age, and to the first *innocency* of nature. *Burnet's Theory.*

The humble and contented man pleases himself *innocently* and easily, while the ambitious man attempts to please others sinfully and difficultly.
South.

The spear
Sung *innocent*, and spent its force in air.
Pope.

Stranger to civil and religious rage,
The good man walked *innoxious* through his age.
Id.

Sent by the better genius of the night,
Innoxious gleaming on the horse's mane,
The meteor sits. *Thomson's Autumn.*

Sweet harmonist! and beautiful as sweet!
And young as beautiful! and soft as young!
And gay as soft! and *innocent* as gay!
Young's Night Thoughts. Narcissa.

Dear lovely bowers of *innocence* and ease.
Seats of my youth, when every sport could please,
How often have I loitered o'er thy green,
When humble happiness endeared each scene!
Goldsmith's Deserted Village.

But many a crime deemed *innocent* on earth
Is registered in heaven, and these no doubt
Have each a reward, with a cause annexed.
Cowper.

There he long had dwelt,
There his worn bosom and keen eye could melt
O'er the *innocence* of that sweet child,
His only shrine of feelings undefiled.
Byron. Don Juan.

And girls of sixteen are thus far Socratic,
But *innocently* so, as Socrates. *Id.*

INNOCENT I., was born in Albany, and elected Pope A. D. 402. He condemned the Novatians and Pelagians; and died at Ravenna in 417. Some of his Epistles are extant.

INNOCENT III., whose name was originally Lothario Conti, was of a noble family, and born at Anagni in 1161. His learning procured him a cardinalship; and he was chosen pope in 1198. He encouraged the Crusades; persecuted the Albigenses; put the kingdom of France under an interdict; and excommunicated John king of England. He died in 1216; and his works were printed at Cologne in 1575.

INNOCENT V., a Dominican friar, was archbishop of Lyons, next a cardinal, and at last elected pope, in 1276, but died a few months after. His works on religion have been printed.

INNOCENT VI., a native of France, was bishop

of Ostia, and a cardinal; and in 1352 was promoted to the papacy. He was esteemed a man of great wisdom and liberality. His letters have been printed. He died in 1362.

INNOCENTS' DAY, a festival of the Romish Church, observed on December 28th, in memory of the massacre of the innocent children by the command of Herod. The Greek church in their calendar, and the Abyssinians of Ethiopia in their offices, commemorate 14,000 infants on this occasion.

It was anciently the custom to have dances in the churches on this day, wherein were children who represented bishops, by way of derision, as some suggest, of the episcopal dignity; though others, with more probability, suppose it done in honor of the innocence of childhood.

By a canon of the council of Cognac, held in 1260, these were expressly forbidden; but they were not wholly suppresed in France before the year 1444, when the doctors of the Sorbonne addressed a spirited letter on this subject to all the bishops of the kingdom.

INNOMINATI, nameless, a title by which the academists of Parma distinguish themselves. Most cities in Italy have an academy, and each has its proper name. Thus those at Parma entitle themselves Gli innominati, as if it was their character to have no name at all.

IN'NOVATE, *v. a.* } Fr. *innover;* Lat. *in-*
INNOVA'TION, *n. s.* } *novo.* To bring in some-
INNOVA'TOR, *n. s.* } thing unknown before; to change by introducing novelties. Innovation, change. Innovator, an introducer of novelties.

The love of things ancient doth argue stayedness; but levity and want of experience maketh apt unto *innovations.* *Hooker.*

I attach thee as a traitorous *innovator,*
A foe to the publick weal.
Shakspeare. Coriolanus.

He that will not apply new remedies, must expect new evils; for time is the greatest *innovator:* and if time of course alter things to the worse, and wisdom and council shall not alter them to the better, what shall be the end? *Bacon's Essays.*

It were good that men in *innovations* would follow the example of time itself, which indeed *innovateth* greatly, but quietly and by degrees. *Id.*

Men pursue some few principles which they have chanced upon, and care not to *innovate,* which draws unknown inconveniences. *Bacon.*

Former things
Are set aside like abdicated kings;
And every moment alters what is done,
And *innovates* some act till then unknown.
Dryden.

Every man cannot distinguish betwixt pedantry and poetry; every man therefore is not fit to *innovate.* *Id.*

He counsels them to detest and persecute all *innovators* of divine worship. *South.*

From his attempts upon the civil power, he proceeds to *innovate* God's worship. *Id.*

Curse on the *innovating* hand attempts it,
Remember him the villain righteous Heaven
In thy great day of vengeance!
Rowe's Jane Shore.

Great changes may be made in a government, yet the form continue; but large intervals of time must pass between every such *innovation,* enough to make it of a piece with the constitution. *Swift.*

INNUEN'DO, *n. s.* Lat. *innuendo* from *innuo.* An oblique hint.

As if the commandments, that require obedience and forbid murder, were to be indicted for a libellous *innuendo* upon all the great men that come to be concerned. *L'Estrange.*

Mercury, though employed on a quite contrary errand, owns it a marriage by an *innuendo.* *Dryden.*

Pursue your trade of scandal-picking,
Your hints that Stella is no chicken;
Your *innuendoes* when you tell us,
That Stella loves to talk with fellows. *Swift.*

INNVIERTEL (i. e. the Quarter of the Inn), a district or circle of Upper Austria, comprising the territory lying between the Danube, the Inn, and the Salza. It was ceded to Austria by Bavaria in the treaty of Teschan in 1779; restored to Bavaria in 1810, but only retained till 1815. In that year also that part of the quarter of the Hausruck which Buonaparte had compelled Austria to cede to Bavaria was restored for an equivalent, and annexed to this circle; so that at present its extent is 1270 square miles. The chief towns are Braunau and Scharding. The southern division, lying towards the duchy of Salzburg, is intersected by well-wooded chains of mountains; and the tracts on the banks of the Danube and the Inn are fertile in wheat, barley, flax, and pasturage. Inhabitants about 200,000.

INNU'MERABLE, *adj.* } Fr. *innumerable;*
INNU'MERABLY, *adv.* } Lat. *in* and *numerus.*
INNU'MEROUS, *adj.* } Not to be counted for multitude; without number.

Ther was ner tresour, of terrestial richesse,—
Nor precious stones, rekened *innumerabell,*—
To be of comparison to your high godenesse;
Above al cretures, to me most amiable.
Chaucer. The Craft of Lovers.

You have sent *innumerable* substance
To furnish Rome, and to prepare the ways
You have for dignities.
Shakspeare. Henry VIII

'Twould be some solace yet, some little cheering,
In this close dungeon of *innumerous* boughs.
Milton.

Cover me ye pines,
Ye cedars with *innumerable* boughs
Hide me, where I may never see them more.
Id.

Faithful found
Among the faithless, faithful only he,
Among *innumerable* false, unmoved,
Unshaken, unseduced, unterrifyed,
His loyalty he kept, his love, his zeal. *Id.*

In lines, which appear of an equal length, one may be longer than the other by *innumerable* parts.
Locke.

I take the wood,
And in thick shelter of *innumerous* boughs,
Enjoy the comfort gentle sleep allows.
Pope's Odyssey.

INO, in fabulous history, a daughter of Cadmus and Harmonia, who nursed Bacchus. She married Athamas king of Thebes, after he had divorced Nephele, by whom he had two children Phryxus and Helle. Ino became mother of Melicerta and Learchus: and soon conceived an implacable hatred against the children of Nephele, because they were to ascend the throne in preference to her own. Phryxus and Helle, inform-

ed of Ino's machinations, escaped to Colchis on a ram with a golden fleece. Juno, jealous of Ino's prosperity, sent the fury Tisiphone to the house of Athamas; who so maddened him that, taking Ino to be a lioness and her children whelps, he pursued her and dashed her son Learchus against a wall. Ino, flying from his fury, threw herself from a high rock into the sea with Melicerta in her arms. Neptune pitied her fate, and made her a sea deity, afterwards called Leucothoe. Melicerta became also a sea god, worshipped by the name of Palemon.

INOA, festivals in memory of Ino, celebrated yearly with sports and sacrifices at Corinth, at Megara (where she was first worshipped), and in Laconia. It was usual at the celebration to throw cakes of flour into a pond, which, if they sunk, were presages of prosperity, but of adversity if they swam on the surface.

INOCARPUS, in botany: a genus of the monogynia order, and decandria class of plants. COR. funnel-shaped: CAL. bifid: the stamina are placed in a double series; the fruit a monospermous plum. Species one only; I. edulis a native of the South Sea Islands and of Amboyna.

INOC'ULATE, *v. n.* & *v. a.* } Lat. *in* and *oculus*, *inoculatio*.
INOCULA'TION, *n. s.*
INOC'ULATOR, *n. s.* To propagate any plant by inserting its bud into another stock; to practise inoculation: inoculation is practised upon all sorts of stone fruit, and upon oranges and jasmines. The practice of transplanting the small-pox, by infusion of the matter from ripened pustules into the veins of the uninfected, in hopes of procuring a milder sort than what frequently comes by infection.—Quincy. The communication of the cow-pock by inoculation is called vaccination: inoculator, one that practises inoculation of trees, or propagates small-pox or cow-pock by inoculation.

Virtue cannot so *inoculate* our old stock, but we shall relish of it. *Shakspeare. Hamlet.*

Nor are the ways alike in all
How to ingraff, how to *inoculate*.
May's Virgil.

Thy stock is too much out of date,
For tender plants t' *inoculate*. *Cleaveland.*
Where lilies, in a lovely brown,
Inoculate carnation. *Id.*

In the stem of Elaiana they all met, and came to be ingrafted all upon one stock, most of them by *inoculation*. *Howel.*

But various are the ways to change the state,
To plant, to bud, to graft, to *inoculate*. *Dryden.*

Now is the season for the budding of the orange-tree: *inoculate* therefore at the commencement of this month. *Evelyn.*

Had John a Gaddesden been now living, he would have been at the head of the *inoculators*.
Friend's History of Physick.

It is evident, by *inoculation*, that the smallest quantity of the matter, mixed with the blood, produceth the disease. *Arbuthnot.*

INOCULATION, in gardening, is the art of inserting in the stocks of fruit trees, &c., the buds of others of the same kind. It is a sort of grafting often had recourse to in the summer season for raising particular kinds of stone fruit, and frequently succeeds better than the common method. See GRAFTING. The following are the directions for inoculating given by Miller:—Choose a smooth part of the stock; then with your knife make a horizontal cut across the rind of the stock, and from the middle of that cut make a slit downwards, about two inches in length, in the form of a T; but be careful not to cut too deep, lest you wound the stock: then having cut off the leaf from the bud, leaving the footstalk remaining, make a cross cut about half an inch below the eye, and with your knife slit off the bud, with part of the wood to it. This done, with your knife pull off that part of the wood which was taken with the bud, observing whether the eye of the bud be left to it or not; for all those buds which lose their eyes in stripping are good for nothing: then, raising the bark of the stock, thrust the bud therein, placing it smooth between the rind and the wood of the stock; and so having exactly fitted the bud to the stock tie them closely round, taking care not to bind round the eye of the bud. When the buds above mentioned have been inoculated three or four weeks, and those which are fresh and plump are joined, loosen the bandage, which, if it be not done in time, will injure if not destroy the bud. In March following cut off the stock sloping, about three inches above the bud, and to what is left fasten the shoot which proceeds from the bud: but this must continue no longer than one year; after which the stock must be cut off close above the bud. The time for inoculating is from the middle of June to the middle of August: but the most proper time is when the buds are formed at the extremity of the same year's shoot, which is a sign of their having finished their spring growth. The first sort commonly inoculated is the apricot; and the last the orange tree, which should never be done till the end of August. In doing this, always make choice of cloudy weather; for if it be done in the middle of the day, when the weather is hot, the shoots will perspire so fast, as to leave the buds destitute of moisture.

INOCULATION, in medicine, is a term generally applied to the practice of infusing the matter from ripened pustules in small-pox into uninfected persons, in order to give that disease in a mild form, and thus to protect from the natural attacks. As to the origin of the art of inoculating the small-pox, as well as the time and place in which it was performed, they are equally unknown to all by whom the practice is adopted. Accident probably gave rise to it. Pylarini says, that among the Turks it was not attended to except among the meaner sort. No mention is made of it by any of the ancient Arabian medical writers that are known in Europe; and the physicians who are natives in and about Arabia assert, that nothing is to be found regarding it in any of those of a more modern date. Until the beginning of the eighteenth century all the accounts we have of inoculating the small-pox are merely traditional. It is also remarkable that before Pylarini's letter to the Royal Society in 1701, and for several years after, this practice was not taken notice of by the most inquisitive travellers. The first accounts we have concerning inoculation are from two Italian physicians, viz. Pylarini and Timoni, whose letters on the subject may be seen in the

Philosophical Transactions. The first is dated A. D. 1701; the next A. D. 1713. Dr. Williams of Haverfordwest, however, who wrote upon inoculation in 1725, proved, that it had been practised in Wales, though in form somewhat different, for upwards of 200 years. In the Highlands of Scotland, and some of the adjacent isles, Dr. Alexander Monro informs us, that the custom through ages past has been, to put their children to bed with those who labored under a favorable small-pox, and to tie worsted threads about their children's wrists, after having drawn them through variolous pustules. According to Dr. Russel, the Arabians assert, that the inoculation of the small-pox has been the common custom of their ancestors, and that they have no doubt of its being as ancient as the disease itself. In 1717 lady Mary Wortley Montague had her son inoculated at Constantinople, at the age of six years; he had but few pustules, and soon recovered. In April 1721 inoculation was successfully tried on seven condemned criminals in London. In 1721 Lady Mary Montague had a daughter of six years old inoculated in this island; soon after which the children of the royal family that had not had the small-pox were inoculated with success: then followed some of the nobility, and the practice soon prevailed.

The practice of inoculation having obtained in every part of the world, it may be grateful, at least to curiosity, to have a general account of the different modes that are and have been adopted in that practice. Inoculation with the blood of variolous patients has been tried without effect: the variolous matter alone produces the disease. The application of the variolous matter takes place in a sensible part only; the activity of the virus is such, that the smallest atom, though imperceptible to any of our senses, conveys the disease as well as the largest quantity. Hence the most obvious method is the prick of a needle or the point of a lancet dipped in the matter of a variolous pustule. Cotton or thread is used, that is previously rubbed with powdered variolous scabs; this thread is drawn with a needle through the cutis, but not left in. This is the method in some parts of the East Indies. The Indians pass the thread on the outside of the hand, between any of the fingers, or between the fore-finger and thumb. The Thessalian women inoculate in the forehead and chin. Some abrade the scarf-skin, and rub in the powdered dry scabs which fall from the pustules of patients with the small-pox. Many of the Greek women make an oblique puncture with a needle, on the middle of the top of the forehead, on each cheek, the chin, each metacarpus, and each metatarsus; then drop in each a little of the pus just taken warm from a patient, and brought in a servant's bosom. Others make several little wounds with a needle in one, two, or more places in the skin, till some drops of blood ensue; then the operator pours a drop of warm pus fresh from a pustule, and mixes it with the blood as it issues out; then the wound is covered by some with a bandage, by others with half a walnut shell placed with its concave side over each orifice. In some parts of Hindostan the person who intends to be inoculated, having found a house where there is a good sort of the small-pox, goes to the bed of the sick person, if he is old enough; or if a child to one of his relations, and speaks to him as follows: 'I am come to buy the small-pox.' The answer is, 'Buy if you please.' A sum of money is accordingly given, and one, three, or five pustules, for the number must always be odd, and not exceeding five, are extracted whole, and full of matter. These are immediately rubbed on the skin of the outside of the hand between the forefinger and the thumb; and this suffices to produce the disease. The same custom obtains in Algiers, Tunis, Tripoli, and other countries. Very similar to this custom is that in Arabia, where on some fleshy part they make several punctures with a needle imbrued in variolous matter, taken from pustules of a favorable kind. Here they buy the small-pox too, as follows: the child to be inoculated carries a few raisins, dates, sugar-plums, or such like: and, showing to the child from whom the matter is to be taken, asks how many pocks he will give in exchange? The bargain being made, they proceed to the operation. The Arabs say that any fleshy part is proper; but generally they insert the matter between the forefinger and thumb on the outside of the hand. The Georgians insert the matter on the fore-arm. The Armenians introduce the matter on the two thighs. In Wales the practice may be termed infriction of the small-pox. There some of the dry pustules are procured by purchase, and are rubbed hard upon the naked arm or leg. The practice in some places is to prick the skin between some of the fingers, by means of two small needles joined to one another; and, after having rubbed a little of the matter on the spot, a circle is made by means of several punctures of the bigness of a common pustule, and matter is again rubbed over it. The operation is finished by dressing the wound with lint. Incisions have been made in the arms and legs, and thread, cotton, or lint, previously dipped in the variolous matter, was lodged in them. The practice of some is to bathe the feet in warm water, and then secure lint dipped in the variolous matter on the instep, or other part of the foot where the skin is thin. Others apply a small blistering plaster; and, when the scarf-skin is elevated and slipped off, the variolous matter is applied to the surface of the true skin, and confined there by a little lint or plaster. Scratching the skin with a pin or needle, and then rubbing the part with lint, previously dipped in variolous matter, is the custom in some places. The Highlanders rub some part of the skin with fresh matter, or dip worsted in variolous matter, and tie about the children's wrists. They observe, that if fresh matter is applied a few days successively, the infection is more certain than by one application. Having thus given a brief history of the practice, we must refer the medical reader to the articles MEDICINE and SMALL-POX, where the comparative merits of inoculation will be brought forward in a more detailed manner.

INOCULATION, VACCINE. See VACCINATION and SMALL-POX.

INO'DORATE, *adj.* } Lat. *in* and *odor*.
INO'DOROUS, *adj.* } Having no scent; not perceptible by the nose.

Whites are more *inodorate* than flowers of the same kind coloured. *Bacon's Natural History.*

The white of an egg is a viscous, unactive, insipid, *inodorous* liquor. *Arbuthnot on Aliments.*

INOFFEN'SIVE, *adj.* } Lat. *in* and *offensus.*
INOFFEN'SIVELY, *adv* } Giving no scandal,
INOFFEN'SIVENESS, *n. s.* } uneasiness, or displeasure; harmless; innocent; unembarrassed: in a manner free from injury; without stop or obstruction.

Whether the sun predominant in heaven
Rise on the earth, or earth rise on the sun;
He from the East his flaming road begin,
Or she from West her silent course advance
With *inoffensive* pace that spinning sleeps
On her soft axle. *Milton. Paradise Lost.*

From hence a passage broad,
Smooth, easy, *inoffensive*, down to hell. *Milton.*

For drink the grape
She crushes, *inoffensive* most. *Id.*

With whatever gall thou set'st thyself to write,
Thy *inoffensive* satires never bite. *Dryden.*

Should infants have taken offence at any thing, mixing pleasant and agreeable appearances with it, must be used, 'till it be grown *inoffensive* to them. *Locke.*

Hark, how the cannon, *inoffensive* now,
Gives signs of gratulation. *Phillips.*

A stranger, *inoffensive*, unprovoking. *Fleetwood.*

However *inoffensive* we may be in other parts of our conduct, if we are found wanting in this trial of our love, we shall be disowned by God as traitors. *Rogers.*

*To gratify an ambitious profligate, *inoffensive* nations are invaded, enslaved, or exterminated. *Beattie.*

INOFFIC'IOUS, *adj.* Lat. *in* and *officium.* Not civil; not attentive to the accommodation of others.

INOP'INATE, *adj.* Fr. *inopiné;* Lat. *inopinatus.* Not expected.

INOPPORTUNE', *adj.* Lat. *inopportunus.* Unseasonable; inconvenient.

INOR'DINACY, *n. s.* } Lat. *in* and *ordinatus.*
INOR'DINATE, *adj.* } Irregularity; disor-
INOR'DINATELY, *adv.* } der; (it is better to
INOR'DINATENESS, *n. s.* } use inordination,
INORDINA'TION, *n. s.* } which is a deviation from right or order): inordinate, irregular; intemperate; beyond prescribed limits.

These people were wisely brought to allegiance; but, being straight left unto their own *inordinate* life, they forgot what before they were taught. *Spenser.*

As soon as a man desires any thing *inordinately*, he is presently disquieted in himself. *Taylor.*

From *inordinate* love and vain fear comes all unquietness of spirit. *Id. Guide to Devotion.*

Thence raise
At last distempered, discontented thoughts;
Vain hopes, vain arms, *inordinate* desires,
Blown up with high conceits, engendering pride. *Milton.*

Reason in man obscured, or not obeyed,
Immediately *inordinate* desires
And upstart passions catch the government
From reason, and to servitude reduce
Man till then free. *Id. Paradise Lost.*

Schoolmen and casuists, having too much philosophy to clear a lye from that intrinsick *inordination* and deviation from right reason, inherent in the nature of it, held that a lye was absolutely and universally sinful. *South.*

They become very sinful by the excess, which were not so in their nature: that *inordinacy* sets them in opposition to God's designation. *Government of the Tongue.*

INORGAN'ICAL, *adj.* In and organical. Void of organs or instrumental parts.

We come to the lowest and most *inorganical* parts of matter. *Locke.*

INOSARCION, a name given by some of the ancient Greek and Roman authors to a peculiar species of emerald, called also the Chalcedonian emerald. The great distinction of this from the other species of this gem was, that it had thick veins in it, which gave peculiar refractions and reflections to the light; and, though the stone was in itself green, yet when viewed in side lights these veins gave the stones all the various colors of the rainbow.

INOS'CULATE, *v. n.* } Lat. *in* and *osculum.*
INOSCULA'TION, *n. s.* } To unite by conjunction of extremities.

The almost infinite ramifications and *inosculations* of all the several sorts of vessels may easily be detected by glasses. *Ray.*

This fifth conjugation of nerves is branched by *inosculating* with nerves. *Derham's Physico-Theology.*

IN'QUEST, *n. s.* Fr. *enqueste;* Lat. *inquiro.* Judicial enquiry or examination; inquiry; search; study. In law, the inquest of jurors, or by jury, is the most usual trial of all causes, both civil and criminal; for in civil causes, after proof is made on either side, so much as each part thinks good for himself, if the doubt be in the fact, it is referred to the discretion of twelve indifferent men, impannelled by the sheriff; and as they bring in their verdict so judgment passes: for the judge saith the jury finds the facts thus; then is the law thus, and so we judge.—*Cowel.*

This is the laborious and vexatious *inquest* that the soul must make after science. *South.*

What confusion of face shall we be under, when that grand *inquest* begins; when an account of our opportunities of doing good, and a particular of our use or misuse of them, is given in? *Atterbury.*

INQUEST. See CORONER.

INQUI'ETUDE, *n. s.* Fr. *inquietude;* Lat. *inquietudo, inquietus.* Disturbed state; want of quiet; attack on the quiet.

Having had such experience of his fidelity and observance abroad, he found himself engaged in honour to support him at home from any farther *inquietude.* *Wotton.*

Iron, that has stood long in a window, being thence taken, and by a cork balanced in water, where it may have a free mobility, will bewray a kind of *inquietude* and discontentment till it attain the former position. *Id.*

The youthful hero, with returning light,
Rose anxious from the' *inquietudes* of night. *Pope.*

IN'QUINATE, *v. a.* } Latin *inquino.* To
INQUINA'TION, *n. s.* } pollute or corrupt.

Their causes and axioms are so full of imagination, and so infected with the old received theories, as they are mere *inquinations* of experience, and concoct it not. *Bacon*

The middle action, which produceth such imperfect bodies, is fitly called by some of the ancients *inquination*, or inconcoction, which is a kind of putrefaction. *Id.*

An old opinion it was, that the ibis feeding upon serpents, that venomous food so *inquinated* their oval conceptions, that they sometimes came forth in serpentine shapes. *Browne.*

INQUIRE', *v. n.* & *v. a.*
INQUI'RABLE, *adj.*
INQUI'RER, *n. s.*
INQUI'RY, *n. s.*
INQUISIT'ION, *n. s.*
INQUIS'ITIVE, *adj.*
INQUIS'ITIVELY, *adv.*
INQUIS'ITIVENESS, *n. s.*
INQUIS'ITOR, *n. s.*

Fr. *enquirer*; Lat. *inquiro*, *inquisitio*. To ask about; to seek out; to call by name: inquirer, one who interrogates or makes search: inquiry, an interrogation; a search by question: inquisition, a judicial inquiry; examination or discussion: in law, a manner of proceeding in criminal matters; the court established in some countries subject to the pope for the detection of heresy: inquisitive, curious; busy; active to pry into any thing: inquisitor, one who examines judicially; an officer in the popish court of inquisition. Inquire is used with other words and has several meanings.

To ask questions; to make search; to exert curiosity on any occasion: with *of* before the person asked.

You have oft heard inquired
After the shepherd that complained of love. *Shakspeare.*

We will call the damsel and *inquire* at her mouth. *Genesis*

Herod *inquired of* them diligently. *Matthew.*

They began to *inquire* among themselves, which of them it was that should do this thing. *Luke* xxii. 23.

He sent Hadoram to king David, to *inquire of* his welfare. 1 *Chron.* xviii. 10.

It is a subject of a very noble *inquiry*, to *inquire of* the more subtile perceptions; for it is another key to open nature, as well as the house. *Bacon.*

It is used with *into* when something is already imperfectly known.

The step-dame poison for the son prepares,
The son *inquires into* his father's years. *Dryden.*

It may deserve our best skill to *inquire into* those rules, by which we may guide our judgment. *South.*

Sometimes with *of*.

Under their grateful shade Æneas sat;
His left young Pallas kept, fixed to his side,
And oft of winds *inquired*, and *of* the tide. *Dryden's Æneid.*

With *after* when something is lost or missing; in which case *for* is likewise used.

Inquire for one Saul of Tarsus. *Acts* ix. 11.

They are more in danger to go out of the way, who are marching under a guide that will mislead them, than he that is likelier to be prevailed on to *inquire after* the right way. *Locke.*

With *about* when fuller intelligence is desired.

To those who *inquired about* me, my lover would answer, that I was an old dependent upon his family. *Swift.*

To make examination.

Awful Rhadamanthus rules the state:
He hears and judges each committed crime,
Inquires into the manner, place, and time. *Dryden.*

When *inquisition* was made of the matter, it was found out. *Esth.* ii. 23.

When he maketh *inquisition* for blood, he remembereth them: he forgetteth not the cry of the humble. *Psalm* ix. 12.

The men which were sent from Cornelius had made *inquiry* for Simon's house, and stood before the gate. *Acts.*

An husbond shuld not been *inquisitif*. *Chaucer. Prologue to the Milleres Tale.*

Ne any then shall after it *inquire*
Ne any mention shall thereof remaine,
But what this verse, that never shall expire,
Shall to you purchase with her thankless pain. *Spenser. Sonnet.*

Canute had his portion from the rest,
The which he called Canutium, for his hire,
Now Cantium, which Kent we commonly *inquire*. *Spenser.*

My boy at eighteen years became *inquisitive*
After his brother. *Shakspeare. Comedy of Errours.*

With much severity and strict *inquisition*, were punished the adherents and leaders of the late rebels. *Bacon's Henry VII.*

In these particulars I have played myself the *inquisitor*, and find nothing contrary to religion or manners, but rather medicinable. *Id. Essays.*

We were willing to make a pattern or precedent of an exact *inquisition*. *Id. Natural History.*

This idleness, together with fear of imminent mischiefs, have been the cause that the Irish were ever the most *inquisitive* people *after* news of any nation in the world. *Davies.*

Though it may be impossible to recollect every failing, yet you are so far to exercise an *inquisition* upon yourself, as, by observing lesser particulars, you may the better discover what the corruption of your nature sways you to. *Taylor.*

What's good doth open to the *inquirers* stand,
And itself offers to the accepting hand. *Denham.*

What satisfaction may be obtained from those violent disputers and eager *inquirers* into what day of the month the world began? *Browne's Vulgar Errours.*

Though he thought *Inquisitiveness* an uncomely guest, he could not but ask who she was. *Sidney.*

His old shaking sire,
Inquisitive of fights, still longs in vain
To find him in the number of the slain. *Dryden.*

Then what the Gallick arms will do,
Art anxiously *inquisitive to* know. *Id.*

Minos, the strict *inquisitor* appears,
And lives and crimes with his assessors hears. *Id.*

This is a question only of *inquirers*, not disputers, who neither affirm nor deny, but examine. *Locke.*

This exactness is absolutely necessary in *inquiries* after philosophical knowledge, and in controversies about truth. *Id.*

Curiosity in children nature has provided, to remove that ignorance they were born with; which, without this busy *inquisitiveness*, will make them dull. *Id.*

A Dutch ambassador, entertaining the king of Siam with the particularities of Holland, which he was *inquisitive after*, told him that the water would, in cold weather, be so hard that men walked upon it. *Id.*

Judgment or opinion, in a remoter sense, may be

called invention: as when a judge or a physician makes an exact *inquiry* into any cause. *Grew.*

Providence, delivering great conclusions to us, designed to excite our curiosity and *inquisitiveness* after the methods by which things were brought to pass. *Burnet.*

It can be no duty to write his heart upon his forehead, and to give all the *inquisitive* and malicious world a survey of those thoughts which it is the prerogative of God only to know. *South.*

Heights that scorn our prospect, and depths in which reason will never touch the bottom, yet surely the pleasure arising from thence is great and noble; for as much as they afford perpetual matter to the *inquisitiveness* of human reason, and so are large enough for it to take its full scope and range in. *Id. Sermons.*

They cannot bear with the impertinent questions of a young *inquisitive* and sprightly genius. *Watts on the Mind.*

The whole neighbourhood grew *inquisitive after* my name and character. *Addison's Spectator.*

When, strict *inquiring* from herself he found
She was the same, the daughter of his friend,
Of bountiful Acasto; who can speak
The mingled passions that surprised his heart,
And through his veins in shiv'ring transport ran? *Thomson's Autumn.*

But if there is any writer whose genius can embellish impropriety, and whose authority can make error venerable, his works are the proper objects of critical *inquisition*. *Johnson's Rambler.*

The INQUISITION, called also, by a shocking misnomer, the Holy Office, is an ecclesiastical tribunal which has been established in modern times in several catholic countries and their dependencies, for the discovery and punishment of heretics and infidels, i. e. of all persons supposed to entertain opinions contrary to the decisions of the church of Rome.

The rise of this cruel institution is to be traced to those times when persecution was general throughout the civilised world. Some writers date its origin as early as the council of Verona, which was held in 1184, and in which pope Lucius commissioned the bishops to obtain all possible information of persons suspected of heresy, &c., and described similar degrees of this crime to those which the Holy Office afterwards acted upon. But it is more commonly dated from a persecution of the Waldenses in the beginning of the thirteenth century.

At this period (in 1203) Innocent III. had commissioned Peter de Castelnau, and Ralph, monks of the order of Citeaux, and of the monastery of Fortfroide, in Narbonnese Gaul, to preach against the heresies of that sect, and he shortly after named three pontifical legates; empowering them to call on the French king Philip II. and all princes and nobles to prosecute and banish heretics wherever they were found. Among other ecclesiastical associates whom they selected was Dominic de Guzman, a canon of the order of St. Augustine; 'a man,' says a Spanish writer, 'to whom we owe two most important blessings, the rosary and the holy office.'

But the Catholic bishops were from the first jealous of this mission, and several of the great feudal chiefs of Provence and Narbonne refused to obey the orders of the legates. Among the most refractory and most powerful of the latter was Raymond VI. count of Toulouse, and in his dominions Peter de Castelnau was assassinated, as it is said, by the Albigenses, and beatified in 1208. The able and aspiring pontiff now called on all the neighbouring powers to assist him in pouring forth the vengeance of the church; and to march into the heretical district. All obstinate heretics were placed at the disposal of Simon de Montfort, commander of this crusade: the whole race of the Waldenses and Albigenses were ordered to be pursued with fire and sword; neither sex, age, nor condition was spared; the country became a wilderness, and the towns heaps of smoking ruins. Pardon and remission of sins were promised by the papal bull 'to all those who would take up arms to revenge the said murder; and since *we are not to keep faith with those who do not keep it with God*,' it added, 'we would have all to understand that every person who is bound to the said earl Raymond, by oath of allegiance or by any other way, is absolved by apostolical authority from such obligations, and it is lawful for any Roman Catholic to persecute the said earl and to seize upon his country, &c.' 'We exhort you,' continued this famous bull, 'to destroy the wicked heresy of the Albigenses, and to do this with more rigor than you would use towards the Saracens themselves: persecute them with a strong hand.' The agents employed were worthy of their vigorous sovereign-head, the pontiff. 'Spare none,' said the abbot of Citeaux to those who required a mark to distinguish the Catholic from the heretic. 'Spare none; God will be able to distinguish his own among the slain.'

Such was the era of the inquisition, and the objects in aid of which it was first established. Dominic was constituted the first inquisitor-general. Innocent III. had scarcely given this institution a formal existence before he was summoned to a higher tribunal. Dominic in fact had only proceeded to Thoulouse to decide upon the religious order which he would wish to associate with himself in the institution, when the pope died 16th of July 1216: his choice of the Augustines was approved by Honorius on the 22nd of December of that year.

The emperor Frederic II. gave the constitution of the society the form of civil law at his coronation: and, in 1224, the inquisitors were busy at Padua; but in Narbonne they had not succeeded to the expectation of the pope; and Louis VIII. put himself at the head of an army against the Albigenses to expedite this holy work.

Gregory IX. gave the institution its final form; and in 1233 it was fully established in France by St. Louis, and in the four Christian kingdoms of Spain.

The council held at Thoulouse, in the year 1229, by Romanus, cardinal of St. Angelo, and pope's legate, had already erected in every city a council of inquisitors, consisting of one priest and three laymen.

The operations of a tribunal conducted by such men, and meeting with no effective opposition, were too rapid to last long. The inquisition became useless at Thoulouse for want of heretics to condemn. In its infant essay it had strangled the serpents that surrounded its cradle;

but the hydra of heresy (as the Romanists delight to call it) was growing up for its maturer labors. Its laws, rules, and devices, were laid up therefore as a part of the papal artillery. Pope Innocent IV. supported it as a favorite ally, and established permanent tribunals, on the plan of that of Thoulouse, over almost the whole of Italy except Naples, where it never gained admittance. It was early imported into the Spanish kingdom of Arragon, bordering on the province where it originated. Wherever the inquisitors were sent they created an alarm like that of an invading army; and, notwithstanding the bigotry and prostrate submission of the age, the cruelty, insulting arrogance, and intolerable oppression of these ghostly fathers, excited insurrection and tumult in almost every town which they garrisoned for the faith. The bishops, who saw in these establishments the ruin of their authority in matters of doctrine, remonstrated against their usurpation; and the princes, who claimed the privilege of burning their own heretics, saw with pain an encroachment on their prerogative by the troops of the holy see. The spirit of Christendom was however pretty well subdued for two centuries; and the inquisition had not much on their hands, from the extirpation of the Albigenses to the dawn of the Reformation and the persecution of the Moors and Jews in Spain.

Their Catholic majesties, Ferdinand and Isabella, now resolved that they would have none but Catholics in their dominions, and that it was necessary, for the glory of God and the prosperity of their reign, to make all their Jewish and Moorish subjects hypocrites, exiles, or martyrs. The respect paid by the queen to the counsels of Torquemada, makes us almost forget the assistance she lent to Columbus: yet on the whole she was certainly unwilling to be his instrument. It was easy by a perfidious and savage edict to drive these unhappy people into the church; but it was not so easy to drive them out of their prejudices and habits. To save their lives, their fortunes, and their families, they made an open profession of a religion which, disgraced and falsified as it was by its ministers, they abhorred; but in secret they cherished their own faith, and practised their own rites. The mass, the cross, and the image, were the objects of their public veneration, but the stolen devotions of the mosque and the synagogue had their hearts and affections. The Moor with his face towards Mecca pronounced the Ave Maria; and the Jew, while he fasted in Lent, was consoled by the consideration that it gave him an interval in which at least he was exempt from attesting his sincerity by devouring pork. It was necessary therefore to establish the inquisition, in order to take cognizance of these dangerous and daring apostates, in those parts of Spain where it did not before exist, and to inspire it with new activity and energy in those provinces whose faith was to be for ever under its protection.

Torquemada, a Dominican friar, and a fit successor of the preaching and persecuting founder of the order, confessor to the queen, the man by whose advice this measure was undertaken, obtained a bull from Sixtus IV., in the year 1483, appointing him inquisitor-general of all Spain, and confirming the extension of the inquisition to Castile, where it had been established three years before. The inquisitorial regulations still in force are principally those approved of by Torquemada, and a council of his nomination. Sixteen tribunals of the faith were established in the different provinces of Spain, subject to a supreme council at Madrid, in which the inquisitor-general presided; and to these tribunals, beside the regular officers necessary to conduct their processes, were attached, as appeared in a subsequent reign, more than 20,000 constables or familiars, who, as a religious police, watched over the conduct, opinions, and expressions of all ranks of the people, and, together with numerous swarms of monks, priests, and confessors, acted as arms or feelers to these dreadful associations of intolerance. As the headstrong enthusiasm, the callous heart, required in an inquisition, are most consistent with a narrow capacity and limited information, so the grossest ignorance and most absurd fatuity appeared in the cruel and arbitrary proceedings of these ghostly fathers; the opinions and sentiments of mankind were regulated by judges who could form no opinions of their own; and many an orthodox believer suffered torture and death as the penalty of not being understood. The dungeons were soon filled with heretics, who after conversion had apostatised to Moses or Mahomet. Every one was commanded, under the penalty of excommunication, to confess his own errors, or to denounce those of others. No connexions of blood, kindred, or friendship, were allowed to stand in the way of the sacred work; and the merit of the impeachment was measured by the strength of those ties of nature which were broken for its sake. None who displeased the supporters of superstition could escape detection; none who were detected could elude imprisonment; and few who were imprisoned could escape torture or the flames.

The first essay of the inquisition at Seville showed with what a 'fell swoop' it could act. In the first six months 300 persons, accused of Judaizing after conversion, were burnt, together with the bones and images of many whom death had happily rescued from its dominion. In the space of about forty years from its establishment in Seville there had been burned in that diocese more than 4000 individuals; 5000 houses remained shut as after a pestilence, and consequently so many families had been exterminated: and 100,000 were condemned to wear the sanbenito, or banished, in the single province of Andalusia. 'I do not wish,' says the chaplain of the inquisitor-general of that time, 'to write any thing more concerning the mischiefs of this heretical pravity; suffice it to say that since the fire is kindled it shall burn till no more wood can be found, and that it will be necessary for it to blaze till those who have Judaized are spent and dead, and not one remains.' To such an extent did the exterminating spirit against the descendants of Abraham proceed, that it was a common saying with Lacero (inquisitor of Cordova soon after the establishment of the tribunal in that city), Da me un Judeo, dartelo he quemado; hand me a Jew, and I will return him to

you burnt to ashes. Many of this miserable people were condemned to the flames for frequenting the synagogues in borrowed shapes, and being carried to their nightly assemblies by the devil in the form of a he-goat. Witnesses were found to prove, to the satisfaction of the inquisitor, this miraculous mode of Judaizing, and to swear that they themselves were present at the ceremonies. The various tribunals were extremely active, each of them celebrating an auto once or oftener in the year. Extreme youth and hoary age; those who were too old to change their opinions, and those who were too young to form any; were seen burning in the same fire: poverty was defenceless, and riches invited plunder. In one day at Toledo sixty-seven females were delivered over to the flames, for relapsing into Jewish practices after conversion; and this was only one of two autos that had been celebrated in the same month. Those that entered the church were liable to be burnt; and the contumacious were plundered and banished.

Thus did the furious zeal of the first inquisitor-general of Spain, operating upon the bigotry or terror of two Catholic princes, extirpate or ruin nearly 1,000,000 of their most wealthy, industrious, and enterprising subjects, who, notwithstanding the oppressions under which they labored, and the popular rage to which they were occasionally exposed, multiplied in Spain as in a second land of Egypt, and almost regarded it as a new Palestine. With this idea they looked upon their expulsion as a calamity similar to the dispersion of their tribes, or the final extinction of their political existence. The price which their fathers had paid for the blood of the Saviour, about fifteen centuries before, was now made a reason why no ransom should be received for their own. Torquemada, with the genuine inspiration of fanaticism, rushed into the royal presence, when the queen was deliberating on an offer of money made by the Jews for liberty of conscience, with a crucifix in his hand, and broke off the intended compromise for toleration or protection, by exclaiming, 'Behold the crucified Redeemer, who was sold formerly to the Jews for thirty pieces of silver by Judas; sell him not again to his enemies for gold or silver like that traitor, or remember the traitor's reward. I shall be no party to the impious bargain; I abdicate my office.' This appeal was successful; the proffered donation was refused; the edict of banishment was confirmed on a whole people; excommunication was denounced against those who should either harbour them, or supply them with the least particle of subsistence, after the period assigned for their expatriation; and the remnant of this miserable race, whose conscience would not allow them to adopt the religion of their persecutors, or who saw no safety within the pale of a church where the prison and the rack were placed below the altar, and where a new Christian had always before him the half-kindled faggots prepared for a heretic, were driven from the place of their birth and early recollections; were stripped, plundered, and tormented with impunity; were reduced to slavery, chased into solitudes, or pursued over the country. Directing their course into all the surrounding states, many of them were received in Portugal, France, and Italy; many crowded the sea-ports and frontiers of the kingdom, and, having taken shipping for Africa, Naples, or the Levant, perished by storms, pirates, or barbarians; and many of them, after experiencing every extremity of misfortune, were obliged to return to their native land, and to receive the waters of baptism from the overflowing cup of their misery. Those who fled into Portugal found intolerance and fanaticism there before them; and soon after their arrival saw the holy office established under the direction of more uncontrolled power, and a fiercer spirit of persecution, if possible, than in the country they had been obliged to relinquish.

The disciples of Mahomet could expect no better treatment than the adherents of Moses. Decrees of expulsion or conversion accordingly issued against them from the same counsels, and the holy office prepared its prisons for the relapsed and apostate. Not fewer than a million and a half of Moors were driven from Spain, from the conquest of Granada to their final banishment under Philip III., besides those destroyed in wars, massacres, and assassinations, tortured to death by the inquisitors, or delivered over to the hands of the executioner.

Nothing can be conceived more absurdly horrible than the treatment of these miserable men. If they adhered to the faith of their fathers they were robbed, plundered, and exiled as infidels; if they renounced it, and became Christians, they were suspected as hypocrites and punished as heretics. Compelled to enter the church, to escape persecution, they found, when in the church, that their compulsory entrance was made an argument of their apostasy; forced to violate their conscience, by denying a religion which they cherished, they experienced only the penalties of that which they embraced; and, deprived of the glory of martyrdom for the one, they enjoyed none of the security expected in the other. By their conversion they were brought within the reach of the inquisitorial fires; and their baptism was like heathen libations poured on the head of the victim preparatory to the sacrifice.

When carried to the prisons of the holy office, it was equally vain for them to deny or to confess the crimes with which they were charged by bigotry, avarice, or malevolence; if they denied, they were burnt as impenitent; if they confessed, they were burnt as relapsed. Torture was applied to force a declaration of what the inquisitor desired, and again inflicted to learn with what intention the acknowledged act was performed. Whatever became of the person of the heretic, whether condemned to capital punishment, or perpetual imprisonment, whether he came out with the penitential robe or to the stake, his property remained in the treasury of the inquisition; he brought forth with him none of his rights. Fidelity to their new profession, and even zeal in confirming or extending it, never ensured protection or commanded confidence, the character of a new Christian, being

marked with an indelible stain of infamy, exclusion from all offices, distinctions, or dignities; and this character was applied to all who were themselves converted from infidelity, or were descended from parents who had been such at any known period, however remote. No baptismal font could wash out such a disgrace. No antiquity of date could change the appellation: the Jewish blood was sufficient to taint the Christian profession; St. Paul himself, with the title of a new Christian, would have found his preaching vain. There have been instances where a man's pedigree has been traced back eight or nine generations, through all its collateral branches, for the purpose of ascertaining his genealogical guilt. The orthodoxy of his creed was to be estimated like that of an old coin, not by the purity of the metal, but the age of the inscription. While Jewish and Moorish extraction exposed to suspicion, and gave credibility to the slightest proofs of apostasy, it was scarcely possible that these unhappy people, with all their old national prejudices and habits, had they been real converts, should not furnish to the vigilant eye of an enemy, a rival, or an inquisitorial devotee, sufficient grounds for denunciation. The edict of faith was published in every diocese of Spain once every year, whereby the duty of accusing heretics, or those suspected of heresy, was enforced under the most awful sanctions; three years' indulgence was offered to those who should become informers or accusers; and excommunication was thundered against all who should conceal the acts or sayings of a heretic, schismatic, or infidel. The circumstances which all good Catholics were required at this annual visitation to disclose, as indications of heretical pravity, were sufficiently minute and particular to allow little chance of escape to disguised Israelites, or renegade Saracens. 'We, the inquisitors of heretical pravity, command all to whom this edict shall be made known, to speak and manifest to us if you know, understand, or have seen, or previously found out, that any living man or woman, present or absent, or already dead, had made, published, said or spoken, any or more opinions or words, heretical, suspected, erroneous, rash, ill-sounding, savouring of scandal, or any heretical blasphemy against God, his Catholic faith, and against that which our holy mother the Church of Rome embraces, teaches, preaches, and holds.' Then follows an enumeration of the heresies of the different enemies of the Catholic faith, and an injunction to declare and denounce them. Among these, as symptoms of Jewish apostasy, the faithful are enjoined to make known to the holy office the cases of any individuals of the Hebrew race who shall be detected 'in wearing a clean shirt, in using a clean tablecloth, or putting on clean sheets on the Sabbath; or who, in honor of that day, shall use handsomer or holiday clothes, who shall steep their meat in water to suck and draw out the blood, who shall sing the psalms of David without the Gloria Patri, who shall eat lettuce or parsley during the time of the paschal,' or be guilty of similar offences against the faith. The Saracens are to be denounced as suspected of Mahommedan abominations, if they abstain from drinking wine or eating swine's flesh, if they bathe at particular times, if they sing Arabian songs at their marriages, or play upon their native musical instruments. Abstinence from pork is not advanced in the edict as a charge of heresy against the Jews, though it is against the Moors, probably from a recollection of the peculiar difficulty that the ancestors of this people felt in swallowing this article of faith, when in a written engagement to be good Catholics, under the sanction of the most solemn oaths, and after a complete enumeration of the points they were required to abjure or embrace, they swore, 'by the Father, Son, and Holy Spirit, who is one in Trinity, and the true God, that whosoever of us shall be found a transgressor of all or any one of these things, he shall perish with flames or stones;' but 'as to swine's flesh we promise to observe, if we cannot eat it possibly through custom, yet we will without contempt or horror take and eat things that are dressed with it.'

In other countries, however, and even in Spain itself, the inquisition which was established for the extirpation of two hated tribes, had soon to contend with more formidable heresies. The new opinions and principles of the Reformation, beginning in Germany, spread from state to state, as by the blaze of signal posts, and every where appeared the beacons of war against ecclesiastical corruptions and abuses. Mankind looked about with amazement and indignation at the gulf of clerical oppression into which they had been plunged, and at the emblems of craft, deceit, and cruelty, with which they were surrounded. The Reformation spread into Spain, which, although it had been for ages the strong hold of superstition, contained at that time the most active and enterprising people of Europe; but the dangerous light was received and buried in the dungeons of the inquisition, and, before it had enlightened any considerable portion of the nation, expired like a lamp in a sepulchre.

Charles V., after having fought against the protestants in Germany, and endeavoured, without success, to establish the inquisition against them in the Netherlands, employed preachers and zealous Catholics to convert those in whom his arms could not work conviction; but his apostles themselves returned infected with the contagion they were commissioned to eradicate. Among those who had imbibed the reformed doctrines were men of great learning and in eminent situations. Cazalla the emperor's preacher, Constantine Ponce Fuente, canon of the cathedral of Seville, and the emperor's chaplain, don Juan Ponce de Leon, son of the count of Baylen, and several others. Heresy, to use an illustration of a Spanish author, was spreading like the yellow fever, when its progress was arrested by the holy office. Seville and Valladolid, the former the most commercial city of the Spanish monarchy and the latter the capital of Castile, were the places where it broke out, and where in the course of two years it was entirely suppressed. In Seville 800 persons were apprehended, imprisoned, and laid up for tortures or autos-de-fe in the year 1557. Many of them were burnt in successive executions of fifteen or

twenty at a time. The most cruel tortures were applied for the purpose of forcing them to confess their associates, their connexions, their friends, their favorers, the nature of their books, their instructors, and the whole ramifications of that heretical conspiracy which the tribunal was determined to destroy, root and branch. By the extreme agony on the rack, Mary Bohorquia, a young lady of noble birth, who was burnt for being a Lutheran, was driven to confess that she had conversed on religious subjects with her sister Dona Juana Ponce de Leon, wife of lord de la Heguera. This latter was immediately apprehended, confined in a loathsome dungeon though far gone in her pregnancy, and a few days after her delivery tortured with such diabolical rigor, that the ropes cut into the very bones of her arms, legs, and thighs. She died after this inhuman treatment, when the fiends who inflicted it, in order to make her atonement, or rather to deprive the reformation of the glory of such a martyr, pronounced her innocent of heresy. In May, 1559, an auto was celebrated at Valladolid which was attended by the regent of Spain (in the absence of Philip), prince Charles, and all the dignitaries and authorities of the state, when thirty persons were brought forth, fourteen of whom were committed to the flames. At the entrance of Philip into his capital, and into the active government of his kingdom in October of the same year, he was regaled by another sacrifice more splendid and imposing than the last, from the number of the victims (which amounted to forty, twenty of whom were burnt), from the greater attendance of guards, courtiers, grandees, and authorities, and from the more extensive and gorgeous diplay of inquisitorial pageantry. A protestant nobleman, don Carlos de Sessé, when passing to the stake, cried out to the king for mercy: 'No,' answered the bigot, with a stern countenance, 'I would bring wood to burn my own son were he such a wretch as you!' and continued to view the horrific ceremony with the greatest coolness. As part of the forms of this terrible day, the inquisitor-general demanded of the monarch the continuance of his protection to the tribunal, repeating the blasphemous words, Domine, adjuva nos, and the king, standing and grasping his sword, half unsheathed it, in token of his zealous compliance.

Among other miseries which the new world experienced from its discoverers and conquerors, it was not to be exempted from this execrable scourge. Philip II. introduced it into his Western dominions in 1571; and such is the blindness of superstition, that the human sacrifices of the Mexicans, which excited such horror in Cortes and his troops, were imitated by the pretended ministers of Christ. One bleeding limb of the monarchy still shook it off with convulsive violence, and rather bore to be severed from the trunk than to endure it. The people of the Netherlands, where heresy was stronger and authority weaker than in Spain, resisted its introduction; and the result of the struggle is well known. By a master stroke of flagitious policy, Philip extinguished the reformation in Spain, but the infatuation of his zeal extended it in the north. In the one case his great engine, the holy office, had been established for more than half a century; in the provinces it had not been able to gain a footing. When representations were made to him of the zeal and numbers of the protestants, he sent against them, as he would have done at home, a reinforcement of priests and ecclesiastics. Hearing that heresies had increased by the cruelties employed for their suppression, he ordered the prisons to be increased in proportion, more fires to be lighted, and more scaffolds to be erected. Informed by his sister that she could no longer govern on the maxims of massacre and extermination, he sent the furies and the duke of Alba. When the casuistical bigots who surrounded the throne, the turba minor diri capitis, began to doubt the success of their cruelty, the monarch fell down before the cross in a frenzy of fanaticism, and swore on that emblem of mercy an oath of blood and extermination against all but Catholics. The sanction of this tremendous oath survived to his successors, who seem to have taken his character as their model. The inquisition appears to have communicated to them all, whether of the family of Austria or of Bourbon, certain repulsive features of resemblance. Established in an age of persecution and despotism, it, for centuries, defied all moral and political changes, creating its own atmossphere, assimilating all things in its neighbourhood, bending every thing to its dominating genius, and, by the fascination of its fiery aspect, disarming its prey of all power of resistance.

Such has been the wretched lot of Spain. Nowhere has religious intolerance risen so high in human esteem. In Spain it has placed cruelty among the virtues. In no country of the world have people been so plundered of their property, so bereaved of their rights, so duped in their understandings. Bigotry has for generations been seated on the throne, and the inquisitor-general has been regarded as its chief pillar. Under the shelter of this tribunal no deceit could be detected, no abuse denounced, no error disproved, no prejudice exploded, no aggression repelled, no mistake corrected, no injustice opposed. Confidence and frankness were destroyed by the fear of finding every man an informer, in a society where friends were enjoined to accuse friends, on pain of excommunication; no liberal opinion could be formed or expressed with impunity, where every such opinion might be visited with the punishment of heresy. The impudent and barefaced insults offered to the reason, common sense, and common feeling of the people, under such secure protection, are almost incredible.

While the inquisition prevented improvement, and cut off the springs of knowledge, it tended, by the form of process by which it was guided, and the tragedies it frequently exhibited, to pervert the sentiments of justice and to encourage hardened inhumanity. When denunciation was commanded under the sanction of the most formidable anathemas, the gratification of private malice became a religious duty. Revenge, when baffled in other quarters, might drag its prey to

the prisons of the holy office, and there, without the fear of detection, was always sure of ample vengeance. Condemned already was the man, on whom his enemy could contrive to attach such a suspicion of heresy as to excite the activity of the tribunal. He was seized in the silence of the night, and his house exchanged for a dungeon, on a charge which he had neither the means of knowing or disproving. The very suspicion of guilt was its punishment. His friends avoided him like a pestilence, because, without being able to assist him by their services, they might expose themselves to his fate by their interference. His family, though involved in his ruin by the sequestration of his property and by the collateral and transmissible infamy attached to his name, were not allowed to see him, to administer to him either consolation or advice. It might have been some relief to have seen his accuser, or to have been confronted with his witnesses, that he might answer the charges of the one, or disprove the testimony of the other; but this also was denied him: he was fatally involved in the labyrinth of his mysterious guilt, without a consciousness of his crime, or a clue to escape. He descended to those durissima regna without a friend, without an adviser, without a prosecutor, where he found only the inquisitor and his ministers,

—— regemque tremendum,
Nesciaque humanis precibus mansuescere corda:

where he found the gloom, the solemnity, the terrors of the poetic hell; in short all the preparations and attributes of the pagan's last judgment, except its justice. Here he was left, during the pauses of punishment, to conjecture by whom and for what he was accused and punished; instead of hearing his accuser and witnesses named, he was obliged to name them himself under the torture; and, if he failed in his conjecture, after ransacking his memory for every possible ground of charge, and every probable enemy, his condemnation was decreed. With the frightful prospect of death before them, and under the excruciating agony of the question, the wretched prisoners ran over crimes they never dreamt of committing, and gave a catalogue of persons whom they never suspected of enmity or heresy. A woman, whose fate is recorded, being required to mention her accomplices, informer, and witnesses, named 600 individuals; but, as she did not fix upon the proper persons, she was condemned. On her way to the fire her daughter approached her, and particularised some relation which she thought her mother might have forgotten. 'Alas!' cried the devoted victim, 'I have already named all Portugal and Castile, but it would not avail.'

The culprit, after undergoing the torture and a long imprisonment, was at last handed over to the secular power as impenitent, contumacious, or relapsed, and the spectacle exhibited to the people was now still more cruel and terrible than that which the holy fathers enjoyed in their pitiless dungeons. The condemned were led forth to execution by burning (which is the most terrible death, says a Spanish author, for the most horrible of crimes); and of this display of supplicіary vengeance the most tremendous and awful solemnity was made. Notice was given at the churches that on a particular day (generally a festival or Sunday), an act of the faith (which originally meant a sermon concerning the faith preached on such occasions) would be given at such a particular place, and an indulgence of forty days offered to all who should go to witness the transactions there to be performed, the torments and punishments of heretics. Great crowds of the faithful attended—the monasteries sent forth their tribes—the clergy, from a considerable distance, poured towards the execution—the civil authorities of all classes were on duty—the greatest preparations were made—the bell of the cathedral tolled—the standard of the inquisition was unfurled—and the train of heretics, dressed in sackcloth painted with flames, devils, and monsters, and walking barefooted accompanied with cannibals which we have neither space nor desire to describe, proceeded, first, in procession from the prison to the holy office to hear a sermon, and then to the place of execution. The prisoners were frequently reserved till there was a sufficient accumulation of them for one grand tragedy. To this entertainment kings, princes, grandees, and courtiers, were invited, as to a magnificent bull-fight, a splendid display of fire-works, or a gorgeous theatrical exhibition. The effect of the pageant was not to be weakened by the emotions of pity. Philip II. enjoyed the sight with a countenance and a heart unmoved. Charles II. had the most pompous one that ever was exhibited, prescribed to him as a medicine. It will be seen, in accounts of these spectacles, with what unmoistened eyes and unruffled features even the ladies of the court beheld the writhings and convulsions of these suffering wretches, heard their horrible cries, and resisted their moving appeals. To have shed tears would have been a crime. They would as soon have wept over Satan on the burning lake. Philip III. is said to have expiated some natural tears shed by him on this occasion with his blood; that is, with a drop of his blood drawn by the inquisitor-general, and burnt by the hands of the common executioner as an emblem of the punishment such heretical sympathy deserved. The preacher who delivered the sermon of the faith, at the great auto, before Charles II. in 1680, where 120 prisoners were present, nineteen of whom were in an hour to be cast into the flames; in the plenitude of his joy burst into an appropriation of the words of the Canticles: 'Ah! thou holy tribunal!' said he, 'for boundless ages mayest thou keep us firm in the faith, and promote the punishment of the enemies of God. Of thee I may say what the Holy Spirit said of the church, 'Thou art fair, my love, thou art fair as the tents of Kedar, as the sightly skins of Solomon.' Of the infuriated conduct of the people on such occasions, the following account from Dr. Geddes will be a sufficient specimen. 'At the place of execution, in Lisbon, there are so many stakes set up as there are prisoners to be burnt, with a good quantity of dry furze about them. The stakes of the professed are about four yards high, and have a small board within half a yard of the top.

The negative and relapsed being first strangled and burnt, the professed go up the ladder betwixt the two Jesuits who have attended them all; and when they come up to the board they turn round to the people, and the Jesuits spend nearly a quarter of an hour in exhorting them to be reconciled to the church of Rome, which if they refuse to do, the Jesuits come down and the executioner ascends, and having turned the professed off the ladder upon the seat, and chained their bodies close to the stake, the Jesuits renew their exhortation, and, at parting, tell them that they leave them to the devil, who is standing at their elbow to carry their souls to hell as soon as they are out of their bodies.'

Scenes, at the description of which the flesh creeps and the heart is horror struck, were often presented at these spectacles. The prisoners frequently resisted with the greatest fury, struggling to free themselves from the stake, while the incarnate fiends allowed the fire to fall away, or added fuel as suited their purpose to heighten or prolong their torments. Sometimes the exultation of martyrdom was expressed in the defiance of despair. Francisco Botello, a Jew, when brought forth for execution was shown his wife, who, without his knowledge, made one of the same auto; 'but such was his shameful conduct,' says the Report, 'that he beheld her with as much joy as if it had been the happiest day of his life, animating a friend who was burning beside him to die in his own lame faith.' 'Francisco Lopez,' says another Report, 'who was burnt in an auto celebrated at Mexico in 1659, stood on the platform of the stage in a most contumacious manner, and, resembling a demon, cast forth sparks from his eyes, and gave beforehand signs of his eternal condemnation.' Sometimes the sufferers, in their lingering torments, made the most pathetic appeals to the sympathy of the spectators, not for a release from their doom, but a more speedy dispatch of their agony. 'Of the five persons condemned,' says Mr. Wilcox, afterwards bishop of Gloucester, in a letter to Dr. Burnet, speaking of an auto celebrated at Lisbon, on the 10th of December, 1705, 'there were but four burnt. Two were first strangled, two, a man and a woman, were burnt alive. The execution was very cruel—the woman was alive in the flames half an hour, and the man above an hour. The present king and his brother were seated in a window so near as to be addressed in very moving terms by the man while he was burning. The favor he asked was only a few more faggots, yet he was unable to obtain it. Those who are burned here are seated on a bench twelve feet high, fastened to a pole, and above six feet higher than the faggots. The wind being a little fresh, the man's hinder parts were perfectly wasted, and as he turned himself his ribs opened before he left speaking; the fire being recruited as it wasted, to keep it just in the same degree of heat. All his entreaties could not procure him a larger allowance of wood to shorten his misery.' The last instance of barbarity carried to the length of burning for heresy, was exhibited at Seville in 1781, on the person of a woman who had been guilty of licentious irregularities, and justified her conduct by special revelations from an angel.

The power of the inquisition was still considerable after its holocausts had ceased; but it was exerted rather in encouraging petty vexations, enjoining ridiculous penances, and prohibiting useful books, than in serious acts of outrage. The rack was disused, as well as the faggot. The familiars became less officious, and the inquisitors were sometimes found to be men of worth and humanity. During the administration of the prince of peace, and for some time before, the holy office became a mere tool in the hands of the government, and was even in this point of view thought of so little service that the design was more than once entertained of abolishing it; and he is said to have got the royal signature to a decree for that purpose in 1796, which by some accident was not carried into execution. The evidences of its former exploits still graced the walls of churches and convents; the pictures and sentences of those whose persons it had burned, or whose property it had confiscated, still remained exposed for the edification of the faithful. A profligate monk or a licentious nun, for bringing scandal on their order, might be threatened with its vengeance; it suppressed mason lodges, and political tracts; and from the arbitrary nature of its proceedings, which remained unchanged, it was still capable of doing much mischief, but it latterly made no approach to violence or rigor.

The last auto of any consequence that it celebrated was in 1781, and excited the ridicule of all Madrid. Ignacio Rodriguez, a common beggar, was condemned to wholesome penance for deserting his mendicant profession, turning sorcerer, and making love-powders. During the time of the French revolution it was of course very active in preventing any importation of political or religious works from that infected country; and many books of all kinds were inserted in its Index Expurgatorius, or laid up on its shelves under the protection of hosts of devils, cracking the bones of heretics. This leniency or inefficiency does not seem to have proceeded from any improvement in the popular mind, but from the insensible influence of European liberality on the high classes, and from the want of opposition or provocation.

In this state of weakness was it when, in 1808, Napoleon decreed its abolition, and the inquisitor-general joined the French party. In the troubles which followed the French invasion the functions of the different tribunals remained suspended, although several of them did not acknowledge the authority of the conqueror. The inquisition usurps the authority of the bishops, the ordinary judges of heretical pravity, by virtue of a papal commission, conferred on it through the medium of the inquisitor-general, in whom the election of subordinate officers is vested, and whose sanction is necessary to give validity to every sentence. Without him the courts can no more act than an army without a general; without him their judges are no more judges of the faith, than ministers of finance; and as the pope, whose bull is necessary to confer that commission, was in the hands of the enemy that dissolved it,

as well as the individual who formerly held it, no processes could be instituted or concluded. The inquisitors, thus dispersed, flocked from all quarters to Cadiz, besieging the government with petitions and memorials; and while not a spot of the Peninsula remained unpolluted with the foot of the invader, except one city, while even the batteries of the enemy were endangering the safety of the existing authorities within the walls of that city, while their country was overrun with Catholic enemies, and defended alone by heretical friends, the most strenuous efforts were made by superstition for the restoration of its protecting judicature.

The liberal party perceived the advantage they had gained, and vigorously laid hold of it. They considered the inquisition as abolished, and they threw upon their opponents the burden of proving the necessity of its re-establishment: they gained the concurrence of the nation for a constitution, the articles of which, defining the judicial power and regulating its exercise, were inconsistent with its existence; and thus its restoration became impracticable. They decreed that torture should be no longer employed, that trials should be public, that witnesses should be confronted with those against whom they depose, that confiscation should no longer exist, that freedom of speech was the necessary privilege of a deputy. And having thus removed the fundamental principles of inquisitorial legislation, the very pillars and corner-stones on which it rested, they allowed it to drop on the heads of its supporters. The nation was asked if they would consent to reconstruct such a monument of barbarism; if, after having sworn to defend the constitution, they were inclined to commit political perjury in destroying it; if they were prepared to erect a mausoleum for their liberty at the very hour of its birth. All the zeal and talent of the nation were employed in the controversy. Innumerable publications appeared on both sides. After receiving petitions from the inquisitors for the revival of the office, after hearing representations from bishops, towns, and provinces, on the same subject, the Cortes appointed a commission, of which Arguelles and several other able and enlightened men were members, to enquire whether the re-establishment of the inquisition was consistent with the maintenance of the constitution; and the result of their opinion was that the tribunal ought to be abolished. The eloquent, elaborate, and ingenious statement of the facts and reasonings which determined their judgment, is detailed in their report, presented to Congress on the 8th of December, 1812. This was followed up with equal ability in the speeches of many of the members of that body; the majority of which on the great question (ninety to sixty) came to a similar conclusion. The discussion on the different propositions connected with the subject continued with some intervals from the end of December to the 22d of February. The speeches (most of them read and handed over to the printer) are now before us in a volume of 694 pages, and display sometimes a depth of research, and sometimes a power of eloquence, united with liberal views and sound reasoning, which it would be difficult to match in any country but our own. But it must not be supposed, though the liberal party was triumphant in the Cortes, that the nation was unanimous in their support, that their opponents were few or insignificant, or that what has happened since is at all an anomaly. The greatest clamor was raised both in the national assembly and in the country; and the cry that the church was in danger resounded on all sides.

The priests and monks contrived to convince the people that the Catholic faith and the holy office were identified, that the inquisition and religion were synonymous terms, and that every one who spoke and wrote against that tribunal was an enemy of devotion, an antichrist, a blasphemer of the glorious saints, and of the blessed virgin. Doctrines such as these were preached in every village, before every convent, in almost every public square: handbills were posted up to the same effect, and every engine of delusion and falsehood was set at work. The ignorant were told that they could not hold their religion a day if they were deprived of the tribunal that protected it; that they would all be obliged to become heathens, heretics, and Lutherans; that they would have no mass, no pope, no purgatory, no rosaries; that our Lady of the Pillar, and St. James of Compostella, would desert them; that they must expect no longer the countenance of the saints; that every miracle would cease; that they would be exposed without protection to the visitations of earthquakes, storms, and bad harvests. In order to make them cling still closer to their religion, and that institution which by one fanatic was called the poniard of the faith, and by another its battering ram, they were told that they were the only nation hitherto uncontaminated with heresy; that this pestilent distemper had been kept off from their shores by an inquistorial quarantine; that they were the most Catholic people upon earth, the privileged monopolists of a pure apostolic worship, the champions of the virgin, and the favorites o heaven and its inhabitants. The nations around them were stigmatised as composed of men overrun with the plague of apostasy; a revolting assemblage of atheists, sorcerers, and freemasons; the enemies of the pope and the sacraments; the contentious partisans of infuriated sects; and the devoted victims of divine vengeance. The steps by which they had arrived at such a deplorable state of corruption and infidelity were, the impunity allowed to heretics, the establishment of the principles of toleration, and the opposition made to the holy office. The Jews and Moors, with all their diabolical rites, had been expelled by the zeal of Catholic kings, or had fled from the just terrors of a sanbenito and a faggot; but more insidious and dangerous enemies of the true faith threatened the Spanish church, if its natural bulwark were destroyed, in the professors of liberal ideas, the preachers of clerical reform, the pretenders to primitive purity, the antagonists of priestly and papal domination, the secret emissaries of heresy or protestantism, the bastard children of the church who, having no share of the inheritance of their father, were anxious to excite dissentions within the family of the faithful, the vipers who endea-

voured to destroy their mother by biting her in the most vital part, and infusing into her wound the deadly venom of error and incredulity. Argument, and reason, and authority, it was said, were weak obstacles to the design of such men; the ordinary ministers of religion had not sufficient vigilance to detect their insidious arts, or sufficient power to repress their open attacks; and nothing but a court, with a numerous and active body of officers spread through all parts of the country, interested in observing the least deviation from the faith, and capable of bringing the culprits to condign punishment, could afford the faithful security against their writings, their discourses, their example, and machinations. Such representations as these, the futility of which could only have been demonstrated by experience and by the steady wisdom of the new government, paved the way for the arbitrary measures of Ferdinand; he has re-instated the inquisition; but the light which the discussion has diffused will not be lost.

The inquisition was established in Portugal at the pressing solicitations of king John III. about the year 1536.

The power of the inquisition was very much limited at Venice, where it was introduced about the year 1289; the office consisting of secular and ecclesiastical persons, though the latter had been long endeavouring to bring it into their own hands, but could never prevail with the Venetian senate to agree to it. Indeed at Venice it seemed rather a political than a religious contrivance; and served rather for the security of the state than that of the church. There are appeals from the subaltern inquisitions in Italy, to the congregation of the holy office residing at Rome.

The congregation was first formed by Paul III. in 1542, but finally established by Sixtus V. in 1588. The members of it, called supreme inquisitors, assemble thrice in the week, and every Thursday in the presence of the pope, who presides in it.

The best accounts of the inquisition and its practices are Limborch's History, by Chandler. The Inquisition unmasked: being an Historical and Philosophical Account of that Tremendous Tribunal, founded on Authentic Documents, Written and Published at a Time when the National Congress of Spain was about to deliberate on this Important Measure. By D. Antonio Puigblanch. Translated from the Author's enlarged copy by W. Walton Esq. 2 vols. 8vo. Baldwin and Co., London, 1816. Llorente's History of the Inquisition, in Spanish, which extends, we believe, to 4 vols. 4to., and the English Translation and abridgment of it in 1 vol. 8vo.

INRAIL', *v. a.* In and rail. To enclose with rails.

In things indifferent, what the whole church doth think convenient for the whole, the same if any part do wilfully violate, it may be reformed and *inrailed* again, by that general authority whereunto each particular is subject. *Hooker.*

Where famed St. Giles's ancient limits spread,
An *inrailed* column rears its lofty head;
Here to seven streets seven dials count the day,
And from each other catch the circling ray. *Gay.*

IN'ROAD, *n. s.* In and road. Incursion; sudden and desultory invasion.

Many hot *inroads*
They make in Italy.
Shakspeare. Antony and Cleopatra.

From Scotland we have had in former times some alarms and *inroads* into the northern parts of this kingdom. *Bacon.*

The loss of Shrewsbury exposed all North Wales to the daily *inroads* of the enemy. *Clarendon.*

By proof we feel
Our power sufficient to disturb his heaven,
And with perpetual *inroads* to alarm,
Though inaccessible his fatal throne. *Milton.*

The country open lay without defence;
For poets frequent *inroads* there had made.
Dryden.

INSANE', *adj.* Lat. *insanus.* Mad; making mad.

Were such things here as we do speak about?
Or have we eaten of the *insane* root,
That takes the reason prisoner? *Shakspeare. Macbeth.*

INSATIABLE, *adj.*
INSA'TIABLENESS, *n. s.*
INSA'TIABLY, *adv.*
INSA'TIATE, *adj.*
INSATISFAC'TION, *n. s.*
INSAT'URABLE, *adj.*
Lat. *insatiabilis, insatiatus, insatisfacio insaturabilis.* Greedy beyond measure, so as not to be satisfied: used in a literal and figurative sense. Insatisfaction, want; an unsatisfied state. Insatiable, not to be glutted or filled.

With hir vengeaunce *insaciable,*
Now have thei hym giltlesse entreted so,
That to reporte it is to lamentable.
Chaucer. Laments of Mary Magdaleine.

O cruel Destiny (quod she), O Fortune *insacyable,*
O wavering world, rolling like a ball!
You are so wayward and so onstable
That never any assurance can be in you at all.
G. Cavendish's Metrical Visions.

My mother went with child
Of that *insatiate* Edward.
Shakspeare. Richard III.

It is a profound contemplation in nature, to consider of the emptiness or *insatisfaction* of several bodies, and of their appetite to take in others.
Bacon's Natural History.

Some men's hydropick *insatiableness* had learned to thirst the more, by how much more they drank.
King Charles.

Insatiate to pursue
Vain war with heaven. *Milton.*

Too oft has pride
And hellish discord, and *insatiate* thirst
Of others' rights, our quiet discomposed.
Phillips.

They were extremely ambitious, and *insatiably* covetous; and therefore no impression, from argument or miracles, could reach them. *South.*

Insatiate archer! could not one suffice?
Young's Night Thoughts. Death.

There, breathless, with his digging nails he clung
Fast to the sand, lest the returning wave,
From whose reluctant roar his life he wrung,
Should suck him back to her *insatiate* grave.
Byron. Don Juan.

INSCRIBE', *v. a.*
INSCRIP'TION, *n. s.*
Fr. *inscrire;* Lat. *inscribo.* To write on any thing. It is generally applied to something written on a monument, or on the outside of something. It is therefore more frequently used with *on* than *in.* To mark any thing with writing; to assign to a patron without a formal dedication; to draw a figure within another: inscription,

something written or engraved; a title. In law, an obligation made in writing, whereby the accuser binds himself to undergo the same punishment, if he shall not prove the crime which he objects to the party accused, in his accusatory libel.—Ayliffe's Parergon. Consignment of a book to a patron without a formal dedication.

In all you writ to Rome, or else
To foreign princes, ego et rex meus
Was still *inscribed*.
Shakspeare. Henry VIII.

In the circle *inscribe* a square.
Notes to Creeche's Manilius.

Connatural principles are in themselves highly reasonable, and deducible by a strong process of ratiocination to be most true; and consequently the high exercise of ratiocination might evince their truth, though there were no such originally *inscribed* in the mind. *Hale's Origin of Mankind.*

Joubertus by the same title led our expectation, whereby we reaped no advantage, it answering scarce at all the promise of the *inscription*. *Browne.*

This avarice of praise in time to come,
Those long *inscriptions* crowded on the tomb.
Dryden.

One ode, which pleased me in the reading, I have attempted to translate in Pindarick verse: 'tis that which is *inscribed* to the present Earl of Rochester.
Id.

Ye weeping loves! the stream with myrtles hide,
And with your golden darts, now useless grown,
Inscribe a verse *on* this relenting stone. *Pope.*

Inscribed above the portal from afar,
Conspicuous as the brightness of a star.
Cowper. Truth.

A worthy moral, and a wise *inscription*,
For a king to put up before his subjects.
Byron. Tragedy. Sardanapalus.

An INSCRIPTION is a title or writing affixed to any thing to give some farther knowledge of it, or to transmit some important truth to posterity. Antiquaries are very curious in examining ancient inscriptions found on stones and other monuments of antiquity. It appears that the ancients engraved upon pillars the principles of sciences, as well as the history of the world. Those mentioned by Herodotus show, that this was the first way of instructing people, and of transmitting histories and sciences to posterity. This is confirmed by Plato in his Hippias; wherein he says, that Pisistratus engraved on stone pillars precepts useful for husbandmen. Pliny assures us, that the first public monuments were made of plates of lead; and that the treaties of confederacy concluded between the Romans and the Jews were written upon plates of brass; that, says he, the Jews might have something to put them in mind of the peace and confederacy concluded with the Romans. The Greeks and Romans were great dealers in inscriptions, and we find so many in those countries of ancient learning, that large volumes have been composed on them; as the collection of Gruter, &c. Since Gruter's collection, Th. Reinesius has compiled another large volume on inscriptions. After all these Grævius published a complete collection of inscriptions, in 3 vols. folio.

INSCRU'TABLE, *adj.* Fr. *inscrutable;* Lat. *inscrutabilis.* Unsearchable; not to be traced out by enquiry or study.

O how *inscrutable!* his equity
Twins with his power. *Sandys.*

A jest unseen, *inscrutable*, invisible,
As a weather-cock on a steeple. *Shakspeare.*

This king had a large heart, *inscrutable* for good, and was wholly bent to make his kingdom and people happy. *Bacon.*

Hereunto they have recourse as unto the oracle of life, the great determination of virginity, conception, fertility, and the *inscrutable* infirmities of the whole body. *Browne.*

We should contemplate reverently the works of nature and grace, the *inscrutable* ways of Providence, and all the wonderful methods of God's dealing with men. *Atterbury.*

Baal himself
Ne'er fought more fiercely to win empire, than
His silken son to save it: he defies
All augury of foes or friends, and like
The close and sultry summer's day, which bodes
A twilight tempest, bursts forth in such thunder
As sweeps the air and deluges the earth.
The man's *inscrutable*. *Byron. Sardanapalus.*

INSCULP', *v.a.* } Lat. *insculpo.* To en-
INSCULP'TURE, *n.s.* } grave, or cut: any thing engraved.

A coin that bears the figure of an angle
Stamped in gold, but that *insculpt* upon.
Shakspeare.

Timon is dead,
Entombed upon the very hem o' the sea:
And on the grave stone this *insculpture*, which
With wax I brought away. *Id. Timon.*

It was usual to wear rings on either hand; but when precious gems and rich *insculptures* were added, the custom of wearing them was translated unto the left. *Browne.*

INSEAM', *v.a.* In and seam. To impress or mark by a seam or cicatrix.

Deep o'er his knee *inseamed* remained the scar.
Pope.

IN'SECT, *n.s.* } Lat. *insecta, insector.*
INSECTA'TOR, *n.s.* } *Insecta*, and Gr. λογος.
INSEC'TILE, *adj.* } Called insects from a
INSECTOL'OGER, *n.s.* } separation in the middle of their bodies, whereby they are cut, as it were, into two parts, as we see in wasps and common flies. See ENTOMOLOGY. Any thing small or contemptible: insectator, one that harasses by pursuing: insectile, having the nature of insects: insectologer, one who studies or describes insects; a word without authority.

Insectile animals, for want of blood, run all out into legs. *Bacon.*

Beast, bird, *insect*, or worm, durst enter none.
Milton.

The new-formed *insect* on the water moves,
The speckled trout the curious snare approves.
Gay's Rural Sports.

The insect itself is, according to modern *insectologers*, of the ichneumon-fly kind. *Derham.*

In ancient times the sacred plough employed
The kings, and awful fathers of mankind;
And some with whom compared, your *insect* tribes
Are but the beings of a Summer's day. *Thomson.*

Man, who madly deems himself the lord
Of all, is nought but weakness and dependance.
This sacred truth, by sure experience taught,
Thou must have learnt, when wandering all alone,
Each bird, each *insect*, flitting thro' the sky,
Was more sufficient for itself than thou.
Id. Coriolanus.

In the vast and the minute we see
The unambiguous footsteps of the God
Who gives its lustre to an insect's wing,
And wheels his throne upon the rolling worlds.
Cowper.

INSECTS. See ENTOMOLOGY.

INSECURE', *adj.* } Lat. *insecurus.* Not se-
INSECU'RITY, *n. s.* } cure; not confident of safety: insecurity is, uncertainty; danger; hazard; peril.

It may be easily perceived with what *insecurity* of truth we ascribe effects, depending upon the natural period of time, unto arbitrary calculations, and such as vary at pleasure. *Browne.*

The unreasonableness and presumption, the danger and desperate *insecurity*, of those that have not so much as a thought, all their lives long, to advance so far as attrition and contrition, sorrow, and resolution of amendment. *Hammond.*

He is liable to a great many inconveniences every moment of his life, and is continually *insecure* not only of the good things of this life, but even of life itself. *Tillotson.*

INSEMINATION, *n. s.* Fr. *insemination;* Lat. *inseminatio.* The act of scattering seed on ground.

INSECU'TION, *n. s.* Fr. *insecution;* Lat. *insecutio.* Pursuit. Not in use.

Not the king's own horse got more before the wheel
Of his rich chariot, that might still the *insecution* feel,
With the extreme hairs of his tail.
Chapman's Iliad.

INSENSATE', *adj.* } Fr. *insensé, insensi-*
INSENSIBIL'ITY, *n. s.* } *bilité;* Ital. *insensato;*
INSEN'SIBLE, *adj.* } Lat. *in* and *sentio.*
INSEN'SIBLENESS, *n. s.* } Stupid; deficient in
INSEN'SIBLY, *adv.* } thought or sensibility: inability to perceive; torpor; dulness of corporal sense, or mental perception: insensible, imperceptible; slow; gradual; void of feeling, emotion, or affection: insensibleness has the same meaning: insensibly, in such a manner as is not discovered by the senses; slowly; gradually.

What is that word honour? Air; a trim reckoning. Who hath it? He that died a Wednesday. Doth he feel it? No. Doth he hear it? No. Is it *insensible* then? Yea, to the dead. But will it not live with the living? No. Why? Detraction will not suffer it. *Shakspeare.*

Ye be reprobates; obdurate *insensate* creatures.
Hammond.

Two small and almost *insensible* pricks were found upon Cleopatra's arm. *Browne's Vulgar Errours.*

So fond are mortal men,
As their own ruin on themselves t' invite,
Insensate left, or to sense reprobate,
And with blindness internal struck.
Milton's Agonistes.

Equal they were formed,
Save what sin hath impaired, which yet hath wrought
Insensibly. *Milton.*

Insensibility of slow motions may be thus accounted for: motion cannot be perceived without perception of the parts of space which it left, and those which it next acquires. *Glanville.*

You grow *insensible* to the conveniency of riches, the delights of honour and praise. *Temple.*

You render mankind *insensible* to their beauties, and have destroyed the empire of love. *Dryden.*

They fall away,
And languish with *insensible* decay. *Id.*

The *insensibleness* of the pain proceeds rather from the relaxation of the nerves than their obstruction.
Ray.

The hills rise *insensibly*, and leave the eye a vast uninterrupted prospect. *Addison on Italy.*

The dense and bright light of the circle will obscure the rare and weak light of these dark colours round about it, and render them almost *insensible.*
Newton's Opticks.

Proposals agreeable to our passions will *insensibly* prevail upon our weakness. *Rogers's Sermons.*

Cadenus
Insensibly came on her side. *Swift.*

Insensible of truth's almighty charms,
Starts at her first approach, and sounds to arms!
Cowper's Hope.

Peace (if *insensibility* may claim
A right to the meek honours of her name). *Id.*

Thus Harold inly said, and passed along,
Yet not *insensibly* to all which here
Awoke the jocund birds to early song
In glens which might have made even exile dear.
Byron's Childe Harold.

INSEPARABILITY, *n. s.* } Lat. *insepara-*
INSEP'ARABLENESS, *n. s.* } *bilis.* The qua-
INSEP'ARABLE, *adj.* } lity of not being
INSEP'ARABLY, *adv.* } divisible: not to be disjoined: with indissoluble union.

Lordship may not (of kinge nor emperour)
Reforme a thing whiche is nat reformable;
Rust of defame, is *inseparable.*
Chaucer's Miscellanies.

Drowning of metals is, when the baser metal is so incorporate with the more rich as it cannot be separated; as if silver should be *inseparably* incorporated with gold. *Bacon.*

Ancient times figure both the incorporation and *inseparable* conjunction of counsel with kings, and the wise and politic use of counsel by kings. *Id.*

Thou, my shade
Inseparable, must with me along;
For death from sin no power can separate.
Milton.

Restlessness of mind seems *inseparably* annexed to human nature. *Temple.*

Care and toil came into the world with sin, and remain ever since *inseparable* from it. *South.*

Oh! nothing now can please me.
Darkness, and solitude, and sighs, and tears,
And all the *inseparable* train of grief,
Attend my steps for ever. *Dryden.*

The parts of pure space are immoveable, which follows from their *inseparability*, motion being nothing but change of distance between any two things; but this cannot be between parts that are *inseparable.* *Locke.*

No body feels pain, that he wishes not to be eased of, with a desire equal to that pain, and *inseparable* from it. *Id.*

Atheists must confess, that before that assigned period matter had existed eternally, *inseparably* endued with this principal of attraction; and yet had never attracted nor convened before, during that infinite duration. *Bentley.*

Together out they fly,
Inseparable now the truth and lie;
And this or that unmixt no mortal e'er shall find.
Pope.

INSERT', *v. a.* }
INSER'TION, *n. s.* } Fr. *insertion*; Lat. *insero*. To place in or amongst other things; to interline: insertion, the thing so placed or inserted.

Those words were very weakly *inserted*, where they are so liable to misconstruction. *Stillingfleet.*

With the worthy gentleman's name I will *insert* it at length in one of my papers. *Addison.*

An ileus, commonly called the twisting of the guts, is either a circumvolution or *insertion* of one part of the gut within the other. *Arbuthnot.*

The great disadvantage our historians labour under is too tedious an interruption, by the *insertion* of records in their narration.
Felton on the Classics.

It is the editor's interest to *insert* what the author's judgment had rejected. *Swift.*

He softens the relation by such *insertions*, before he describes the event. *Broome.*

Poesy and oratory omit things not essential, and *insert* little beautiful digressions, in order to place every thing in the most affecting light. *Watts.*

INSERVE', *v. a.* }
INSER'VIENT, *adj.* } To be of use to an end: conducive of a use to an end.

The providence of God, which disposeth of no part in vain, where there is no digestion to be made, makes not any parts *inservient* to that intention.
Browne.

INSHELL', *v. a.* In and shell. To hide in a shell. Not used.

Aufidius, hearing of our Marcius' banishment
Thrusts forth his horns again into the world,
Which were *inshelled* when Marcius stood for Rome,
And durst not once peep out.
Shakspeare. Coriolanus.

INSHIP', *v. a.* In and ship. To shut in a ship; to stow; to embark. Not used. We say simply to ship.

See them safely brought to Dover, where *inshipped*,
Commit them to the fortune of the sea. *Shakspeare.*

INSHRINE', *v. a.* In and shrine. To enclose in a shrine or precious case. It is written equally enshrine.

Warlike and martial Talbot, Burgundy
Inshrines thee in his heart.
Shakspeare. Henry VI.

Not Babylon,
Equalled in all its glories, to *inshrine* Belus.
Milton.

IN'SIDE, *n. s.* In and side. Interior part; part within. Opposed to the surface or outside.

Looked he o' the' *inside* of the paper?
—He did unseal them.
Shakspeare. Henry VIII.

Show the *inside* of your purse to the outside of his hand, and no more ado. *Id. Winter's Tale.*

Here are the outsides of the one, the *insides* of the other, and there's the moiety I promised ye.
L'Estrange.

As for the *inside* of their nest, none but themselves were concerned in it. *Addison's Guardian.*

INSIDE GUARD, in the broad sword exercise, a guard to secure the face and front of the body from a cut made at the inside of the position, above the wrist. See SWORD EXERCISE.

INSIDIA'TOR, *n. s.* }
INSID'IOUS, *adj.* }
INSID'IOUSLY, *adv.* } Fr. *insidieux*; Lat. *insidiosus*. Sly; diligent to entrap; treacherous: with malicious artifice: by stealth or in a deceitful manner: insidiator is one who lies in wait.

The castle of Cadmus was taken by Phebidas the Lacedemonian, *insidiously* and in violation of league.
Bacon.

Since men mark all our steps, and watch our haltings, let a sense of their *insidious* vigilance excite us so to behave ourselves, that they may find a conviction of the mighty power of Christianity towards regulating the passions. *Atterbury.*

They wing their course,
And dart on distant coasts, if some sharp rock,
Or shoal *insidious*, breaks not their career.
Thomson.

Simeon and Levi spoke not only falsely but *insidiously*, nay hypocritically, abusing their proselytes and their religion, for the effecting their cruel designs.
Government of the Tongue.

Against the head which innocence secures
Insidious malice aims her darts in vain,
Turned backward by the powerful breath of heaven.
Dr. Johnson's Irene.

The palace has become a fortress
Since that *insidious* hour.
Byron.. Tragedy. Sardanapalus, act 5. sc. 1.

Till worn by age, and mouldering to decay,
The' *insidious* waters wash its base away.
Canning.

IN'SIGHT, *n. s.* Dut. *insicht*. This word had formerly the accent on the last syllable. Introspection; deep view; knowledge of the interior parts; thorough skill in any thing.

For though the people have no gret *insight*
In vertue, he considered ful right
Hire bountee; and disposed, that he wold
Wedde hire only, if ever he wedden shold.
Chaucer. The Clerkes Tale.

Straitway sent with careful diligence
To fetch a leech, the which had great *insight*
In that disease of grieved conscience,
And well could cure the same; his name was Patience. *Spenser.*

Now will be the right season of forming them to be able writers, when they shall be thus fraught with an universal *insight* into things. *Milton.*

Hardy shepherd, such as thy merits, such may be her *insight* justly to grant thee reward. *Sidney.*

The use of a little *insight* in those parts of knowledge, which are not a man's proper business, is to accustom our minds to all sorts of ideas. *Locke.*

A garden gives us a great *insight* into the contrivance and wisdom of providence, and suggests innumerable subjects of meditation. *Spectator.*

Due consideration, and a deeper *insight* into things, would soon have made them sensible of their error. *Woodward.*

INSIGNIF'ICANCE, *n. s.* }
INSIGNIF'ICANCY, *n. s.* }
INSIGNIF'ICANT, *adj.* }
INSIGNIF'ICANTLY, *adv.* } Fr. *insignificance*; Lat. *in* and *significo*. Want of meaning: unimportance. Unimportant; wanting weight; ineffectual: this sense, though supported by authority, is not very proper. Insignificantly, in an unmeaning or trifling manner.

Birds are taught to use articulate words, yet they understand not their import, but use them *insignificantly*, as the organ pipe renders the tune, which it understands not. *Hale.*

To give an account of all the *insignificancies* and the verbal nothings of this philosophy, would be to transcribe it. *Glanville.*

All the arguments to a good life will be very in-

significant to a man that hath a mind to be wicked, when remission of sins may be had upon cheap terms. *Tillotson.*

My annals are in mouldy mildews wrought,
With easy *insignificance* of thought. *Garth.*

Calumny robs the publick of all that benefit that it may justly claim from the worth and virtue of particular persons, by rendering their virtue utterly *insignificant*. *South.*

As I was ruminating on that I had seen, I could not forbear reflecting on the *insignificancy* of human art, when set in comparison with the designs of Providence. *Addison's Guardian.*

Nothing can be more contemptible and *insignificant* than the scum of a people, instigated against a king. *Addison.*

'Till you can weight and gravity explain,
These words are *insignificant* and vain. *Blackmore.*

In a hemorrhage from the lungs, no remedy so proper as bleeding, often repeated: stypticks are often *insignificant*. *Arbuthnot.*

So language in the mouths of the adult,
Witness its *insignificant* result. *Cowper. Conversation.*

With a pride common to all Italians who have been masters, have not been persuaded to parade their *insignificance*. *Byron's Notes on Childe Harold.*

INSINCERE', *adj.* } Lat. *in* and *sincerus*.
INSINCER'ITY, *n. s.* } Not what he appears; dissembling; unfaithful, when used of a person; not sound, when used of things: insincerity is dissimulation; want of truth or fidelity.

If men should always act under a mask, and in disguise, that indeed betrays design and *insincerity*. *Broome on the Odyssey.*

Ah why, Penelope, this causeless fear,
To render sleep's soft blessings *insincere?*
Alike devote to sorrow's dire extreme,
The day reflection, and the midnight dream. *Pope.*

INSIN'EW, *v. a.* In and sinew. To strengthen; to confirm. A word not used.

All members of our cause,
That are *insinewed* to this action. *Shakspeare.*

INSIN'UANT, *adj.*
INSIN'UATE, *v. a.* & *v. n.*
INSINUA'TION, *n. s.*
INSIN'UATIVE, *adj.*
INSIN'UATOR, *n. s.*
Fr. *insinuer;* Lat. *insinuo*. To introduce gently into the bosom: figuratively to gain favor by degrees; to hint; to instil; to wheedle; to steal imperceptibly; to enfold; enervate: insinuation, the power of stealing into favor: insinuative implies the disposition: insinuator, the person.

There is no particular evil which hath not some appearance of goodness, whereby to *insinuate itself*. *Hooker.*

I love no colours; and, without all colour
Of base *insinuating* flattery,
I pluck this white rose with Plantagenet. *Shakspeare.*

When the industry of one man hath settled the work, a new man, by *insinuation* or misinformation, may not supplant him without a just cause. *Bacon.*

Pestilential miasms *insinuate* into the humoral and consistent parts of the body. *Harvey.*

At the isle of Rhee he *insinuated himself* into the very good grace of the duke of Buckingham. *Clarendon.*

He had a natural *insinuation* and address, which made him acceptable in the best company. *Id.*

Close the serpent sly
Insinuating, of his fatal guile
Gave proof unheeded. *Milton.*

All the art of rhetorick, besides order and clearness, are for nothing else but to *insinuate* wrong ideas, move the passions, and thereby mislead the judgment. *Locke.*

Men not so quick perhaps of conceit as slow to passions, and commonly less inventive than judicious, howsoever prove very plausible, *insinuant*, and fortunate men. *Wotton.*

The water easily *insinuates* itself into and placidly distends the vessels of vegetables. *Woodward.*

And all the fictions bards pursue
Do but *insinuate* what's true. *Swift.*

It is a strange *insinuative* power which example and custom have upon us. *Government of the Tongue.*

I scorn your coarse *insinuation*,
And have most plentiful occasion
To wish myself the rock I view,
Or such another dolt as you. *Cowper. The Poet, Oyster, and Sensitive Plant.*

Serene, accomplished, cheerful, but not loud;
Insinuating without *insinuation*. *Byron. Don Juan.*

INSIP'ID, *adj.*
INSIPID'ITY, *n. s.*
INSIP'IDNESS, *n. s.*
INSIP'IDLY, *adv.*
INSIP'IENCE, *n. s.*
Fr. *insipide;* Lat. *insipidus*. Without taste; wanting power of affecting the organs of taste; flat; dull; heavy: folly: a want of understanding.

Some earths yield, by distillation, a liquor very far from being inodorous or *insipid*. *Boyle.*

The gods have made your noble mind for me,
And her *insipid* soul for Ptolemy;
A heavy lump of earth without desire,
A heap of ashes that o'erlays your fire. *Dryden's Cleomenes.*

Some short excursions of a broken vow
He made indeed, but flat *insipid* stuff. *Dryden.*

One great reason why many children abandon themselves wholly to silly sports, and trifle away all their time *insipidly*, is because they have found their curiosity baulked. *Locke.*

Our fathers much admired their sauces sweet,
And often called for sugar with their meat;
Insipid taste, old friend, to them that Paris knew,
Where rocambole, shallot, and the rank garlick grew. *King.*

When liberty is gone
Life grows *insipid*, and has lost its relish. *Addison's Cato.*

She lays some useful bile aside,
To tinge the chyle's *insipid* tide. *Prior.*

This chyle is the natural and alimentary pituita, which the ancients described as *insipid*. *Floyer on the Humours.*

On these grounds, therefore, though there cannot be a more partial admirer of the work itself, I cannot hesitate a moment to consider that 'faultless monster,' Sir Charles Grandison, whose *insipid* uniformity of goodness it is fashionable to decry, far the more preferable to be held up to a child as an object of imitation. *Canning.*

INSIST' *v. a.*
INSIST'ENT, *adj.*
INSIS'TURE, *n. s.*
Lat. *insisto*. To stand or rest upon; not to recede; to persist; to dwell upon in discourse. Insistent, resting upon any thing: constancy; regularity.

Upon such large terms, and so absolute,
As our conditions shall *insist* upon,
Our peace shall stand firm as rocky mountains. *Shakspeare.*

The heavens themselves, the planets, and the center,
Observe degree, priority, and place,
Insisture, course, proportion, season, form,
Office, and custom, in all line of order. *Id.*

Were there no other act of hostility but that which we have already *insisted* on, the intercepting of her supplies were irreparably injurious to her. *Decay of Piety.*

The combs being double, the cells on each side the partition are so ordered, that the angles on one side *insist* upon the centers of the bottom of the cells on the other side. *Ray.*

The breadth of the substruction must be at least double to the *insistent* wall. *Wotton.*

Insist on, as if each were his own pope,
Forgiveness, and the privilege of hope.
Cowper. Hope.

The diversities in point of correctness, and delicacy which arose from their different ways of life, I do not now *insist*-upon. *Beattie.*

INSIT'IENCY, *n. s.* Lat. *in* and *sitio*. Exemption from thirst.

What is more admirable than the fitness of every creature for the use we make of him? The docility of an elephant, and the *insitiency* of a camel for travelling in desarts. *Grew.*

INSIT'ION, *n. s.* Lat. *insitio*. The insertion or engraffment of one branch into another.

Without the use of these we could have nothing of culture or civility; no tillage, grafting, or *insition*. *Ray.*

INSNARE', *v. a.* } Belg. *in-snaer*. To catch
INSNA'RER, *n. s.* } in a trap, gin, or snare: and hence figuratively to inveigle; to entangle in difficulties or perplexities; generally written ENSNARE, which see.

That the hypocrite reign not, lest the people be *ensnared*. *Job* xxxvi. 30.

That which in a great part, in the weightiest causes belonging to this present controversy, hath *insnared* the judgments both of sundry good and of some well learned men, is the manifest truth of certain general principles, whereupon the ordinances that serve for usual practice in the church of God are grounded. *Hooker.*

Why strewest thou sugar on that bottled spider,
Whose deadly web *insnareth* thee about.
Shakspeare.

She *ensnared*
Mankind with her fair looks. *Milton.*

By long experience Durfey may no doubt
Insnare a gudgeon, or perhaps a trout;
Though Dryden once exclaimed, in partial spite,
He fish!—because the man attempts to write.
Fenton.

These
Insnare the wretched in the toils of law,
Fomenting discord, and perplexing right,
An iron-race. *Thomson.*

INSO'CIABLE, *adj.* Fr. *insociable*; Lat. *insociabilis*. Averse from conversation; incapable of connexion or union.

If this austere *insociable* life
Change not your offer made in heat of blood.
Shakspeare.

The lowest ledge or row must be merely of stone, closely laid, without mortar, which is a general caution for all parts in building that are contiguous to board or timber, because lime and wood are *insociable*. *Wotton's Architecture.*

INSOBRI'ETY, *n. s.* In and sobriety. Drunkenness; want of sobriety.

He whose conscience upbraids him with profaneness towards God, and *insobriety* towards himself, if he is just to his neighbour, he thinks he has quit scores. *Decay of Piety.*

IN'SOLATE, *v. a.* } Lat. *in* and *sol*. To dry in
INSOLA'TION, *n. s.* } the sun; to expose to the action of the sun.

We use these towers for *insolation*, refrigeration, conversation, and for the view of divers meteors. *Bacon.*

If it have not a sufficient *insolation* it looketh pale, and attains not its laudable colour; if it be sunned too long, it suffereth a torrefaction. *Browne.*

INSOLATION, in pharmacy, is a method of preparing fruits, drugs, &c., by exposing them to the heat of the sun's rays; either to dry, to maturate, or to sharpen them.

IN'SOLENCE, *n. s.* & *v. a.* } Fr. *insolence*;
IN'SOLENCY, *n. s.* } Lat. *insolentia*.
IN'SOLENT, *adj.* } Pride exerted in
IN'SOLENTLY, *adv.* } contemptuous and overbearing treatment of others; petulant contempt. Insolence, a word out of use; to insult or treat with contempt: insolent, contemptuous; haughty; over-bearing: insolently, rudely; haughtily.

Insolent is he that despiseth, in his jugement, all other folk as in regarde of his value, of his conning, of his speking, and of his bering.
Chaucer. The Persones Tale.

They could not restrain the *insolency* of O'Neal, who, finding none now to withstand him, made himself lord of those people that remained. *Spenser.*

Such a nature,
Tickled with good success, disdains the shadow
Which he treads on at noon; but I do wonder
His *insolence* can brook to be commanded
Under Cominius. *Shakspeare.*

The bishops, who were first faulty, *insolenced* and assaulted. *King Charles.*

Blown with *insolence* and wine. *Milton.*

Publick judgments are the banks and shores upon which God breaks the *insolency* of sinners, and stays their proud waves. *Tillotson.*

I warn thee thus, because I know thy temper
Is *insolent* and haughty to superiors.
Dryden. Sebastian and Dorax.

Not faction, when it shook thy regal seat,
Not senates, *insolently* loud,
Those echoes of a thoughtles crowd,
Could warp thy soul to their unjust decree.
Dryden.

Judge me not ungentle,
Of manners rude, and *insolent* of speech,
If, when the public safety is in question,
My zeal flows warm, and eager from my tongue.
Rowe's Jane Shore.

We have not pillaged those rich provinces which we rescued: victory itself hath not made us *insolent* masters. *Atterbury.*

The steady tyrant man,
Who with the thoughtless *insolence* of power,
For sport alone, pursues the cruel chace.
Thomson.

The multitude unawed is *insolent*,
Once seized with fear contemptible and vain.
Mallet.

Her women *insolent* and self caressed,
By Vanity's unwearied finger dressed.
Cowper. Expostulation.

INSOL'VABLE, *adj.* } Fr. *insolvable*; Lat.
INSOL'UBLE, *adj.* } *in* and *solvo*. Not to
INSOL'VENT, *adj.* } be solved or cleared;
INSOL'VENCY, *n. s.* } inextricable; inexplicable: insoluble, not to be resolved, cleared, or dissolved: insolvent, one who is unable to pay: insolvency, inability to pay debts. An act of insolvency is a law by which imprisoned debtors are released without payment.

Admit this, and what shall the Scripture be but a snare and a torment to weak consciences, filling them with infinite scrupulosities, doubts *insoluble*, and extreme despair? *Hooker.*

By public declaration he proclaimed himself *insolvent* of those vast sums he had taken upon credit. *Howel.*

Stony matter may grow in any part of a human body; for when any thing *insoluble* sticks in any part of the body, it gathers a crust about it. *Arbuthnot.*

Spend a few thoughts on the puzzling enquiries concerning vacuums, the doctrine of infinities, indivisibles and incommensurables, wherein there appear some *insolvable* difficulties. *Watts on the Mind.*

An *insolvent* is a man that cannot pay his debts. *Watts.*

Insolvent tenant of incumbered space. *Smart.*

The foe of virtue has no claim to thee,
But let *insolvent* innocence go free.
Cowper. Charity.

INSOMUCH', *conj.* In so much. So that to such a degree that.

To make ground fertile, ashes excel; *insomuch* as the countries about Ætna have amends made them for the mischiefs the eruptions do. *Bacon.*

Simonides was an excellent poet, *insomuch* that he made his fortune by it. *L'Estrange.*

They made the ground uneven about their nest, *insomuch* that the slate did not lie flat upon it, but left a free passage underneath. *Addison.*

INSPECT', *v. a.* } Lat. *inspicio*. To look
INSPEC'TION, *n. s.* } into by way of examina-
INSPEC'TOR, *n. s.* } tion: inspection, prying, examination; close survey; superintendence; presiding care. In the first sense it should have *into* before the object, and in the second sense it may admit *over*; but authors confound them: inspector, a prying examiner; a superintendant.

When ye unto this balade have *inspeccion*,
In my makyng holde me excusable;
It is submitted unto your correccion.
Chaucer's Miscellanies.

With their new light our bold *inspectors* press,
Like Cham, to shew their father's nakedness.
Denham.

With narrow search, and with *inspection* deep,
Consider every creature. *Milton.*

We may safely conceal our good deeds, when they run no hazard of being diverted to improper ends, for want of our own *inspection*. *Atterbury.*

The divine *inspection* into the affairs of the world doth necessarily follow from the nature and being of God; and he that denies this, doth implicitly deny his existence. *Bentley.*

Young men may travel under a wise *inspector* or tutor to different parts, that they may bring home useful knowledge. *Watts.*

INSPECTION, TRIAL BY, OR BY EXAMINATION, is when, for the greater expedition of a cause, in some point or issue, being either the principal question, or arising collaterally out of it, but being evidently the object of sense, the judges of the court, upon the testimony of their own senses shall decide the point in dispute. For, where the affirmative or negative of a question is matter of such obvious determination, it is not thought necessary to summon a jury to decide it; who are properly called in to inform the conscience of the court of dubious facts: and therefore, when the fact, from its nature, must be evident to the court, either from ocular demonstration or other irrefragable proof, there the law departs from its usual resort, the verdict of twelve men, and relies on the judgment of the court alone. As in case of a suit to reverse a fine for nonage of the cognizor, or to set aside a statute or cognizance entered into by an infant; here, and in other cases of the like sort, a writ shall issue to the sheriff, commanding him that he constrain the said party to appear, that it may be ascertained by the view of his body, by the king's justices, whether it be of full age or not: Ut per aspectum corporis sui constare poterit justiciariis nostris, si prædictus an sit plenæ ætatis necne. If, however, the court has, upon inspection, any doubt of the age of the party (as may frequently be the case), it may proceed to take proofs of the party; and particularly may examine the infant himself upon an oath of voir dire, veritatem dicere; that is, to make true answers to such questions as the court shall demand of him; or the court may examine his mother, his god-father, or the like.

INSPECTING FIELD OFFICER, a military officer, selected from the line, and nominated by the war-office, to superintend and to vouch for the faithful distribution of monies which are issued to officers acting on detachment, or on recruiting parties, within the limits of a certain appointed district. All district pay-masters are strictly enjoined by the general regulations to have their muster-rolls and pay-lists duly authenticated before a justice of the peace, and to have them witnessed by the inspecting field-officer.

INSPECTOR, Heb. חזן, hhazen, in the Jewish synagogue, an officer whose business consists particularly in inspecting the prayers and lessons, in preparing and showing them to the reader, and standing by him to see he reads right; and, if he mistakes, to correct him.

INSPECTORS, in the Roman law, were such persons as examined the quality and value of lands and effects, in order to the adjusting or proportioning taxes and impositions to every man's estate.

INSPER'SION, *n. s.* Lat. *inspersio*. A sprinkling upon.

INSPHERE', *v. a.* In and sphere. To place in an orb and sphere.

Where those immortal shapes
Of bright aerial spirits live *insphered*,
In regions mild of calm and serene air.
Milton.

INSPI'RABLE, *adj.* } Fr. *inspirer*; Lat.
INSPIRA'TION, *n. s.* } *in* and *spiro*. That
INSPIRE', *v. n.* & *v. a.* } may be drawn in
INSPI'RER, *n. s.* } with the breath: the
INSPIR'IT, *n. s.* } act of drawing in the breath; the act of breathing into any thing; infusion of ideas into the mind by a superior

power: inspire, to breathe into; to infuse; to animate; to influence: inspirer, he that inspires: inspirit, to animate; actuate; invigorate, and encourage.

He knew not his Maker, and him that *inspired* into him an active soul, and breathed in a living spirit. *Wisdom* xv. 11.

For, when ye mildly looke with lovely hew,
Then is my soule with life and love *inspired*.
Spenser's Sonnet.

I never spoke with her in all my life,
—How can she then call us by our names,
Unless it be by *inspiration*? *Shakspeare.*

Your father was ever virtuous, and holy men at their death have good *inspirations*. *Id.*

Great power of love! with what commanding fire
Dost thou enflame the world's wide regiment
And kindly heat in every heart *inspire*!
Nothing is free from thy sweet government.
Fletcher's Purple Island.

To these *inspirable* hurts, we may enumerate those they sustain from their expiration of fuliginous steams. *Harvey.*

We to his high *inspiration* owe,
That what was done before the flood we know.
Denham.

Sighs now breathed
Unutterable, which the spirit of prayer
Inspired, and winged for heaven with speedier flight,
Than loudest oratory. *Milton.*

If the *inspiring* and expiring organ of any animal be stopt, it suddenly yields to nature, and dies.
Walton.

Erato, the poet's mind *inspire*,
And fill his soul with thy celestial fire.
Dryden.

A discreet use of becoming ceremonies renders the service of the church solemn and affecting, *inspirits* the sluggish, and inflames even the devout worshipper. *Atterbury.*

The courage of Agamemnon is *inspirited* by love of empire and ambition.
Pope's Preface to the Iliad.

Ye nine, descend and sing,
The breathing instruments *inspire*. *Pope.*

Inspiration is when an overpowering impression of any proposition is made upon the mind by God himself, and gives a convincing and indubitable evidence of the truth and divinity of it: so were the prophets and apostles *inspired*. *Watts.*

Sure 'tis something more,
'Tis heaven directs, and stratagems *inspire*
Beyond the short extent of human thought.
Somerville.

Whether the blossom blows, the Summer ray
Russets the plain, *inspiring* Autumn gleams,
Or Winter rises in the bleakening east.
Thomson's Seasons.

How keen their looks whom liberty *inspires*.
Beattie.

That he who died below and reigns above,
Inspires the song, and that his name is love.
Cowper. Table Talk.

——— had none admired,
Would Pope have sung, or Horace been *inspired*?
Byron. Don Juan.

Inspiration, among divines, implies the conveying of certain extraordinary and supernatural notices or motions into the soul, or any supernatural influence of God upon the mind of a rational creature, whereby he is formed to a degree of intellectual improvement to which he could not, or would not, in fact, have attained in a natural way. Thus the prophets spoke by divine inspiration. Some authors reduce the inspiration of the sacred writers to a particular care of Providence, which prevented any thing they had said from failing or coming to nought; maintaining that they never were really inspired either with knowledge or expression. According to M. Simon, inspiration is no more than a direction of the Holy Spirit, which never permitted the sacred writers to be mistaken. It is a common opinion that the inspiration of the Holy Spirit regards only the matter, not the style or words; and this seems to fall in with M. Simon's doctrine of direction. Theological writers have enumerated several kinds of inspiration: such as, an inspiration of superintendency, in which God so influences and directs the mind of any person as to keep him more secure from error than he would have been merely by the use of his natural faculties; plenary superintendent inspiration, which excludes any mixture of error at all from the performance so superintended; inspiration of elevation, where the faculties act in a regular, and, as it seems, in a common manner, yet are raised to an extraordinary degree, so that the composer shall have more of the true sublime than natural genius could have given; and inspiration of suggestion, when the use of the faculties is superseded, and God speaks directly to the mind, making such discoveries to it as it could not otherwise have obtained, and dictating the very words in which such discoveries are to be communicated, if they are designed as a message to others. It is generally allowed that the New Testament was written by a plenary superintendent inspiration; for without this the discourses and doctrines of Christ could not have been faithfully recorded by the evangelists and apostles; nor could they have assumed the authority of speaking the words of Christ, and evinced this authority by the actual exercise of miraculous powers. Jerome, Grotius, Erasmus, Episcopius, and many others assert that the inspiration of the apostles was not plenary, in other words, that all their writings are not entirely free from error. But the emphatical manner in which our Lord speaks of the agency of the Spirit upon them, and in which they themselves speak of their own writings, will most undoubtedly justify our believing that their inspiration was free from all error. If we allow that there were some errors in the New Testament, as it came from the hands of the apostles, we shall indeed require the aid of some infallible church to decide what are errors and what are not—what are the words which the Holy Ghost teacheth and which may be relied on as true, and what are to be rejected as erroneous: and it is remarkable that the head of that sect at the greatest apparent distance from the church of Rome—Dr. Priestly—who tells us of the inconclusive reasoning of the apostle Paul, must in that very discovery be supposed (with those who admit it to be such) capable of reasoning better, and therefore of pronouncing, ex cathedrâ, upon what we ought to reject of the apostle's reasoning. But see Theology.

Inspiration, in physiology, is that action of the breast by which the air is admitted within the lungs; in which sense inspiration is a branch

of respiration, and stands opposed to expiration. This admission of the air depends immediately on its spring or elasticity, at the time when the cavity of the breast is enlarged by the elevation of the thorax and abdomen, particularly by the motion of the diaphragm downwards: so that the air does not enter the lungs, because they are dilated; but these dilate because the air enters within them. See RESPIRATION.

INSPIS'SATE, *v. a.* } Lat. *in* and *spissus*.
INSPISSA'TION, *n. s.* } To thicken: the act of making any liquid thick.

Sugar doth *inspissate* the spirits of the wine, and maketh them not so easy to resolve into vapour.
Bacon.

The effect is wrought by the *inspissation* of the air.
Id.

Recent urine will crystallize by *inspissation*, and afford a salt neither acid nor alkaline. *Arbuthnot.*

This oil farther *inspissated* by evaporation turns into balm. *Id. on Aliments.*

INSPISSATING, in pharmacy, an operation by which a liquor is brought to a thicker consistence, by evaporating the thinner parts. Thus juices, as that of liquorice, are inspissated.

INSPRUCK, or YNNSBRUGG, a city of Germany, in Austria, the capital of the Tyrol, so named from the Inn, over which there is here a beautiful bridge: and near the town is the confluence of the Inn and Sill. It has a noble castle or palace, formerly the residence of the archdukes of Austria, with a cathedral where they are buried. The chapel erected by Maria Theresa to the memory of her husband is considered a building of considerable taste. In the church of the Franciscans are bronze statues of all the German emperors. The houses, though built in the German taste, are rather handsomer, and the streets, though narrow, remarkably well paved. The fortifications are trifling, but the natural fastnesses of the country form a barrier so perfectly inaccessible to an enemy, that Gustavus Adolphus, after having overrun the other parts of Germany, could never make any impression upon this. In 1672 the emperor Leopold I. converted the gymnasium of the Jesuits into a university, which was enriched by Maria Theresa with two valuable collections of books from the citadel at Ambras, and the imperial library at Vienna. The transit trade from Germany to Italy is here considerable; but in manufactures the only establishment worth noticing is a large cotton-work. The Innthal, or valley in which Inspruck stands, is one of the largest of those formed by the northern Alps; and is also the most picturesque. Its length is about thirty miles; its greatest breadth, as in the neighbourhood of Inspruck, about six miles. Here the Inn is bordered by fields in high cultivation, adorned with different kinds of forest trees, intermixed with villages, and graced at intervals with the ruins of an ancient castle. The back ground is formed by mountains, having on their sides vast forests, while their tops terminate in a mass of precipitous and barren rocks. This was the scene of several heroic efforts of the Tyrolese against the French and Bavarians in 1809. Inspruck is sixty-two miles south of Munich, and eighty-four W.S.W. of Salzburg. Population about 10,000.

INSTABIL'ITY, *n. s.* } Lat. *instabilis*. In-
INSTA'BLE, *adj.* } constancy; fickleness; mutability of opinion or conduct. See UNSTABLE.

Instability of temper ought to be checked, when it disposes men to wander from one scheme of government to another; such a fickleness cannot but be fatal to our country. *Addison's Freeholder.*

INSTALL', *v. a.* } Fr. *installer*; Lat. *in-*
INSTALLA'TION, *n. s.* } *sta*. To advance to rank
INSTAL'MENT, *n. s.* } or office by placing in the
INSTATE', *v. a.* } seat or stall proper to that condition; the act of giving visible possession: instalment, the act of installing, or the seat of one installed: instate, to place in a certain rank.

For his possessions,
Although by confiscation they are ours,
We do *instate* and widow you withal.
Shakspeare.

Cranmer is returned with welcome,
Installed archbishop of Canterbury. *Id.*

Is it not easy
To make lord William Hastings of our mind,
For the *instalment* of this noble duke
In the seat royal? *Id. Richard III.*

This kind of conquest does only *instate* the victor in these rights which the conquered prince had.
Hale.

The king chose him master of the horse; after this he was *installed* of the most noble order. *Wotton.*

Had this glistering monster been born to thy poverty, he could not have been so bad; nor, perhaps, had thy birth *instated* thee in the same greatness, wouldst thou have been better. *South.*

Upon the election the bishop gives a mandate for this *installation*. *Ayliffe's Parergon.*

There five-and-thirty years ago was I
Installed.
Byron. Tragedy. Two Foscari, act 5. sc. 1.

INSTALMENT is derived from the Latin in, and stallum, a term used for a seat in a church, in the choir, or a seat or bench in a court of justice, &c. Vossius is of opinion the word is of German origin. It is chiefly used for the induction of a dean, prebendary, or other ecclesiastical dignitary, into the possession of his stall, or proper seat, in the cathedral church to which he belongs: sometimes also called installation. It is likewise used for the ceremony by which the knights of the garter are placed in their rank, in the chapel of St. George at Windsor. See GARTER, KNIGHTS OF THE.

IN'STANCE, *n. s.* & *v. n.* } Fr. *instance*. Im-
IN'STANCY, *n. s.* } portunity; solici-
IN'STANT, *adj.* & *n. s.* } tation; motion;
INSTANTA'NEOUS, *adj.* } process of a suit;
INSTANTA'NEOUSLY, *adv.* } example; state of
IN'STANTLY, *adv.* } any thing, occasion, or act: instance, to give as an example: instant, urgent; pressing; quick; without delay; a part of duration in which we perceive no succession; a particular time; a day of the present month: instantaneous, and instantaneously, done in an instant, or with the utmost speed: instantly, immediately; without the least delay.

His frendes sent he to, at his *instance*,
And praied hem to don him that plesance
That hastily they wolden to him come.
Chaucer. The Marchantes Tale.

There is scarce an *instant* between their flourishing and their not being. *Hooker.*

Christian men should much better frame themselves to those heavenly precepts which our Lord and Saviour with so great *instancy* gave us concerning peace and unity, if we did concur to have the ancient councils renewed. *Id.*

The *instances* that second marriage move,
Are base respects of thrift, but none of love.
Shakspeare.

Yet doth this accident,
So far exceed all *instance*, all discourse,
That I am ready to distrust mine eyes. *Id.*

I can at any unseasonable *instant* of the night appoint her to look out at her lady's chamber window. *Id.*

Sleep *instantly* fell on me. *Milton.*

Instant without disturb they took alarm. *Id.*

These seem as if, in the time of Edward the First, they were drawn up into the form of a law in the first *instance*. *Hale.*

As to false citations, that the world may see how little he is to be trusted, I shall *instance* in two or three about which he makes the loudest clamour. *Tillotson.*

What I had heard of the raining of frogs came to my thoughts, there being reason to conclude that those came from the clouds, or were *instantaneously* generated. *Derham.*

This manner of the beginning or ceasing of the deluge doth not at all agree with the *instantaneous* actions of creation and annihilation.
Burnet's Theory.

On the twentieth *instant* it is my intention to erect a lion's head. *Addison's Guardian.*

The *instance* of a cause is said to be that judicial process which is made from the contestation of a suit, even to the time of pronouncing sentence in the cause, or till the end of three years. *Ayliffe.*

The greatest saints are sometimes made the most remarkable *instances* of suffering. *Atterbury.*

Suppose the earth should be removed nearer to the sun, and revolve for *instance* in the orbit of Mercury, the whole ocean would boil with heat. *Bentley.*

A soul supreme in each hard *instance* tried
Above all pain, all anger, and all pride. *Pope.*

Words are signs, not copies, of ideas. An idea, for *instance*, may be essentially changed; and the sign that stood for it before may stand for it afterwards, without causing an immediate perception in the mind of this change. *Bolingbroke.*

The rapid radiance *instantaneous* strikes
The' illumined mountain. *Thomson.*

The harvest's treasure all
Now gather in, beyond the rage of storms
Sure to the swain; the circling fence shut up,
And *instant* winter's utmost rage defied. *Id.*

Fair was the blossom, soft the vernal sky:
Elate with hope we deemed no tempest nigh:
When lo! a whirlwind's *instantaneous* gust
Left all its beauties withering in the dust.
Beattie.

Your Commentaries had taught me, that, although the *instance* in which a penal law is exerted be particular, the laws themselves are general.
Junius's Letters.

So
He stood i' the temple! Look upon him as
Greece looked her last upon her best, the *instant*
Ere Paris' arrow flew.
Byron. Deformed Transformed.

Granted at
The *instance* of the elders of the council.
Id. Tragedy. Two Foscari.

INSTEAD' *of*, *prep.* From in and stead, or place. In room of; in place of.

They *instead of* fruit
Chewed bitter ashes. *Milton.*

Vary the form of speech, and *instead of* the word church make it a question in politicks, whether the monument be in danger. *Swift.*

To gaze, *instead of* pavement, upon grass,
And rise at nine in lieu of long eleven.
Byron. Don Juan.

Equal to.

This very consideration to a wise man is *instead of* a thousand arguments, to satisfy him, that, in those times, no such thing was believed. *Tillotson.*

Instead is sometimes used without *of*. In the place; in the room.

He in derision sets
Upon their tongues a various spirit, to rase
Quite out their native language, and *instead*
To sow a jangling noise of tongues unknown.
Milton.

INSTEEP', *v. a.* In and steep. To soak; to macerate in moisture. To lay under water.

Suffolk first died, and York, all haggled over,
Comes to him where in gore he lay *insteeped*.
Shakspeare.

The guttered rocks, and congregated sands,
Traitors *insteeped* to clog the guiltless keel. *Id.*

IN'STEP, *n. s.* In and step. The upper part of the foot where it joins to the leg.

The caliga was a military shoe with a very thick sole, tied above the *instep* with leather thongs.
Arbuthnot on Coins.

Around, as princess of her father's land,
A like gold bar above her *instep* rolled
Announced her rank. *Byron. Don Juan.*

INSTERBURG, a town and circle of East Prussia, on the Angerap, in the government of Gumbinnen. Its chief trade is in corn and lintseed. The circle of this name is of great extent, comprehending a population of 150,000. Part of it is covered with forests; but the soil of the rest is fertile, and the pastures are extensive: manufactures are hardly known here. It is fifty miles east of Konigsberg; and contains 5300 inhabitants.

IN'STIGATE, *v. a.*, INSTIGA'TION, *n. s.*, INSTIGA'TOR, *n. s.* } Fr. *instiguer;* Lat. *instigo;* Italian *instigare.* To urge to ill; to incite to the commission of crime. Instigation, impulse to vice or violence. Instigator, one who incites to evil.

Be it that thy wife be excellently gode,
That none be bet of disposicion,—
In processe of time she might turn hire mode
By some misse-livers *instigacion.*
Chaucer. Remedie of Love.

Why, what need we
Commune with you of this? But rather follow
Our forceful *instigation.*
Shakspeare. Winter's Tale.

It was partly by the *instigation* of some factious malcontents that bare principal stroke amongst them.
Bacon.

The sea of blood is enough to drown in eternal misery the malicious author or *instigator* of its effusion. *King Charles.*

INSTIL' *v. a.*, INSTILLA'TION, INSTIL'MENT, *n. s.* } Fr. *instiller;* Span. and Port. *instillar;* Lat. *instillo.* To infuse by

drops; to insinuate; to teach. Instillation, the act of dropping or infusing gradually, whether in a literal or figurative sense. Instilment, the thing infused or instilled.

Though assemblies be had indeed for religion's sake, hurtful nevertheless they may easily prove, as well in regard of their fitness to serve the turn of hereticks, and such as privily will soonest adventure to *instill* their poison into men's minds. *Hooker.*

The leperous *instillment*. *Shakspeare.*

He from the well of life three drops *instilled*. *Milton.*

They imbitter the cup of life by insensible *instillations*. *Rambler.*

Those heathens did in a particular manner *instil* the principle into their children of loving their country, which is far otherwise now-a-days. *Swift.*

How in the noon of night that pibroch thrills,
Savage and shrill. But with the breath which fills
Their mountain-pipe, so fill the mountaineers
With the fierce native daring which *instils*
The stirring memory of a thousand years,
And Evan's, Donald's fame rings in each clansman's ears. *Byron. Childe Harold.*

IN'STINCT, *adj.* & *n. s.*
INSTINCT'ED, *adj.*
INSTINC'TIVE, *adj.*
INSTINC'TIVELY, *adv.*
French *instinct*; Span. and Port. *instinto*; Lat. *instinctus*. Moved; animated; a word not in use. Instinct, desire or aversion acting in the mind without the intervention of reason or deliberation; the power of determining the will of brutes. Instincted, impressed as an animated power. Instinctive, acting without the application of choice or reason; rising in the mind without apparent cause. Instinctively, by instinct or call of nature.

Thou knowest I am as valiant as Hercules; but beware *instinct*; the lion will not touch the true prince: *instinct* is a great matter. I was a coward on *instinct*: I shall think the better of myself and thee, during my life; I for a valiant lion, and thee for a true prince. *Shakspeare. Henry IV.*

The very rats
Instinctively had quit it. *Id. Tempest.*

Raised
By quick *instinctive* motion, I sprung up,
As thitherward endeavouring. *Milton.*

What native unextinguishable beauty must be impressed and *instincted* through the whole, which the defedation of so many parts, by a bad printer and a worse editor, could not hinder from shining forth. *Bentley's Preface to Milton.*

Nature first pointed out my Portius to me,
And easily taught me by her secret force
To love thy person, ere I knew thy merit;
Till what was *instinct* grew up into friendship. *Addison.*

The philosopher avers,
That reason guides our deed, and *instinct* theirs.
Instinct and reason how shall we divide? *Prior.*

Reason serves when pressed;
But honest *instinct* comes a volunteer. *Pope.*

It will be natural that Ulysses' mind should forbode; and it appears that the *instinctive* presage was a favourite opinion of Homer's. *Broome.*

Prompted by *instinct's* never-erring power,
Each creature knows its proper aliment. *Armstrong.*

And an immortal *instinct* which redeemed
The frailties of a heart so soft yet bold. *Byron. Childe Harold.*

INSTINCT. Instinct is defined, by Bishop Gleig, 'a certain power or disposition of mind, by which, independent of all instruction or experience, without deliberation, and without having any end in view, animals are unerringly directed to do spontaneously whatever is necessary for the preservation of the individual or the continuation of the kind.' 'Instinct,' says the late lord Monboddo, in his Ancient Metaphysics, 'is a determination given by Almighty wisdom to the mind of the brute, to act in such or such a way, upon such or such an occasion, without intelligence, without knowledge of good or ill, and without knowing for what end or purpose he acts.' Such in the human species is the instinct of sucking exerted immediately after birth; and such in the inferior creation is the instinct by which insects invariably deposit their eggs in situations most favorable for hatching and affording nourishment to their future progeny. These operations are necessary for the preservation of the individual and the continuation of the kind; but neither the infant nor the insect knows that they are necessary; they both act without having any end in view, and act uniformly without instruction and without experience.'

Many systems have been adopted to explain the principles which produce and direct the spontaneous actions of brutes. Some of the ancient philosophers ascribed to brutes an understanding different only in degree from that of man, and attributed their inferiority to the want of proper bodily organs. This system has been strenuously supported by M. Helvetius, De l'Esprit, tom. i. p. 2, &c. Cudworth endeavoured to explain the instinct of animals by a certain plastic nature. Des Cartes thought that all the actions of brutes might be explained by the simple laws of mechanism, and considered them as machines totally devoid of life and sentiment, but so curiously constructed by the Creator, that the mere impressions of light, sound, and other external agents on their organs, produced a series of motions in them, and caused them to execute those various operations, which had before been ascribed to an internal principle of life and spontaneity. But the actions and manners of brutes, which are totally incompatible with the mere principles of mechanism, evince the absurdity of this opinion. Buffon adopts the opinion of Des Cartes in part, but allows them life, and the faculty of distinguishing between pleasure and pain, together with a strong inclination to the former, and aversion from the latter. By these inclinations and aversions he undertakes to account for all, even the most striking operations of animals. The pre-established harmony of Leibnitz has also been applied to explain the actions of brutes. Others have considered the actions of animals as produced by the constant and immediate influence of the divine energy, directing all their inclinations and motions: such appears to have been the opinion of Addison, in the second volume of the Spectator.

Concerning human instincts philosophers differ widely in opinion; some maintaining that man is endowed with a greater number of instincts than any species of brutes; whilst others deny that in human nature there is any power or propensity at all which can properly be called

instinctive. 'This diversity of opinion,' says Dr. Gleig, 'may easily be traced to its source. There are not many original thinkers. The greater part of even those who are called philosophers implicitly adopt the opinions of certain masters whose authority they deem sufficient to supply the place of argument; and, having chosen their respective guides, each maintains with zeal what his master taught, or is supposed to have taught. When Locke so successfully attacked the doctrine of innate ideas, and innate principles of speculative truth, he was thought by many to have overturned at the same time all innate principles whatever; to have divested the human mind of every passion, affection, and instinct; and to have left in it nothing but the powers of sensation, memory, and intellect. Such, we are persuaded, was not his intention; nor is there any thing in his immortal work which, when interpreted with candor, appears to have such a tendency. Great part of his Essay on Human Understanding has been very generally misunderstood. Much of its merit, however, was soon discovered; and mankind, finding philosophy disencumbered of the barbarous jargon of the schools, and built upon a few self-evident principles, implicitly embraced every opinion advanced, or which they supposed to be advanced, by that illustrious author; especially if that opinion was contrary to any part of the scholastic system, which had so long been employed to perplex the understanding, and to veil absurdity. Hence arose many philosophers of eminence, both at home and abroad, who maintained, as they imagined, upon the principles of Locke, that in the human mind there are no instincts, but that every thing which had been usually called by that name is resolvable into association and habit. This doctrine was attacked by Lord Shaftesbury, who introduced into the theory of mind, as faculties derived from nature, a sense of beauty, a sense of honor, and a sense of ridicule: and these he considered as the tests of speculative truth and moral rectitude. His lordship's principles were in part adopted by Mr. Hutchison of Glasgow, who published a system of moral philosophy, founded upon a sense of instinct, to which he gave the name of the moral sense; and the undoubted merit of his work procured him many followers.—It being now discovered, or at least supposed, that the human mind is endowed with instinctive principles of action, a sect of philosophers soon arose, who maintained, with much vehemence, that it is likewise endowed with instinctive principles of belief; and who built a system of metaphysics, if such it may be called, upon a number of innate, distinct, and independent senses. The rise of this sect is well known. Berkeley and Hume had adopted Locke's doctrine respecting the origin of our ideas; and had thence deduced consequences supposed to be dangerous in themselves, but which it was thought could not be denied without refusing the principles from which they were inferred. The foundation of the instinctive system being thus laid, the system itself was rapidly carried to a height far beyond what seems to have been the intention of its excellent author; and reason was well nigh banished from the regions of philosophy. For such a proceeding it is not difficult to assign the cause. The instinctive scheme requires much less labor of investigation than the systems of Locke and the ancients; for upon the principles of it, when carried to its utmost extent, every phenomenon in human nature is thought to be sufficiently accounted for, by supposing it the effect of a particular instinct implanted in the mind for that very purpose. Hence, in some popular works of philosophy, we have a detail of so many distinct internal senses, that it requires no small strength of memory to retain their very names; besides the moral sense, we have the sense of beauty, the sense of deformity, the sense of honor, the hoarding sense, and a number of others, which it is needless here to mention. This new system, which converts the philosophy of mind into mere history, or rather into a collection of facts and anecdotes, though it has made a rapid progress, is not yet universally received. It has been opposed by many speculative men, and by none with greater skill than Dr. Priestley; who maintains, with the earliest admirers of Locke, that we have from nature no innate sense of truth, nor any instinctive principle of action; that even the action of sucking in new-born infants is to be accounted for upon principles of mechanism; and that the desire of the sexes is merely association.'

Dr. Gleig proceeds to enquire, 'Whether or not there be instinctive principles in man?' 'But,' he adds, 'in order to proceed upon sure grounds, it will be proper to consider, first, such actions of the inferior animals as are generally allowed to be instinctive: for an attempt has been lately made to prove, that even these actions are the offspring of reason influenced by motives; and that instinct, as above defined, is a mere imaginary principle, which has no existence either in man or brute. Caterpillars, it is said, when shaken off a tree in every direction, instantly turn round towards the trunk and climb up, though they had never formerly been on the surface of the ground. This is a striking instance of instinct. On the tree, and not upon the ground, the caterpillar finds its food. If, therefore, it did not turn and climb up the trunk, it would inevitably perish; but surely the caterpillar knows not that such an exertion is necessary to its preservation; and therefore it acts not from motives, but from blind impulse. The bee and the beaver are endowed with an instinct which has the appearance of foresight. They build magazines, and fill them with provisions; but the foresight is not theirs. Neither bees nor beavers know any thing of futurity. The solitary wasp digs holes in the sand, in each of which she deposits an egg. Though she certainly knows not that an animal is to proceed from that egg, and still less, if possible, that this animal must be nourished with other animals, she collects a few small green worms, which she rolls up in a circular form, and fixes in the hole in such a manner that they cannot move. When the wasp-worm is hatched, it is amply stored with the food destined for its support. The green worms are devoured in succession; and

the number deposited is exactly proportioned to the time necessary for the growth and transformation of the wasp-worm into a fly; when it issues from the hole, and is capable of procuring its own nourishment. This instinct of the parent wasp is the more remarkable, that she feeds not upon flesh herself. Birds of the same species, unless restrained, uniformly build their nests of the same materials, and in the same form and situation, though they inhabit very different climates; and the form and situation are always suited to their nature, and calculated to afford them shelter and protection. When danger, or any other circumstance peculiar to certain countries, renders a deviation from the common form or situation of nests necessary, that deviation is made in an equal degree, and in the very same manner, by all the birds of one species; and it is never found to extend beyond the limits of the country where alone it can serve any good purpose. When removed by necessity from their eggs, birds return to them with haste and anxiety, and shift them so as to heat them equally; and it is worthy of observation that their haste to return is always in proportion to the cold of the climate. But do birds reason, and all of the same species reason equally well, upon the nature and extent of danger, and upon the means by which it can be best avoided? Have birds any notion of equality, or do they know that heat is necessary for incubation? No: in all these operations men recognize the intentions of nature; but they are hid from the animals themselves, and therefore cannot operate upon them as motives.

One instance of the mathematical skill displayed in the structure of a honeycomb, deserves to be mentioned. It is a curious mathematical problem, at what precise angle the three planes which compose the bottom of a cell ought to meet, in order to make the greatest possible saving of material and labor. This is one of those problems belonging to the higher parts of mathematics, which are called problems of maxima and minima. The celebrated M'Laurin resolved it by a fluxionary calculation, which is to be found in the Transactions of the Royal Society of London, and determined precisely the angle required. Upon the most exact mensuration which the subject could admit, he afterwards found, that it is the very angle in which the three planes in the bottom of the cell of a honey-comb do actually meet. Shall we ask here, Who taught the bees the properties of solids, and to resolve problems of maxima and minima? If a honey-comb were a work of human art, every man of common sense would conclude, without hesitation, that he who invented the construction must have understood the principles on which it was constructed. We need not say that bees know none of these things. They work most geometrically without any knowledge of geometry; somewhat like a child, who, by turning the handle of an organ, makes good music without any knowledge of music. The art is not in the child, but in him who made the organ. In like manner, when a bee makes its combs so geometrically, the geometry is not in the bee, but in that Great Geometrician who made the bee, and made all things in number, weight, and measure. On the whole, it is evident, that the structure of a honey-comb is an effect of instinct which cannot be confounded with the operations of reason. But, on the other hand, we agree with Mr. Locke, that 'if brutes have any ideas at all, and are not mere machines, as some would have them, we cannot deny them to have some reason.' Yet, that animals have no power of enlarging their ideas, is a position, of the truth of which, though advanced by Locke, we have great doubts. It is well known that crows feed upon several kinds of shell fish when within their reach; and that they contrive to break the shell by raising the fish to a great height, and letting it drop upon a stone or a rock. This may perhaps be considered as pure instinct directing the animal to the proper means of acquiring its food. But what is to be thought of the following fact, which was communicated to the editors of the Encyclopædia Britannica, 'by a gentleman whose veracity,' they say, 'is unquestioned, and who, being totally unacquainted with the theories of philosophers, has of course no favorite hypothesis to support? In spring, 1791, a pair of crows made their nest in a tree, of which there are several planted round his garden; and in his morning walks he had often been amused by witnessing furious combats between them and a cat. One morning the battle raged more fiercely than usual, till at last the cat gave way and took shelter under a hedge, as if to wait a more favorable opportunity of retreating to the house. The crows continued for a short time to make a threatening noise; but, perceiving that on the ground they could do nothing more than threaten, one of them lifted a stone from the middle of the garden, and perched with it on a tree planted in the hedge, where she sat watching the motions of the enemy of her young. As the cat crept along under the hedge, the crow accompanied her by flying from branch to branch, and from tree to tree: and when at last puss ventured to quit her hiding place, the crow, leaving the trees and hovering over her in the air, let the stone drop from on high on her back. That the crow, on this occasion, reasoned, is self-evident; and it seems to be little less evident, that the ideas employed in her reasoning were enlarged beyond those which she had received from her senses. By her senses she might have perceived that the shell of a fish is broken by a fall: but could her senses inform her, that a cat would be wounded or driven off the field by the fall of a stone? No: from the effect of the one fall preserved in her memory, she must have inferred the other by her power of reasoning.'

Having, by the above and other arguments, proved that there is such a principle as instinct in the inferior animals, and that it is essentially different from human reason, Dr. Gleig returns to our own species, and enquires, 'Whether there be any occasions upon which man acts instinctively, and what those occasions are? This, says he, is a question of some difficulty, to which a complete and satisfactory answer will perhaps never be given. The principle of association (see METAPHYSICS) operates so power-

fully in man, and at so early a period of life, that in many cases it seems to be impossible to distinguish the effects of habit from the operations of nature. Yet there are a few cases, immediately connected with the preservation of the individual and the propagation of the kind, in which, by a little attention, these things may be distinguished. We have already given an instance in the sucking of a child, which we believe to be an operation performed by instinct. Dr. Priestley, however, thinks differently; the action of sucking, says he, I am confident, from my own observations, is not natural, but acquired. What observations they were which led him to this conclusion he has not told us, and we cannot imagine; but every observation which we ourselves have made compels us to believe that an attempt to suck is natural to children. It has been observed, by Mr. Smellie, that the instinct of sucking is not excited by any smell peculiar to the mother, to milk, or to any other substance; for that infants suck indiscriminately every thing brought into contact with their mouths. He therefore infers, that the desire of sucking is innate, and co-eval with the appetite for air. The observation is certainly just: but a disciple of Dr. Priestley's may object to the inference; for 'in sucking and swallowing our food, and in many such instances, it is exceeding probable, says the Dr., that the actions of the muscles are originally automatic, having been so placed by our Maker, that at first they are stimulated, and contract mechanically whenever their action is requisite.' This is certainly the case with respect to the motion of the muscles in the action of breathing; and if that action be of the same kind, and proceed from the very same cause with the action of sucking, and if a child never show a desire to suck but when something is brought into contact with its mouth, Dr. Priestley's account of this operation appears to us much more satisfactory than that of the authors who attribute it to instinct. But the actions of breathing and sucking differ essentially in several particulars. They are indeed both performed by means of air; but, in the former, a child for many months exerts no spontaneous effort, whilst a spontaneous effort seems to be absolutely necessary for the performance of the latter. Of this indeed we could not be certain, were it true that infants never exhibit symptoms of a wish to suck, but when something is actually in contact with their mouths; for the mere act of sucking then might well be supposed to be automatic and the effect of irritation. But this is not the case. A healthy and vigorous infant, within ten minutes of its birth, gives the plainest and most unequivocal evidence of a desire to suck, before any thing be brought into actual contact with its mouth. It stretches out its neck, and turns its head from side to side, apparently in quest of something; and that the object of its pursuit is something which it may suck, every man may satisfy himself by a very convincing experiment. When an infant is thus stretching out its neck and moving its head, if any thing be made to touch any part of its face, the little creature will instantly turn to the object, and endeavour by quick alternate motions from side to side to seize it with its mouth, in the very same manner in which it always seizes the breast of its nurse, till, taught by experience to distinguish objects by the sense of sight, when these alternate motions, being no longer useful, are no longer employed. If this be not an instance of pure instinct, we know not what it is. It cannot be the result of association or mechanism; for, when the stretching of the neck takes place, nothing is in contact with the child's mouth, and no association which includes the act of sucking can have been formed. Associations of ideas are the consequence of simultaneous impressions frequently repeated; but when the child first declares, as plainly as it could do were it possessed of language, its wish to suck, it has not received a single impression with which that wish can possibly be associated. The greater part of those actions, as well as of the apparently instinctive principles of belief, we have no doubt, are acquired; but we are persuaded that a child sucks its nurse, as a bee builds its cell, by instinct; for upon no other hypothesis can we account for the spontaneous efforts exerted in both these operations; and we think it no disgrace to our species, that in some few cases we should act from the same principle with the inferior creation, as nothing seems more true than that,

—Reason raise o'er instinct as we can;
In this 'tis God that works, in that 'tis man.

IN'STITUTE, *v. a.* & *n. s.*
INSTITU'TION, *n. s.*
INSTITU'TIONARY, *adj.*
IN'STITUTOR, *n. s.*
IN'STITUTIST, *n. s.*
Fr. *instituer*; Lat. *instituo*. To fix; establish; settle or prescribe; to educate or instruct; the leading idea is to build upon. Institute, established law; settled order; precept; maxim; example. Institution, act of establishing; a positive law; education. Institutionary, elementary; containing first principles. Institutor, an instructor; one who establishes an institution. Institutist, a writer of elemental instructions.

The *institution* of God's law is described as being established by solemn injunction. *Hooker.*

Here let us breathe, and haply *institute*
A course of learning, and ingenuous studies.
Shakspeare.

Green gall the *institutists* would persuade us to be an effect of an over-hot stomach.
Harvey on Consumption.

That it was not out of fashion Aristotle declareth in his politics, among the *institutionary* rules of youth. *Browne.*

If children were early *instituted*, knowledge would insensibly insinuate itself. *Decay of Piety.*

It might have succeeded a little better, if it had pleased the *institutors* of the civil months of the sun to have ordained them alternately odd and even.
Holder on Time.

The theocracy of the Jews was *instituted* by God himself. *Temple.*

They quarrel sometimes with the execution of laws, and sometimes with the *institution*. *Id.*

This law, though custom now directs the course,
As nature's *institute*, is yet in force,
Uncancelled, though disused. *Dryden.*

It is a necessary piece of Providence in the *institution* of our children, to train them up to some-

what in their youth, that may honestly entertain them in their age. *L'Estrange.*

The holiness of the first fruits and the lump is an holiness merely of *institution*, outward and nominal; whereas the holiness of the root is an holiness of nature, inherent and real. *Atterbury.*

His learning was not the effect of precept or *institution*. *Bentley.*

To *institute* a court and country party without materials, would be a very new system in politics. *Swift.*

The certain feasts are *instituted* now,
Where Venus hears the lover's vow.
Cowper. Conversation.

Our *institutions* and our strong belief
Have given me power to smooth the path from sin
To higher hope and better thoughts.
Byron's Manfred.

INSTITUTE, or INSTITUTION, in literature, is a term applied to establishments for the promotion of science generally, and was first given to the French *National Institute*, founded in December 1795. That nation, at the time of the Revolution, having conceived a hatred to every thing royal, abolished the seven Royal Academies, and substituted the National Institute. It was first opened the 7th of December, when Benezech, the then minister for the home department, attended, and the decree of foundation was read; which was to the following purport:—'The Academy of Arts and Sciences belongs to the republic, and Paris is its place of residence. Its employment is to aim at bringing all arts and sciences to the utmost perfection of which they are capable. It is to notice every new attempt, and all new discoveries, and to keep up a correspondence with all foreign literary societies. And, by the particular orders of the Executive Directory, its first studies are to be directed to those subjects which more immediately tend to the reputation and advantage of the French republic.' The academy is to consist of 288 members, half of whom are to reside in Paris, the other half in the departments; and to them is to be added a certain number of foreigners, as honorary members, confined at present to twenty-four. The academy is divided into three classes, each class into sections, each section to contain twelve members. First class, mathematics and natural philosophy. This class is divided into ten sections. 1. Mathematics; 2. Mechanical arts; 3. Astronomy; 4. Experimental Philosophy; 5. Chemistry; 6. Natural history; 7. Botany; 8. Anatomy and animal history; 9. Medicine and surgery; 10. Animal economy, and the veterinary science. Second class, morality and politics. This class consists of six sections. 1. Analysis of sensations and ideas; 2. Morals; 3. Legislature; 4. Political economy; 5. History; 6. Geography. Third class, literature and the fine arts. This class consists of eight sections. 1. Universal grammar; 2. Ancient languages; 3. Poetry; 4. Antiquities; 5. Painting; 6. Sculpture; 7. Architecture; 8. Music. For each class a particular room in the Louvre is appropriated. No one can be a member of two classes at the same time; but a member of one class may be present at the meetings of any other. Each class is to print, yearly, an account of its transactions. Four times a year there are to be public meetings. On these occasions, the three classes meet together. At the end of each year, they are to give a circumstantial account to the legislative body of the progress made in that year in the arts and sciences. The prizes given yearly by each class are to be publicly notified at certain times. The sums requisite for the support of the institution are to be decreed yearly by the legislative body, upon a requisition made by the executive directory. The first forty-eight members were chosen by the executive directory, to whom the choice of the remaining members was confided. To the members residentiary in Paris is reserved the choice both of the department and the foreign members. On a vacancy in any class, three candidates are named by the class for the choice of the body at large. Each class is to have, at its place of meeting, a collection of the products, both of nature and art, and a library, according to its particular wants. The regulations of the institution, with respect to the times of meeting and its employments, are to be drawn up by the body at large, and laid before the legislative assembly. On the restoration of the house of Bourbon, every thing royal was restored, and the National Institute was reconverted to a Royal Academy. Still, however, the same objects are pursued.

The French National Institute appears to have given rise to 'The Royal Institution of Great Britain,' founded in 1799 by the celebrated count Rumford, and which is situated in Albemarle Street, Piccadilly. The establishment is upon a magnificent plan, and the building adapted to the design. It comprises, a reading room for English and foreign newspapers; a library for reference, and another for the reading of modern publications; a museum of curiosities; a mechanical repository for machinery, &c.; a chemical laboratory on a grand scale, the learned Mr. Brande being the chemical professor; and, lastly, a splendid amphitheatre for lectures, which will hold 700 persons, with a gallery capable of holding 200 more. The number of proprietors was 400, who are life-holders and subscribers. This society is incorporated, and prints its Transactions in a quarterly publication Its members are authorised to add to their names the initials M.R.I.

INSTITUTE, in Scottish law. When by disposition or deed of entail a number of persons are called to the succession of an estate one after another, the person first named is called the institute, the others substitutes.

INSTITUTES, in literary history, a book containing the elements of the Roman law. The institutes are divided into books; and contain an abridgement of the whole body of the civil law, being designed for the use of students. See LAW.

INSTITUTION, LONDON. See LONDON.

INSTITUTION, AFRICAN. See AFRICAN INSTITUTION.

INSTITUTION, in the canon and common law, signifies the investing a clerk with the spiritualities of a rectory, &c., which is done by the bishop, who uses the following formula:—'I institute you rector of such a church with the cure of souls, and receive your cure and mine.'

Before the clerk is instituted he must subscribe the thirty-nine articles in the presence of the ordinary, or his substitute; this subscription must also be without reserve, exception, or qualification; otherwise his institution is ipso facto, void and null, and the church still vacant. 13 Eliz. c. 12. At the same time the ordinary requires the clerk to subscribe the other two articles mentioned in the thirty-sixth canon about the king's supremacy, and the lawfulness and use of the liturgy. Before institution he must also take the oaths mentioned in the first statute of William and Mary, c. 8, instead of the former oaths of allegiance and supremacy, required by stat. 1 Eliz.; and then he must take the oath against simony, enjoined by the fortieth canon, and the oath of canonical obedience; and, if it is a vicarage, the oath of personal residence; and he is to have certificates given him of his subscribing the declaration contained in the act of uniformity, in English, in a distinct instrument, under the hand and seal of the bishop; and of his other subscriptions and oaths, in Latin.

The church, by institution, is full against all persons but the king, but it is not full against the king, till induction; and the clerk by it may enter upon the parsonage house and glebe, and take the tithes; but he cannot let or grant them, nor sue for them, if they be refused to be paid, till he be inducted. See INDUCTION.

INSTOP', *v. a.* In and stop. To close up; to stop.

> With boiling pitch another near at hand
> The seams *instops*. *Dryden's Ann. Mirab.*

INSTRUCT', *v. a.* INSTRUC'TOR, *n. s.* INSTRUC'TION, *n. s.* INSTRUC'TIVE, *adj.* Fr. *instruire;* Lat. *instruo.* To teach; to form by precept; to inform authoritatively; to educate; to institute; to direct. It has commonly *in* before the thing taught: instructor, a teacher; one who imparts knowledge: instruction, the act of teaching; information; knowledge; mandates: instructive, conveying knowledge.

Out of heaven he made thee to hear his voice, that he might *instruct* thee. *Deuteronomy* iv. 36.

> See this dispatched with all the haste thou can'st;
> Anon I'll give thee more *instruction*. *Shakspeare.*

> The father of the faithful there did dwell
> Who both their parent and *instructor* was.
> *Denham's Progress of Learning.*

> O thou, who future things can'st represent
> As present, heavenly *instructor!* *Milton.*
> *Instruct* me, for thou knowest. *Id.*

> Poets, the first *instructors* of mankind,
> Brought all things to their native proper use.
> *Roscommon.*

With variety of *instructive* expressions by speech man alone is endowed. *Holder.*

They speak to the merits of a cause, after the proctor has prepared and *instructed* the same for a hearing before the judge. *Ayliffe.*

I would not laugh but to *instruct;* or, if my mirth ceases to be *instructive,* it shall never cease to be innocent. *Addison.*

Several *instructors* were disposed amongst this little helpless people. *Id.*

We have precepts of duty given us by our *instructors.* *Rogers.*

> Emblem *instructive* of the virtuous man,
> Who keeps his tempered mind serene and pure,
> And every passion aptly harmonized,
> Amid a jarring world with vice inflamed.
> *Thomson.*

> *Instructive* satire, true to virtue's cause!
> Thou shining supplement of public laws.
> *Young.*

> Thy lips have shed *instruction* as the dew,
> Taught me what path to shun, and what pursue.
> *Cowper. Charity*

IN'STRUMENT, *n. s.* INSTRUMEN'TAL, *adj.* INSTRUMENTAL'ITY, *n. s.* INSTRUMEN'TALLY, *adv.* INSTRUMEN'TALNESS, *n. s.* Fr. *instrument;* Latin *instrumentum.* A tool used for work; a frame constructed for yielding harmonious sounds; a writing containing contract or order: used of persons, as agents, and often in a bad sense: that by means of which something is done; one who acts for another: instrumental, conducive to; helpful; not vocal: instrumentality, subordinate agency: instrumentally, in a manner conducive to an end: instrumentalness, usefulness to a definite purpose.

If he smite him with an *instrument* of iron, so that he die, he is a murderer. *Numbers* xxxv. 16.

> So ferforth this thing is went,
> That my will was his willes *instrument;*
> That is to say, my will obeied his will
> In all things. *Chaucer. The Squieres Tale.*

> Thise olde gentil Bretons, in hir dayes,
> Of diverse aventures maden layes
> Rimeyed in hir firste Breton tonge;
> Which layes with hir *instruments* they songe,
> Or elles reden hem for hir plesance.
> *Id. Prologue to the Frankeleines Tale.*

> The joyous birdes shrouded in chearefull shade
> Their notes unto the voice attempred sweet;
> The angelical soft trembling voices made
> To the' *instruments* divine respondence meet.
> The silver sounding *instruments* did meet
> With the base murmur of the water's fall;
> The water's fall, with difference discreet,
> Now soft, now loud, unto the wind did call;
> The gentle warbling wind low answered to all.
> *Spenser. Faerie Queene.*

They which, under pretence of the law ceremonial abrogated, require the abrogation of *instrumental* musick, approving nevertheless the use of vocal melody to remain, must shew some reason, wherefore the one should be thought a legal ceremony and not the other. *Hooker.*

All the *instruments* which aided to expose the child, were even then lost when it was found.
Shakspeare.

> If, haply, you my father do suspect,
> An *instrument* of this your calling back,
> Lay not your blame on me. *Id. Othello.*

All second and *instrumental* causes, without that operative faculty which God gave them, would become altogether silent, virtueless, and dead.
Raleigh.

The *instrumentalness* of riches to works of charity, has rendered it very political, in every Christian commonwealth, by laws to settle and secure property. *Hammond.*

Prayer, which is *instrumental* to every thing, hath a particular promise in this thing. *Taylor.*

> In solitary groves he makes his moan,
> Nor mixed in mirth, in youthful pleasure shares,
> But sighs when songs and *instruments* he hears.
> *Dryden.*

Sweet voices, mixt with *instrumental* sounds,
Ascend the vaulted roof, the vaulted roof rebounds.
Id.

In benefits, as well as injuries, it is the principal that we are to consider, not the *instrument;* that which a man does by another is in truth his own act. *L'Estrange.*

Box is useful for turners and *instrument* makers. *Mortimer.*

Habitual preparation for the sacrament consists in a standing permanent habit, or principle of holiness, wrought chiefly by God's spirit, and *instrumentally* by his word, in the heart or soul of man. *South.*

I discern some excellent final causes of conjunction of body and soul: but the *instrumental* I know not, nor what invisible bands and fetters unite them together. *Bentley.*

The Presbyterian merit is of little weight, when they allege themselves *instrumental* towards the restoration. *Swift.*

An *instrument*, whose chords upon the stretch,
And strained to the last screw that he can bear,
Yield only discord in his Maker's ear.
Cowper. Truth.

INSTRUMENTS, MUSICAL. See MUSIC.

INSUBRES, INSUBRI, or ISOMBRES, the ancient inhabitants of Insubria, a people of Gallic origin, who were conquered by the Romans, and their country made into a province.

INSUBRIA, or INSUBRIUM AGER, in ancient geography, a district of Gallia Transpadana; situated between the Ticinus on the west, the Addua on the east, the Padus on the south, and the Orobii on the north.

INSUF'FERABLE, *adj.* } Lat. *in* and *suf-*
INSUF'FERABLY, *adv.* } *fero.* Not to be borne; intolerable; beyond endurance; detestable; contemptible to an extreme degree: used both in a good and bad sense.

How shall we behold the face
Henceforth of God or angel, erst with joy
And rapture so oft beheld? those heavenly shapes
Will dazzle now this earthly with their blaze
Insufferably bright. *Milton's Paradise Lost.*

The one is oppressed with constant heat, the other with *insufferable* cold. *Browne's Vulgar Errours.*

Eyes that confessed him born for kingly sway,
So fierce, they flashed *insufferable* day. *Dryden.*

Though great light be *insufferable* to our eyes, yet the highest degree of darkness does not at all disease them; because that, causing no disorderly motion, leaves that curious organ unharmed. *Locke.*

There is no person remarkably ungrateful, who was not also *insufferably* proud. *South.*

INSUFFI'CIENCE, *n. s.* } Fr. *insufficience;*
INSUFFI'CIENCY, *n. s.* } Lat. *in* and *sufficit.*
INSUFFI'CIENT, *adj.* } Inadequateness to
INSUFFI'CIENTLY, *adv.* } any end or purpose; want of requisite value or power; used of things and persons: unequal to the task: want of proper ability: in an unskilful manner.

Hold ye, then, me, or elles our covent
To pray for you ben *insufficient!*
Chaucer. The Sompnoures Tale.

The bishop, to whom they shall be presented, may justly reject them as incapable and *insufficient.*
Spenser.

The minister's aptness or *insufficiency*, otherwise than by reading to instruct the flock, standeth in this place as a stranger, with whom our form of common prayer hath nothing to do. *Hooker.*

We will give you sleepy drinks, that your senses, unintelligent of our *insufficience*, may, though they cannot praise us, as little accuse us. *Shakspeare.*

Fasting kills by the bad state, or by the *insufficient* quantity of fluids. *Arbuthnot on Aliments.*

We are weak, dependant creatures, *insufficient* to our own happiness, full of wants which of ourselves we cannot relieve, exposed to a numerous train of evils which we know not how to divert. *Rogers.*

INSUFFLA'TION, *n. s.* Lat. *in* and *sufflo.* The act of breathing upon.

Imposition of hands is a custom of parents in blessing their children, but taken up by the apostles instead of that divine *insufflation* which Christ used. *Hammond's Fundamentals.*

IN'SULAR, *adj.* } Fr. *insulaire;* Lat. *in-*
IN'SULARY, *adj.* } *sula.* Belonging to an is-
IN'SULATED, *adj.* } land: insulated, not contiguous on any side.

Druina, being surrounded by the sea, is hardly to be invaded, having many other *insulary* advantages. *Howel.*

Their loves, and feasts, and house, and dress, and mode
Of living in their *insular* abode.
Byron. Don Juan.

Look again!
Two forms are slowly shadowed on my sight,
Two *insulated* phantoms of the brain.
Byron. Childe Harold.

INSULATED, in architecture, an appellation given to such columns as stand alone.

INSULATED, in electrical experiments. When any body is prevented from communicating with the earth, by the interposition of an electric body, it is said to be insulated. See ELECTRICITY.

INSULSE', *adj.* Lat. *insulsus.* Dull; insipid; heavy.

IN'SULT, *n. s.* & *v. a.* } Fr. *insulter;* Lat.
INSULT'ER, *n. s.* } *insulto.* The act of
INSULT'INGLY, *adv.* } leaping upon any thing. In this sense it has the accent on the last syllable: the sense is rare. An act or speech of insolence or contempt: insult, to treat with insolence; sometimes used with the preposition *over;* to trample upon in triumph: insulter, one who acts insultingly, or in a contemptuous way.

The bulls *insult* at four she may sustain,
But after ten from nuptial rights refrain.
Dryden.

Insultingly, he made your love his boast,
Gave me my life, and told me what it cost. *Id.*
So 'scapes the *insulting* fire his narrow jail,
And makes small outlets into open air. *Id.*

Even man, the merciless *insulter* man,
Man, who rejoices in our sex's weakness,
Shall pity thee. *Rowe's Jane Shore.*
The ruthless sneer that *insult* adds to grief.
Savage.

The poet makes his hero, after he was glutted by the death of Hector, and the honour he did his friend by *insulting* over his murderer, to be moved by the tears of king Priam. *Pope.*

Take the sentence seriously, because railleries are an *insult* on the unfortunate.
Broome on the Odyssey.

Death! was I not the sovereign of the state,
Insulted on his very throne, and made
A mockery to the men who should obey me?
Byron. Marino Faliero.

Were weighed i' the balance, 'gainst the foulest stain,
The grossest *insult*, most contemptuous crime
Of a rank, rash patrician—and found wanting! *Id.*

INSUPERABILITY, *n. s.* } Lat. *in* and *supero*. That which cannot be overcome or
INSU'PERABLE, *adj.*
INSU'PERABLENESS, *n. s.*
INSU'PERABLY, *adv.*
surmounted: beyond the power of conquest.

This appears to be an *insuperable* objection, because of the evidence that sense seems to give it. *Digby on Bodies.*

Much might be done, would we but endeavour; nothing is *insuperable* to pains and patience. *Ray.*

Between the grain and the vein of a diamond there is this difference, that the former furthers, the latter, being so *insuperably* hard, hinders the splitting of it. *Grew's Museum.*

And middle natures how they long to join,
Yet never pass the *insuperable* line. *Pope.*

INSUPPORTABLE, *adj.* } Lat. *in sub porto.* Not to be endured; a state of
INSUPPOR'TABLENESS, *n. s.*
INSUPPOR'TABLY, *adv.*
suffering beyond endurance.

But safest he who stood aloof,
When *insupportably* his foot advanced,
In scorn of their proud arms, and warlike tools,
Spurned them to death by troops. *Milton's Agonistes.*

Then fell she to so pitiful a declaration of the *insupportableness* of her desires, that Dorus's ears procured his eyes with tears to give testimony how much they suffered for her sufferings. *Sidney.*

The thought of being nothing after death is a burden *insupportable* to a virtuous man; we naturally aim at happiness, and cannot bear to have it confined to our present being. *Dryden.*

The first day's audience sufficiently convinced me, that the poem was *insupportably* too long. *Id.*

A disgrace put upon a man in company is *insupportable*; it is heightened according to the greatness and multiplied according to the number of the persons that hear. *South.*

To those that dwell under or near the equator, this spring would be a most pestilent and *insupportable* summer; and, as for those countries that are nearer the poles, a perpetual spring will not do their business. *Bentley.*

Were it not for that rest which is appointed on the first day of the week, and the solemn meetings which then take place for the purposes of social worship and religious instruction, the labours of the common people, that is of the greatest part of mankind, would be *insupportable*. *Beattie.*

INSURANCE and ASSURANCE, in mercantile language, are terms used synonymously: under the latter we have treated of assurances on lives, and referred to MARINE INSURANCE for that important branch of mercantile affairs. It remains only for us to attend in this place to the subject of insurance against fire.

This is a mode of providing against what might otherwise prove a ruinous contingency of human life, peculiar, of course, to a state of high civilization. The period of its first introduction into this country has not been correctly ascertained: but our oldest, which are amongst the most respectable fire offices, bear date (with the exception of the Hand in Hand, which was incorporated in 1696) in the early part of the eighteenth century. The oldest fire office in Paris is said to have commenced business so late as 1745. In Holland, though these institutions are not unknown, they are said to be little resorted to; and yet th number of fires in Amsterdam is represented as far less in proportion than in London.

In this metropolis, and in different parts of the kingdom, are various companies, each of which has a large capital funded, for the purpose of insuring from loss or damage by fire, buildings, furniture, goods in trade, merchandise, farming stock, ships in port, harbour, or dock, the cargoes of such ships, ships building or repairing, vessels on rivers and canals, the goods on board such vessels, &c. These articles are commonly divided into three classes:—1. Common assurances, which are effected at 2*s.* per cent. per annum, up to £1000; 2. Hazardous assurances, at 3*s.* per cent. per annum; and, 3, doubly hazardous, at 5*s.* per cent. per annum. The mode of classification, and more detailed particulars, may be learnt from the proposals of the most respectable companies; which are—Hand in Hand Fire Office, incorporated in 1696; Sun Fire Office, incorporated in 1706; Union Fire Office, incorporated in 1714; Westminster Fire Office, incorporated in 1717; Royal Exchange Assurance Company, incorporated in 1719; London Assurance, incorporated in 1719; Phœnix Fire Office, established in 1782; Imperial Insurance Company, 1803; Globe Insurance Office, 1803; Albion, 1805; Hope, 1807; Eagle, 1807; Atlas, 1808: besides various extensive companies in the country; as in Kent, Norfolk, &c.

In 1782 a duty of 1*s.* 6*d.* was imposed on every £100 assured from loss by fire, which was increased in 1797 to 2*s.* per cent., in 1804 to 2*s.* 6*d.* per cent., and since that period to 3*s.* From the produce of this duty an estimate has been formed of the total amount of property assured from fire in Great Britain, which appears to have been nearly as follows:—

In 1785 . . .	£125,000,000
1789 . . .	142,000,000
1793 . . .	167,000,000
1797 . . .	184,000,000
1801 . . .	223,000,000
1806 . . .	260,000,000
1810 . . .	305,000,000

The duty paid in this last year was thus contributed by the different offices:—

Duty paid on Fire Insurance in 1810.	£.	s.	d.
Sun	93,867	16	10
Phœnix	57,709	4	10
Royal Exchange	45,067	12	10
Imperial	35,346	14	6
Globe	27,353	10	6
British	16,695	5	5
Hope	15,878	17	8
Albion	15,683	8	11
County	13,664	5	4
Westminster	12,054	13	10
Hand in Hand	11,505	12	9
Eagle	11,355	12	8
Atlas	9,815	9	6
London	9,312	17	4
Union	5,847	18	8

The legal effect of the contracts of these societies is altogether regulated by the terms of them respectively, and each person on entering becomes voluntarily a party to the rules of the society. Speaking generally, a very high feeling of honor and liberality pervades the conduct of these bodies, who, we fear, are far more often 'sinned against than sinning,' in respect to their business. But some curious cases of claims occur in the law books.

The Sun, inserting the terms 'civil commotion' as an exception to the cases of fire against which they insured, resisted the claim of Mr. Langdale, in 1780, for a fire occasioned by the riots of that year and the court held them exempt from paying it. Yet there is a case where (2 Wils. 363.) the London Assurance paid a claim for a fire occasioned by a mob; only they use the terms 'military or usurped power.'

In case of loss occuring the insured is bound by most of the proposals of the societies, and ought, in all cases, to give immediate notice of the event, and as particular an account of the value, &c., as the nature of the case will admit. He must also generally produce a certificate of the minister and church-wardens as to his character, their belief of the loss sustained, and the truth of what he advances. If a policy of insurance from fire refer to certain printed proposals, the proposals will be considered as part of the policy.

Insurance 'against all the damages which the plaintiffs should suffer by fire, on stock and utensils in their regular built sugar-house,' was held not to extend to damage done to the sugar by the heat of the usual fires employed in refining, being accumulated by the mismanagement of plaintiffs, who inadvertently kept the top of their chimney closed.' *Austin* v. *Drewe*.

In insurances against fire, the loss may be either partial or total, and some of the offices, if not all, expressly undertake to allow all reasonable charges, attending the removal of goods in cases of fire, and to pay the sufferer's loss, whether the goods are destroyed, lost, or damaged, by such removal. Park, 449. In a policy against fire from half year to half year, the assured agreed to pay the premium half yearly, 'as long as the insurers should agree to accept the same,' within fifteen days after the expiration of the former half year, and it was also stipulated that no insurance should take place till the premium was actually paid; a loss happened within fifteen days after the end of one half year, but before the premium of the next was paid: held that the insurers were not liable though the assured tendered the premium before the end of fifteen days, but after the loss. *Torleton* v. *Stanniforth in Error*, E. 36 *Geo.* 3.

Want of fairness in the statement of circumstances is very justly held to vitiate this obligation with most others. A plaintiff, Bufe. v. Turner, having one of several warehouses next but one to a boat-builder's shop which took fire; on the same evening, after the fire was apparently extinguished, gave instructions by an extraordinary conveyance for insuring that warehouse, then having others uninsured, but without apprising the insurers of the recent neighbouring fire. Though the terms of insurance did not expressly require the communication, it was held that the concealment of this fact avoided the policy. 6 *W. P. Taunton*, 338.

Contrary to what has been determined as to MARINE INSURANCES (see that article), fire policies are not, in their nature, assignable, nor can the interest in them be transferred without the consent of the office. It is provided, however, that, when any person dies, the interest shall remain to his heir, executor, or administrator, respectively, to whom the property insured belongs; provided they procure their right to be endorsed on the policy, or the premium be paid in their name. Park, 549. It is necessary that the party injured should have an interest or property in the house insured, at the time the policy is made out, and at the time the fire happens.

For some interesting particulars as to the capitals of the principal Insurance Companies, see ENGLAND, vol. viii. p. 307.

INSURMOUN'TABLE, *adj.* } Fr. *surmonter*; Lat. *in*
INSURMOUN'TABLY, *adv.* }
super montem. Insuperable; unconquerable.

This difficulty is *insurmountable*, till I can make simplicity and variety the same. *Locke*.

Hope thinks nothing difficult; despair tells us, that difficulty is *insurmountable*. *Watts*.

INSURREC'TION, *n. s.* Lat. *insurgo*. A seditious rising; a rebellious commotion.

This city of old time hath made *insurrection* against kings, and that rebellion and sedition have been made therein. *Ezra*.

There shall be a great *insurrection* upon those that fear the Lord. 2 *Esd.* xvi. 70.

Between the acting of a dreadful thing,
And the first motion, all the interim is
Like a phantasma, or a hideous dream:
The genius and the mortal instruments
Are then in council; and the state of man,
Like to a little kingdom, suffers then
The nature of an *insurrection*.
Shakspeare. Julius Cæsar.

Insurrections of base people are commonly more furious in their beginnings. *Bacon's Henry VII*.

The trade of Rome had like to have suffered another great stroke by an *insurrection* in Egypt. *Arbuthnot*.

INTACTÆ, in geometry, right lines which are continually approached by curves, and yet can never be touched by them. They are more usually called Asymptotes. See CONIC SECTIONS.

INTACT'IBLE, *adj.* Lat. *in* and *tactum*. Not perceptible to the touch.

INTAGL'IO, *n. s.* Italian. Any thing that has figures engraved on it.

We meet with the figures which Juvenal describes on antique *intaglios* and medals. *Addison on Italy*.

INTAGLIOS are precious stones on which are engraved the heads of great men, inscriptions, and the like. They are often set in rings, seals, &c.

INTAPHERNES, one of the seven Persian lords, who conspired against Smerdis the Magian. See PERSIA. He was afterwards put to death by Darius for conspiring against him, together with his whole family, except two persons, viz. his wife and any other she should name; who

thereupon preferred her brother to her husband and children, saying she might have another husband and more children, but, her parents being dead, she could never have another brother.

INTASTABLE, *adj.* In and taste. Not raising any sensations in the organs of taste. A word not elegant, nor used.

Something which is invisible, *intastable*, and intangible, as existing only in the fancy, may produce a pleasure superior to that of sense. *Grew.*

INTEGER, *n. s.* } Fr. *integral*; Lat.
IN'TEGRAL, *adj.* & *n. s.* } *integer*. The whole
INTEG'RITY, *n. s.* } of any thing: uninjured; complete; not defective; not fractional: the whole, as made up of parts. Integrity, honesty; purity of manners; entireness; genuineness of character.

Your dishonour
Mangles true judgment, and bereaves the state
Of that *integrity* which should become it.
Shakspeare.

————My robe
And my *integrity* to Heaven is all
I dare now call my own. *Id. Henry VIII.*

A local motion keepeth bodies *integral*, and their parts together. *Bacon's Natural History.*

Language continued long in its purity and *integrity*. *Hale.*

Physicians, by the help of anatomical dissections, have searched into those various meanders of the veins, arteries, nerves, and *integrals* of the human body. *Id.*

No wonder if one remain speechless, though of *integral* principles, who, from an infant, should be bred up amongst mutes, and have no teaching. *Holder.*

As not only signified a piece of money, but any *integer*; from whence is derived the word ace, or unit. *Arbuthnot.*

The libertine, instead of attempting to corrupt our *integrity*, will conceal and disguise his own vices. *Rogers.*

Whoever has examined both parties cannot go far towards the extremes of either, without violence to his *integrity* or understanding. *Swift.*

Take away this transformation, and there is no chasm, nor can it affect the *integrity* of the action. *Broome.*

A mathematical whole is better called *integral*, when the several parts which make up the whole are distinct, and each may subsist apart. *Watts.*

I promised that when I possessed the power, I would use it with inflexible *integrity*. *Johnson's Rasselas.*

INTEGRAL, or INTEGRANT, in philosophy, appellations given to parts of bodies which are of a similar nature with the whole: thus filings of iron have the same nature and properties as bars of iron. Bodies may be reduced into their integrant parts by triture or grinding, limation or filing, solution, amalgamation, &c. Chemists distinguish between the integrant and constituent parts of bodies: thus when crude mercury is dissolved in nitric acid, though held imperceptibly in the menstruum; yet when that menstruum is diluted with water, and a copper-plate is suspended in it, the menstruum leaves the mercury, to work upon the copper, and the mercury subsides unaltered and in its own natural form; the mercury, therefore, in this operation, was only divided into its integrant parts, or small parcels, by the same nature and properties as the whole; but when cinnabar is resolved or divided into crude mercury and sulphur, neither of these is of the same nature and properties with the cinnabar, and they are not its integrant but its constituent parts.

INTEG'UMENT, *n. s.* Lat. *integumentum*, *intego*. Any thing that covers or envelops another.

He could no more live without his frize coat than without his skin: it is not indeed so properly his coat, as what the anatomists call one of the *integuments* of the body. *Addison.*

INTELLECT, *n. s.* }
INTELLEC'TION, *n. s.* }
INTELLEC'TIVE, *adj.* }
INTELLEC'TUAL, *adj.* & *n. s.* }
INTEL'LIGENCE, *n. s.* }
INTEL'LIGENCY, *n. s.* }
INTEL'LIGENCER, *n. s.* }
INTEL'LIGENT, *adj.* }
INTELLIGEN'TIAL, *adj.* }
INTELLIGIBIL'ITY, *n. s.* }
INTEL'LIGIBLE, *adj.* }
INTEL'LIGIBLENESS, *n. s.* }
INTEL'LIGIBLY, *adv.* }
Fr. *intellect*, *intellectif*, *intelligence*, *intelligible*; Lat. *intelligo*, *intellectus*, *intelligibilis*. These words vary in signification thus: Intellect is the faculty of understanding; intellection the act of understanding; intelligence, information conveyed; intelligibleness, perspicuity of the information conveyed. These are primary senses, from which the rest are derived. Intellective is having power to understand a subject. Intellectual, relating to the understanding; mental acts; ideal. Proposed as the object not of the senses but intellect: as, Cudworth names his book the Intellectual System of the Universe. Intellectual, the understanding: not used in this sense. Intelligence, commerce of acquaintance; spirit; understanding. Intelligencer, one who conveys information or news; a messenger. Intelligent, knowing; skilful; giving information: it has *of* before the thing. Intelligential, consisting of unbodied mind. Intelligibility, possibility of being understood. Intelligible, easy to be comprehended; clear; perspicuous. Intelligibly, speaking or writing in a manner so as to be understood; clearly; plainly; without mystery or equivocation.

Right as a man hath sapiences three,
Memorie, engine, and *intellect* also;
So, in o Being of Divinitee
Three persons mowen ther, righte wel, be.
Chaucer. The Second Nonnes Tale.

I write; as he that none *intelligence*
Of metres hath, ne floures of sentence.
Id. The Court of Love.

Heaps of huge words, up hoarded hideously,
They think to be chief praise of poetry,
And thereby wanting due *intelligence*,
Have marred the face of goodly poesie. *Spenser.*

It was perceived there had not been in the catholicks so much foresight as to provide that true *intelligence* might pass between them of what was done. *Hooker.*

Anaxagoras and Plato term the Maker of the world an *intellectual* worker. *Hooker.*

Last night the very gods shewed me a vision:
I fast and prayed for their *intelligence*.
Shakspeare. Cymbeline.

How deep you were within the books of heaven!
To us, the' imagined voice of heaven itself;
The very opener and *intelligencer*
Between the grace and sanctities of heaven,
And our dull workings. *Id. Henry IV.*

A maskind witch! hence with her, out of door!
A most *intelligency* bawd! *Shakspeare.*

Servants, who seem no less,
Which are to France the spies and speculations
Intelligent of our state. *Id. King Lear.*

It is not only in order of nature for him to govern that is the more *intelligent*, as Aristotle would have it; but there is no less required for government, courage to protect, and, above all, honesty. *Bacon.*

If they had instructions to that purpose, they might be the best *intelligencers* to the king of the true state of his whole kingdom. *Id.*

He keeps *intelligence* by thousand spies;
Argus to him bequeathed his hundred eyes:
So waking, still he sleeps, and sleeping, wakeful lies. *Fletcher's Purple Island.*

Men's hearts and faces are so far asunder
That they hold no *intelligence.*
Beaumont and Fletcher's Philaster.

The advertisements of neighbour princes are always to be regarded, for that they receive *intelligence* from better authors than persons of inferior note. *Hayward.*

Noah sends out his *intelligencers*, the raven and the dove; whose wings in that vaporous air might easily descry further than his sight. *Bp. Hall.*

They are the best sort of *intelligencers*; for they have a way into the inmost closets of princes. *Howell.*

Religion teaches us to present to God our bodies as well as our souls: if the body serves the soul in actions natural and civil, and *intellectual*, it must not be eased in the only offices of religion. *Taylor.*

Let all the passages
Be well secured, that no *intelligence*
May pass between the prince and them. *Denham.*

He lived rather in a fair *intelligence*, than any friendship with the favourites. *Clarendon.*

In at his mouth
The devil entered; and his brutal sense,
His heart or head possessing, soon inspired
With act *intelligential.* *Milton's Paradise Lost.*

Food alike those pure
Intelligential substances require,
As doth your rational. *Id.*

Who would lose,
Though full of pain, this *intellectual* being,
Those thoughts that wander through eternity
To perish rather, swallowed up and lost,
In the wide womb of uncreated night,
Devoid of sense and motion? *Id.*

How fully hast thou satisfied me, pure
Intelligence of heaven, angel! *Id.*

All heart they live, all head, all eye, all ear,
All *intellect*, all sense. *Id.*

Intelligent of seasons, they set forth
Their airy caravan. *Id.*

Her husband not nigh,
Whose higher *intellectual* more I shun. *Id.*

There are divers ranks of created beings intermediate between the glorious God and man, as the glorious angels and created *intelligences.* *Hale.*

If a man as *intellective* be created, then either he means the whole man, or only that by which he is *intellective.* *Glanville.*

The fancies of most, like the index of a clock, are moved but by the inward springs of the corporeal machine; which, even on the most sublimed *intellectual*, is dangerously *influential.* *Id. Scepsis.*

Simple apprehension denotes the soul's naked *intellection* of an object, without either composition or deduction. *Id.*

His eyes, being his diligent *intelligencers*, could carry unto him no other news but discomfortable. *Sidney.*

In a dark vision's *intellectual* scene,
Beneath a bower for sorrow made,
The melancholy Cowley lay. *Cowley.*

The genuine sense, *intelligibly* told,
Shews a translator both discreet and bold. *Roscommon.*

They hoped to get the favour of the houses, and by the favour of the houses they hoped for that of the *intelligences*, and by their favour, for that of the supreme God. *Stillingfleet.*

Satan appearing like a cherub to Uriel, the *intelligence* of the sun circumvented him even in his own province. *Dryden.*

Something must be lost in all translations, but the sense will remain, which would otherwise be maimed when it is scarce *intelligible.* *Id.*

It is in our ideas, that both the rightness of our knowledge, and the propriety or *intelligibleness* of our speaking, consists. *Locke.*

They have news-gatherers and *intelligencers*, who make them acquainted with the conversation of the whole kingdom. *Spectator.*

We shall give satisfaction to the mind, to shew it a fair and *intelligible* account of the deluge. *Burnet.*

All those arts, rarities, and inventions, which vulgar minds gaze at, and the ingenious pursue, are but the reliques of an *intellect* defaced with sin and time. *South.*

To write of metals and minerals *intelligibly*, is a task more difficult than to write of animals. *Woodward.*

They will say 'tis not the bulk or substance of the animal spirit, but its motion and agility, that produces *intellection* and sense. *Bentley's Sermons.*

Those tales had been sung to lull children asleep, before ever Berosus set up his *intelligence* office at Coos. *Bentley.*

A train of phantoms in wild order rose,
And joined, this *intellectual* scene compose. *Pope.*

Intellect, the artificer, works lamely without his proper instrument, sense. *Bolingbroke.*

Logick is to teach us the right use of our reason, or *intellectual* powers. *Watts.*

Many natural duties relating to God, ourselves, and our neighbours, would be exceeding difficult for the bulk of mankind to find out by reason: therefore it has pleased God to express them in a plain manner, *intelligible* to souls of the lowest capacity. *Id.*

When a roast or ragout,
And fish, and soup by some side dishes backed,
Can give us either pain or pleasure, who
Would pique himself on *intellects*, whose use
Depends so much upon the gastric juice. *Byron. Don Juan.*

I'm a plain man, and in a single station,
But—oh! ye lords of ladies *intellectual*,
Inform us truly, have they not hen-pecked you all. *Id.*

INTEM'PERAMENT, *n. s.* In and temperament. Bad constitution.

Some depend upon the *intemperament* of the parulcerated, and others upon the afflux of lacerative humours. *Harvey.*

INTEM'PERANCE, *n. s.*
INTEM'PERANCY, *n. s.*
INTEM'PERATE, *adj.*
INTEM'PERATELY, *adv.*
INTEM'PERATENESS, *n. s.*
INTEM'PERATURE, *n. s.*
Fr. *intemperance*; Lat. *intemperantia.* Want of moderation; excess in meat or drink:

intemperate, immoderate in appetite; passionate; lusty; ungovernable; excessive; exceeding a just mean; and in this sense we say intemperate weather; an intemperate climate: intemperature, excess of some quality.

Use not thy mouth to *intemperate* swearing; for therein is the word of sin. *Ecclus.* xxiii. 13.

You are more *intemperate* in your blood
Than those pampered animals,
That rage in savage sensuality. *Shakspeare.*

Boundless *intemperance*
In nature is a tyranny. *Id. Macbeth.*

Another law of Lycurgus induced to *intemperance*, and all kinds of incontinency. *Hakewill.*

More women should die than men, if the number of burials answered in proportion to that of sicknesses; but men, being more *intemperate* than women, die as much by reason of their vices, as women do by the infirmity of their sex. *Graunt.*

How grossly do many of us contradict the plain precepts of the Gospel, by living *intemperately* or unjustly. *Tillotson.*

Do not too many believe no religion to be pure, but what is *intemperately* rigid? Whereas no religion is true, that is not peaceable as well as pure. *Sprat.*

The Lacedemonians trained up their children to hate drunkenness and *intemperance*, by bringing a drunken man into their company. *Watts.*

Free from the wayward bias bigots feel,
From fancy's influence and *intemperate* zeal.
Cowper. Progress of Error.

INTEN'ABLE, *adj.* In and tenable. Intenable, indefensible; as, an intenable opinion; an intenable fortress.

I know I love in vain, strive against hope;
Yet in this captious and *intenable* sieve,
I still pour in the waters of my love.
Shakspeare.

INTEND', *v. a.*, INTEN'DANT, *n. s.*, INTEND'IMENT, *n. s.*, INTEND'MENT, *n. s.* Fr. *entendement*; Lat. *intendo*. To stretch out; to enforce; to strain; to regard, or take care of; to pay attention; to mean or design: intendant, an officer of the highest class, who oversees any particular allotment of the public business: intendiment, intendment, old words which signify attention, intention, or design

Thou art a prince yborne by thy discente;
And for to rule thy royall dignite,
I shall the given, first *intendemente*,
Discrecion, prudence, in right jugement,
Whiche in a prince is thing most covenable.
Chaucer's Miscellanies.

They could not *intend* to the recovery of that country of the north. *Spenser.*

Be nought hereat dismayed
'Till well ye wot, by grave *intendiment*,
What woman, and wherefore doth we upbraid.
Id.

The same advancing high above his head,
With sharp *intended* sting so rude him smote,
That to the earth him drove, as stricken dead;
Ne living wight would have him life behot.
Faerie Queene.

This they should carefully *intend*, and not, when the sacrament is administered, imagine themselves called only to walk up and down in a white and shining garment. *Hooker.*

Out of my love to you, I came hither to acquaint you withal; that either you might stay him from his *intendment*, or brook such disgrace well as he shall run into. *Shakspeare.*

Neither was there any who might share in the government, while the king *intended* his pleasure.
Bacon's Henry VII.

Having no children, she did with singular care and tenderness *intend* the education of Philip.
Bacon.

Go therefore, mighty powers? *intend* at home,
While here shall be our home, what best may ease
The present misery. *Milton's Paradise Lost.*

By this the lungs are *intended* or remitted.
Hale.

The opinion she had of his wisdom was such as made her esteem greatly of his words: but that the words themselves sounded so, as she could not imagine what they *intended*. *Sidney.*

Their beauty they, and we our loves suspend;
Nought can our wishes, save thy health, *intend*.
Waller.

All that worship for fear, profit, or some other by-end, fall more or less within the *intendment* of this emblem. *L'Estrange.*

Magnetism may be *intended* and remitted, and is found only in the magnet and in iron. *Newton.*

Nearchus, who commanded Alexander's fleet, and Onesicrates, his *intendant* general of marine, have both left relations of the Indies. *Arbuthnot.*

Elegant phrase and figure formed to please
Are qualities, that seem to comprehend
Whatever parents, guardians, schools *intend*.
Cowper. Progress of Error.

INTENDMENT OF CRIMES. In cases of treason, intention proved by circumstances is punishable as if it were put in execution. So likewise, if a person forcibly enter a house in the night-time, with intent to commit burglary, it is felony: and an assault on the highway, with an intent to commit robbery, is felony, and punished with transportation.

INTEN'ERATE, *v. a.*, INTENERA'TION, *n. s.* Lat. *in* and *tener*. To make tender, or soften.

In living creatures the noblest use of nourishment is for the prolongation of life, restoration of some degree of youth, and *inteneration* of the parts.
Bacon.

Autumn vigour gives,
Equal, *intenerating*, milky grain.
Phillips.

INTENSE', *adj.*, INTENSE'LY, *adv.*, INTENSE'NESS, *n. s.*, INTEN'SION, *n. s.*, INTEN'SIVE, *adj.*, INTEN'SIVELY, *adv.* Lat. *intensus*, *in* and *tendo*. Raised to a high degree; vehement; ardent; kept on the stretch; anxiously attentive: intensely, to an extreme degree: intension, the act of forcing or straining any thing: intensive, increased; intent; unremitted: intensively, by increase of degree.

Sounds will be carried further with the wind than against the wind; and likewise to rise and fall with the *intension* or remission of the wind.
Bacon.

God and the good angels are more free than we are, that is, *intensively* in the degree of freedom; but not extensively in the latitude of the object, according to a liberty of exercise, but not of specification. *Bramhall against Hobbes.*

Faith differs from hope in the extension of its object, and in the *intension* of degree. *Taylor.*

But in disparity
The one *intense*; the other still remiss,
Cannot well suit with either, but soon prove
Tedious alike. *Milton's Paradise Lost.*

As his perfection is infinitely greater than the perfection of a man, so it is infinitely greater than the perfection of an angel; and, were it not infinitely greater than the perfection of an angel, it could not be infinitely greater than the perfection of a man, because the *intensive* distance between the perfection of an angel and of a man is but finite. *Hale.*

Sublime or low, unbended or *intense*,
The sound is still a comment to the sense.
Roscommon.

To observe the effects of a distillation, prosecuted with so *intense* and unusual a degree of heat we ventured to come near. *Boyle.*

If an Englishman considers our world, how *intensely* it is heated, he cannot suppose that it will cool again. *Addison.*

The water of springs and rivers, that sustains a diminution from the heat above, being evaporated more or less, in proportion to the greater or lesser *intenseness* of heat. *Woodward.*

Where sits the soul, *intense* collected cool,
Bright as the skies, and as the season keen.
Thomson.

Not a sound is heard
To break the midnight air, though the raised ear,
Intensely list'ning, drinks in every breath.
Barbauld. Evening Meditation.

The electric blood with which their arteries run
Their body's self turned soul with the *intense*
Feeling of that which is.
Byron. Prophecy of Dante.

INTENT', *adj.* & *n. s.*
INTEN'TION, *n. s.*
INTEN'TIONAL, *adj.*
INTEN'TIONALLY, *adv.*
INTEN'TIVE, *adj.*
INTEN'TIVELY, *adv.*
INTENT'LY, *adv.*
INTENT'NESS, *n. s.*

Fr. *intention*; Lat. *intentus*. Anxiously diligent: intent, a design or purpose: to all intents, in all senses, whatever be meant. See INTEND. Intentional, designed in will or action: intentive, diligently applied: intently, with close attention or eager desire: intentness, anxious and diligent application.

For his *intent* within short while
Was to returne unto this yle
That he came fro, and kepe his day;
For nothing would he be away.
Chaucer. Dreame.

Surely, my sonne! then answered he againe,
If happie; then it is in this *intent*,
That having small yet doe I not complaine
Of want, no wish for more it to augment
But doe myselfe, with that I hove content.
Spenser. Faerie Queene.

Although the Scripture of God be stored with infinite variety of matter in all kinds, although it abound with all sorts of laws, yet the principal *intent* of Scripture is to deliver the laws of duties supernatural. *Hooker.*

Whereas commandment was given to destroy all places where the Canaanites had served the gods, this precept had reference unto a special *intent* and purpose, which was, that there should be but one place whereunto the people might bring offerings.
Id.

I'll urge his hatred more to Clarence;
And, if I fail not in my deep *intent*,
Clarence hath not another day to live.
Shakspeare.

She did course o'er my exteriors with such a greedy *intention*, that the appetite of her eye did seem to scorch me up like a burning-glass. *Id.*

Where the object is fine and accurate, it conduceth much to have the sense *intentive* and erect.
Bacon's Natural History.

Distractions in England made most men *intent* to their own safety. *King Charles.*

If we insist passionately or so *intently* on the truth of our beliefs, as not to proceed to as vigorous pursuit of all just, sober, and godly living.
Hammond.

When we use but those means which God hath laid before us, it is a good sign that we are rather *intent* upon God's glory than our own conveniency.
Taylor.

The general himself had been more *intent* upon his command. *Clarendon.*

They on their mirth and dance
Intent. *Milton.*

I find in myself that this inward principle doth exert many of its actions *intentionally* and purposely
Hale.

The naked relation, at least the *intentive* consideration of that, is able still, and at this disadvantage of time, to rend the hearts of pious contemplators. *Browne's Vulgar Errours.*

I wish others the same *intention*, and greater successes. *Temple.*

Of action eager, and *intent* on thought,
The chiefs your honourable danger sought.
Dryden.

This fury fit for her *intent* she chose;
One who delights in wars. *Id. Æneid.*

He was miserable to all *intents* and purposes.
L'Estrange.

Were men as *intent* upon this as on things of lower concernment, there are none so enslaved to the necessities of life, who might not find many vacancies that might be husbanded to this advantage of their knowledge *Locke.*

Intention is when the mind with great earnestness, and of choice, fixes its view on any idea, considers it on every side, and will not be called off by the ordinary solicitation of other ideas. *Id.*

The Athenians sent their fleet to Sicily, upon pretence only to assist the Leontines; but with an *intent* to make themselves masters of that island.
Grew.

In persons possessed with other notions of religion, the understanding cannot quit these but by great examination; which cannot be done without some labour and *intention* of the mind, and the thoughts dwelling a considerable time upon the survey and discussion of each particular. *South.*

There is an incurable blindness caused by a resolution not to see; and, to all *intents* and purposes, he who will not open his eyes is for the present as blind as he that cannot. *Id.*

The glory of God is the end which every intelligent being is bound to consult, by a direct and *intentional* service. *Rogers.*

Whenever I am wishing to write to you, I shall conclude you are *intentionally* doing so to me.
Atterbury to Pope.

The odd paintings of an Indian screen may please a little; but, when you fix your eye *intently* upon them, they appear so disproportioned that they give a judicious eye pain. *Atterbury.*

Most part of chronical distempers proceed from laxity of the fibres; in which case the principal *intention* is to restore the tone of the solid parts.
Arbuthnot on Aliments.

The Chian medal seats him with a volume open and reading *intently*. *Pope.*

Of darkness visible so much be lent,
As half to shew, half veil the deep *intent*.
Id. Dunciad.

He is more disengaged from his *intentness* on affairs. *Swift.*

Whilst they are *intent* on one particular part of their theme, they bend all their thoughts to prove or disprove some proposition that relates to that part, without attention to the consequences that may affect another. *Watts.*

Be *intent* and solicitous to take up the meaning of the speaker. *Id.*

Some, with hope replenished and rebuoyed,
Return to whence they came—with like *intent*,
And weave their web again.
Byron. Childe Harold.

He lied with such a fervour of *intention*,
There was no doubt he earned his laureat pension.
Id. Don Juan.

Some have been so good-natured as to cloak counsel under the garb of conjecture, and under pretence of guessing my *intentions* have recommended their own favorite studies to my notice as fit objects for my recommendation to the notice of my fellow citizens. *Canning. Microcosm.*

INTER', *v. a.* Fr. *enterrer;* Lat. *in* and *terra*. To cover with earth; to bury.

The evil that men do lives after them;
The good is oft *interred* with their bones.
Shakspeare.

His body shall be royally *interred*,
And the last funeral pomps adorn his herse.
Dryden.

The best way is to *inter* them as you furrow pease. *Mortimer.*

The ashes, in an old record of the convent, are said to have been *interred* between the very wall and the altar where they were taken up. *Addison.*

But let him
Inter his son before we press upon him
This edict.
Byron. Tragedy. Two Foscari. act. iv. sc. 1.

INTERAMNA, in ancient geography, a town of the Cisappennine Umbria; so called from its situation between rivers, or in an island in the river Nar, now called Terni. It was the birthplace of Tacitus the historian, and Tacitus the emperor. Pliny distinguishes the natives by the name of Interamnates Nartes.

INTERAMNA LIRINAS, a town and colony of the Volsci in Latium, on the confines of Samnium, at the confluence of the rivers Liris and Melpis, now in ruins.

INTERAMNA, or INTERAMNIA, Prætutianorum, a town in the territory of the Prætutiani, a part of Picenum; now called Teramo, in the Abruzzo of Naples.

INTER'CALAR, *adj.* } Fr. *intercalaire;* Lat.
INTERCAL'ARY. } *intercalaris.* Inserted out of the common order to preserve the equation of time; as, the 29th of February in a leap year is an intercalary day.

INTERCALARY DAY, the odd day in leap year, so called from *calare*, to proclaim, it being proclaimed by the priests with a loud voice.

INTER'CALATE, *v. a.* Fr. *intercaler;* Lat *intercalo*. To insert an extraordinary day.

INTERCATIA, in ancient geography, a town of the Vaccæi in Hispania Citra. Here Scipio Æmilianus slew a champion of the barbarians in single combat; and was the first who mounted the wall in taking the town. It was situated to the south-east of Asturica, and is now in ruins.

INTERCALA'TION, *n. s.* Fr. *intercalation;* Lat. *intercalatio*. Insertion of days out of the ordinary reckoning.

In sixty-three years there may be lost almost eighteen days, omitting the *intercalation* of one day every fourth year, allowed for this quadrant, or six supernumeraries. *Browne.*

INTERCEDE', *v. n.* } Fr. *interceder;* Lat.
INTERCED'ER, *n. s.* } *intercedo.* To pass be-
INTERCES'SION, *n. s.* } tween; to mediate; to
INTERCES'SOR, *n. s.* } act between two parties with a view of reconciling differences. It has *with* if only one part be named, and *between* if both be named. Interceder, more properly written intercessor, a mediator; an agent between two parties to procure reconciliation: intercession, mediation; interposition; agency in the cause of another, sometimes against him.

He bare the sin of many, and made *intercession* for the transgressors. *Isa.* liii. 12.

Pray not thou for this people, neither make *intercession* to me; for I will not hear thee. *Jer.* vii. 16.

He maketh *intercession* to God against Israel.
Rom. xi. 2.

So of thy grace and bountie speciall
To the King on *hyghe* be *intercessor*,
In hevyn to crown hir a quene of honoure.
G. Cavendishe's Metrical Visions.

The better course should be by planting of garrisons about him, which, whensoever he shall look forth, or be drawn out, shall be always ready to *intercept* his going or coming. *Spenser.*

Can you, when you pushed out of your gates the very defender of them, think to front his revenges with the palsied *intercession* of such a decayed dotard as you seem to be. *Shakspeare.*

Behold the heavens! thither thine eyesight bend;
Thy looks, sighs, tears, for *intercessours* send.
Fairfax.

On man's behalf,
Patron or *intercessour*, none appeared. *Milton.*
Them the glad son
Presenting, thus to *intercede* began. *Id.*

He supposeth that a vast period *interceded* between that origination and the age wherein he lived.
Hale.

Loving, and therefore constant, he used still the *intercession* of diligence and faith, ever hoping, because he would not put himself into that hell to be hopeless.
Sidney.

Origen denies that any prayer is to be made to them, although it be only to *intercede with* God for us, but only the Son of God. *Stillingfleet.*

To pray to the saints, to obtain things by their merits and *intercessions*, is allowed and contended for by the Roman church. *Id.*

I may restore myself into the good graces of my fair criticks, and your lordship may *intercede with* them on my promise of amendment. *Dryden.*

Your *intercession* now is needless grown;
Retire, and let me speak with her alone. *Id.*

When we shall hear our eternal doom from our *intercessours*, it will convince us, that a denial of Christ is more than transitory words. *South.*

Those superficies reflect the greatest quantity of light, which have the greatest refracting power, and which *intercede* mediums that differ most in their refracting densities. *Newton.*

Though for the first all Westminster should plead,
And for the last all Gresham *intercede*. *Young.*

INTERCEPT', *v. a.* } Lat. *intercipio*. To
INTERCEP'TION, *n. s.* } stop and seize in the way; to obstruct; cut off, or stop from being communicated.

Who *intercepts* me in my expedition?
—O, she that might have *intercepted* thee,
By strangling thee. *Shakspeare. Richard III.*

I then in London, keeper of the king,
Mustered my soldiers, gathered flocks of friends,
Marched towards St. Albans t' *intercept* the queen. *Shakspeare.*

Your *intercepted* packets
You writ to the pope. *Id. Henry.*

Though they cannot answer my distress,
Yet in some sort they're better than the tribunes;
For that they will not *intercept* my tale. *Shakspeare.*

The word in Matthew doth not only signify suspension, but also suffocation, strangulation, or *interception* of breath. *Browne.*

On barbed steeds they rode in proud array,
Thick as the college of the bees in May,
When swarming o'er the dusky fields they fly,
New to the flowers, and *intercept* the sky. *Dryden.*

If we hope for things which are at too great a distance from us, it is possible that we may be *intercepted* by death in our progress towards them. *Addison's Spectator.*

Behind the hole I fastened to the pasteboard, with pitch, the blade of a sharp knife, to *intercept* some part of the light which passed through the hole. *Newton's Opticks.*

The direful woes,
Which voyaging from Troy the victors bore,
While storms vindictive *intercept* the shore. *Pope.*

How dark the veil that *intercepts* the blaze
Of Heaven's mysterious purposes and ways! *Cowper. Charity.*

INTERCHANGE', *v. a.* & *n. s.* } Fr. *changer*.
INTERCHANGE'ABLE, *adj.* } To put each
INTERCHANGE'ABLY, *adv.* } in the place of
INTERCHANG'MENT, *n. s.* } the other; to exchange; to succeed alternately: commerce; alternate succession; mutual donation and reception.

In these two things the East and West churches did *interchangeably* both confront the Jews and concur with them. *Hooker.*

Let Diomedes bear him,
And bring us Cressid hither. Good Diomed,
Furnish you fairly for this *interchange*. *Shakspeare.*

Farewell; the leisure, and the fearful time,
Cuts off the ceremonious vows of love,
And ample *interchange* of sweet discourse. *Id.*

Since their more mature dignities made separation of their society, their encounters, though not personal, have been royally attornied with *interchange* of gifts. *Id.*

I shall *interchange*
My wained state for Henry's regal crown. *Id.*

A contract of eternal bond of love,
Confirmed by mutual joinder of your hands,
Attested by the holy close of lips,
Strengthened by *interchangement* of your rings. *Id.*

This in myself I boldly will defend,
And *interchangeably* hurl down my gage
Upon this overweening traitor's foot. *Id.*

So many testimonies, *interchangeable* warrants, and counterrolments, running through the hands, and resting in the power of so many several persons, is sufficient to argue and convince all manner of falsehood. *Bacon's Office of Alienation.*

With what delights could I have walked thee round!
If I could joy in ought! sweet *interchange*
Of hill and valley, rivers, woods, and plains. *Milton.*

His faithful friend and brother Euarchus came so mightily to his succour, that, with some *interchanging* changes of fortune, they begat, of a just war, the best child peace. *Sidney.*

All along the history of the Old Testament we find the *interchangeable* providences of God towards the people of Israel, always suited to their manners. *Tillotson.*

Removes and *interchanges* would often happen in the first ages after the flood. *Burnet's Theory.*

After so vast an obligation, owned by so free an acknowledgment, could any thing be expected but a continual *interchange* of kindnesses? *South.*

These articles were signed by our plenipotentiaries, and those of Holland; but not by the French, although it ought to have been done *interchangeably*; and the ministers here prevailed on the queen to execute a ratification of articles, which only one part had signed. *Swift.*

Too late and long
We may deplore and struggle with the coil,
In wretched *interchange* of wrong for wrong
'Midst a contentious world, striving where none are strong. *Byron. Childe Harold.*

Upon occasions of such trying exigency, as those which we have lately experienced, I hold it to be the very essence of our free and popular constitution, that an unreserved *interchange* of sentiment should take place between the representative and his constituents. *Canning's Speeches.*

INTERCESSIO, INTERCESSION, was used in ancient Rome, for the act of a tribune of the people, or other magistrate, by which he inhibited the acts of other magistrates; or even, in case of the tribunes, the decrees of the senate. Veto was the solemn word used by the tribunes, when they inhibited any decree of the senate, or law proposed to the people. The general law of these intercessions was, that any magistrate might inhibit the acts of his equal or inferior; but the tribunes had the sole prerogative of controlling the acts of every other magistrate.

INTERCESSOR, in the Roman law, was the name of an officer, whom the governors of provinces appointed principally to raise taxes and other duties.

INTERCESSOR is also a term heretofore applied to such bishops as, during the vacancy of a see, administered the bishopric, till a successor to the deceased bishop had been elected. The third council of Carthage calls these interventors

INTERCIPIENT, *adj.* & *n. s.* See INTERCEPT.

They commend repellents, but not with much astringency, unless as *intercipients* upon the parts above, lest the matter should thereby be impacted in the part. *Wiseman.*

INTERCISION, *n. s.* Lat. *inter* and *cædo*. Interruption.

By cessation of oracles we may understand their *intercision* not abscission, or consummate desolation. *Browne.*

INTERCLUDE', *v. n.* Lat. *intercludo.* To shut from a place or course by something intervening; to intercept.

The voice is sometimes *intercluded* by a hoarseness, or viscous phlegm cleaving to the aspera arteria. *Holder.*

INTERCLU'SION, *n. s.* Lat. *interclusus.* Obstruction; interception.

INTERCOLUMNIA'TION, *n. s.* Lat. *inter* and *columna.* The space between the pillars.

The distance of *intercolumniation* may be near four of its own diameter, because the materials commonly laid over this pillar were rather of wood than stone. *Wotton.*

INTERCOM'MON, *v. n.* Inter and common. To feed at the same table.

Wine is to be forborn in consumptions, for that the spirits of the wine do prey upon the roscid juice of the body, and *intercommon* with the spirits of the body, and so rob them of their nourishment. *Bacon's Natural History.*

INTERCOMMU'NITY, *n. s.* Inter and community. A mutual communication or community; a mutual freedom or exercise of religion.

INTERCOS'TAL, *adj.* Fr. *intercostal*; Lat. *inter* and *costa.* Placed between the ribs.

The diaphragm seems the principal instrument of ordinary respiration, although to restrained respiration the *intercostal* muscles may concur. *Boyle.*

By the assistance of the inward *intercostal* muscles, in deep suspirations, we take large gulps of air. *More.*

INTERCOURSE, *n. s.* Fr. *entrecours.* Commerce; exchange.

This sweet *intercourse*
Of looks, and smiles; for smiles from reason flow,
To brute denied, and are of love the food. *Milton.*

Communication: followed by *with.*

The choice of the place requireth many circumstances, as the situation near the sea, for the commodiousness of an *intercourse with* England. *Bacon.*

What an honor is it that God should admit us into such a participation of himself! That he should give us minds capable of such an *intercourse with* the supreme Mind! *Atterbury.*

Alone amid the shades,
Still in harmonious *intercourse* they lived
The rural day, and talked with flowing heart,
Or sighed, and looked unutterable things. *Thomson.*

INTERCUR'RENCE, *n. s.* From Lat. *intercurro.* Passage between.

Consider what fluidity salt-petre is capable of, without the *intercurrence* of a liquor. *Boyle.*

INTERCUR'RENT, *adj.* Lat *intercurrens.* Running between.

If into a phial, filled with good spirit of nitre, you cast a piece of iron, the liquor, whose parts moved placidly before, meeting with particles in the iron, altering the motion of its parts, and perhaps that of some very subtile *intercurrent* matter, those active parts presently begin to penetrate, and scatter abroad particles of the iron. *Boyle.*

INTERDEAL', *n. s.* Inter and deal. Traffic; intercourse. Obsolete.

The Gaulish speech is the very British, which is yet retained of the Welchmen and Britons of France; though the alteration of the trading and *interdeal* with other nations has greatly altered the dialect. *Spenser.*

INTERDICT', *v. a.* & *n. s.* }
INTERDIC'TION, *n. s.* }
INTERDIC'TORY, *adj.* }
Fr. *interdire*; Lat. *inter* and *dico.* To forbid; to prohibit: a prohibitory decree; a papal prohibition to the clergy to celebrate the holy offices: interdiction, a forbidding decree; papal anathema: interdictory, belonging to interdict.

Amongst his other fundamental laws, he did ordain the *interdicts* and prohibitions touching entrance of strangers. *Bacon.*

The truest issue of thy throne,
By his own *interdiction* stands accurst. *Shakspeare.*

Sternly he pronounced
The rigid *interdiction*, which resounds
Yet dreadful in mine ear. *Milton's Paradise Lost.*

Alone I passed, through ways
That brought me on a sudden to the tree
Of *interdicted* knowledge. *Id.*

These are not fruits forbidden, no *interdict*
Defends the touching of these viands pure;
Their taste no knowledge works, at least of evil. *Id. Paradise Regained.*

Had he lived to see her happy change,
He would have cancelled that harsh *interdict*,
And joined our hands himself. *Dryden's Don Sebastian.*

Nani carried himself meritoriously against the pope, in the time of the *interdict*, which held up his credit among the patriots. *Wotton.*

An archbishop may not only excommunicate and *interdict* his suffragans, but his vicar-general may do the same. *Ayliffe.*

By magick fenced, by spells encompassed round,
No mortal touched this *interdicted* ground. *Tickel.*

INTERDICT, a censure inflicted by a pope, or bishop, suspending the priests from their functions, and depriving the people of the use of sacraments, divine service, and Christian burial. This punishment was but little practised till the time of Gregory VII. Afterwards indeed interdicts were often executed in France, Italy, and Germany; and, in 1170, pope Alexander III. put all England under an interdict, forbidding the clergy to perform any part of divine service, except baptising of infants, taking confessions, and giving absolution to dying penitents. In excommunicating a prince all his subjects, who retain their allegiance, are excommunicated, and the whole country is put under an interdict. In the reign of king John the kingdom of England lay under a papal interdict for above six years together: it began A. D. 1208. In imitation of the popes, the bishops also soon began to interdict; and it became a common thing for a city, or town, to be excommunicated for the sake of a single person whom they undertook to shelter; but this severity was found to have such ill effects, to promote libertinism and a neglect of religion, that the succeeding popes very seldom made use of it. There was also an interdict of persons, who were deprived of the benefit of attending on divine service. Particular persons were also anciently interdicted of fire and water, which signified a banishment for some particular offence: by their censure, no person was allowed to receive them, or allow them fire or water; and, being thus wholly deprived of the two necessary elements of life, they were doubtless under a kind of civil death.

The following is the formula of an ancient interdict:—

'In the name of Christ, We, the bishop, in behalf of the Father, Son, and Holy Ghost, and of St. Peter, the chief of the apostles, and in our own behalf, do excommunicate and interdict this church, and all the chapels thereunto belonging, that no man from henceforth may have leave to say mass, or to hear it, or in any wise to administer any divine office, nor to receive God's tithes without our leave; and whosoever shall presume to sing or hear mass, or perform any divine office, or to receive any tythes, contrary to this interdict, on the part of God the Father Almighty, and of the Son, and of the Holy Ghost, and on the behalf of St. Peter, and all the saints, let him be accursed and separated from all Christian society, and from entering into Holy Mother Church, where there is forgiveness of sins; and let him be anathema, maranatha, for ever with the devils in hell. Fiat. fiat. fiat.'—*Du Cange.*

INTERDICTS, in the Roman law, were certain formulæ of words by which the prætor, when the possession of any property was contested between many, ordered or forbade something to be done with it, till the right or property should be legally determined. Which formulæ were called interdicts, because they related to the possession of the thing in the interim, or till the right was ascertained.

They had three kinds of interdicts, prohibitory, restitutory, and exhibitory. Prohibitory were those by which the judges forbade any one to vex another in the possession of any thing legally belonging to him. Restitutory were those by which the judges appointed any one, who had been expelled out of his estate, to be repossessed, before his right was legally ascertained. Exhibitory were those by which any thing in dispute was ordered to be exhibited; as a testament, &c.

INTERESS, *v. a.* } Fr. *interesser;* Lat. *interest.*
IN'TEREST, *v. a., v. n.,* & *n. s.* }
To concern; to affect, or give share in; to affect or move with passion; to gain the affections: interest, concern, or advantage; influence over others; participation; regard to private gain; usury; surplus of advantage.

The mystical communion of all faithful men is such as maketh every one to be *interessed* in those precious blessings, which any one of them receiveth at God's hands. *Hooker.*

Our joy,
Although our last not least; to whose young love,
The vines of France and milk of Burgundy,
Strive to be *interessed.* *Shakspeare. King Lear.*

Did he take *interest?*
—No, not take *interest;* not, as you would say,
Directly, *interest.* *Shakspeare.*

They, who had hitherto preserved them, had now lost their *interest.* *Clarendon.*

Divisions hinder the common *interest* and publick good. *Temple.*

This was a goddess who used to *interest* herself in marriages. *Addison on Medals.*

Exert, great God, thy *interest* in the sky;
Gain each kind power, each guardian deity,
That, conquered by the publick vow,
They bear the dismal mischief far away. *Prior.*

It is a sad life we lead, my dear, to be so teazed; paying *interest* for old debts, and still contracting new ones. *Arbuthnot.*

Wherever *interest* or power thinks fit to interfere, it little imports what principles the opposite parties think fit to charge upon each other. *Swift.*

Endeavour to adjust the degrees of influence, that each cause might have in producing the effect, and the proper agency and *interest* of each therein. *Watts.*

What nation will you find whose annals prove
So rich an *interest* in Almighty love?
Cowper. Expostulation.

She could repay each amatory look you lent
With *interest,* and in turn was wont with rigour
To exact of Cupid's bills the full amount,
At sight, nor would permit you to discount. *Byron.*

God forbid, that there should not be modes of assembly by which every class of this great nation may be brought together to deliberate on any matters connected with their *interest* and their freedom. *Canning.*

INTEREST is the premium paid for the loan of money. See ARITHMETIC.

INTEREST, in commerce, is a sum paid for the loan, or for forbearance in demanding a sum of money, called the principal. It is usually estimated according to some rate or proportion; in this country at a sum of money laid on, or considered as the aliquot part of £100.

The highest legal interest in England is 5 per cent. per annum, except, to the great injury of the poor, in the case of the pawnbrokers, who are allowed to take from 15 to 20 per cent.

Interest is either simple or compound.

Simple interest is that which is counted and allowed upon the principal only, for the whole time of the loan or forbearance.

The sum of the principal and interest is called the amount.

As the interest of any sum, for any time, is directly proportional to the principal sum and time, therefore the interest of £1 for one year being multiplied by any proposed principal sum, and by the time of its forbearance, in years and parts, will be its interest for that time. That is, if $r =$ the rate of interest of £1 per annum, $p =$ any principal sum lent, $t =$ the time it is lent for, and $a =$ the amount, or sum of principal and interest; then is $prt =$ the interest of the sum p, for the time t, at the rate r; and consequently $p + prt = p \times \overline{1 + rt} = a$, the amount of the same for that time. And, from this general theorem, other theorems can easily be deduced for finding any of the quantities above-mentioned; which, collected all together, will be as follow:—

1st, $a = p + prt$ the amount

2d, $p = \frac{a}{1 + rt}$ the principal,

3d, $r = \frac{a - p}{pt}$ the rate,

4th, $t = \frac{a - p}{pr}$ the time.

Tables of simple interest are so numerous and attached to such a variety of publications, that we cannot think them needed in a work of science.

Compound Interest, called also Interest-upon-

Interest, is that which is counted not only upon the principal sum lent, but also for its interest, as it becomes due, at the end of each stated time of payment.

Although it is not lawful to lend money at compound interest, yet in purchasing annuities, pensions, &c., and taking leases in reversion, it is usual to allow compound interest to the purchaser for his ready money; and therefore it is necessary to understand the subject.

Besides the quantities concerned in simple interest, viz. the principal p, the rate or interest of £1 for one year r, the amount a, and the time t, there is another quantity employed in compound interest, viz. the ratio of the rate of interest, which is the amount of £1 for one time of payment, and which here let be denoted by R, viz. $R = 1 + r$. Then, the particular amounts for the several times may be thus computed, viz. As £1 is to its amount for any time, so is any proposed principal sum to its amount for the same time; i. e.

£1 : R :: p : pR the 1st year's amount,
£1 : R :: pR : $p\mathrm{R}^2$ the 2d year's amount,
£1 : R :: $p\mathrm{R}^2$: $p\mathrm{R}^3$ the 3d year's amount,
and so on.

Therefore in general, $p\mathrm{R}^t = a$ is the amount for the t year, or t time of payment. Whence the following general theorems are deduced:—

1st, $a = p\mathrm{R}^t$ the amount,

2d, $p = \frac{a}{\mathrm{R}^t}$ the principal,

3d, $r = \sqrt[t]{\frac{a}{p}}$ the ratio,

4th, $t = \frac{\log.\text{ of } a - \log.\text{ of } p}{\log.\text{ of R}}$ the time.

From which any one of the quantities may be found, when the rest are given.

For example, suppose it were required to find in how many years any principal sum will double itself, at any rate of interest. In this case we must employ the 4th theorem, where a will be $= 2p$, and then it is

$$t = \frac{\mathrm{l.}\ a - \mathrm{l.}\ p}{\log.\ \mathrm{R.}} = \frac{\mathrm{l.}\ 2p - \mathrm{l.}\ p}{\log.\ \mathrm{R.}} = \frac{\log.\ 2}{\log.\ \mathrm{R.}}$$

So, if the rate of interest be 5 per cent. per annum; then $\mathrm{R} = 1 + \cdot05 = 1\cdot05$, and hence

$$t = \frac{\log.\ 2.}{\log.\ 1\cdot05} = \frac{\cdot3010300}{\cdot0211893} = 14\cdot2067 \text{ nearly:}$$

that is, any sum doubles in $14\frac{1}{4}$ years nearly, at the rate of 5 per cent. per annum compound interest.

Compound interest is also computed by means of such a table as the following; containing the amounts of £1 from one year to forty, at various rates of interest:—

Years.	At 3 per Cent.	At 3½ per Cent.	At 4 per Cent.	At 4½ per Cent.	At 5 per Cent.	At 6 per Cent.
1	1·03000	1·03500	1·04000	1·04500	1·05000	1·06000
2	1·06090	1·07123	1·08160	1·09203	1·10250	1·12360
3	1·09273	1·10872	1·12486	1·14117	1·15763	1·19102
4	1·12551	1·14752	1·16986	1·19252	1·21551	1·26248
5	1·15927	1·18769	1·21665	1·24618	1·27628	1·33823
6	1·19405	1·22926	1·26532	1·30226	1·34010	1·41852
7	1·22987	1·27228	1·31593	1·36086	1·40710	1·50363
8	1·26677	1·31681	1·36857	1·42210	1·47746	1·59385
9	1·30477	1·36290	1·42331	1·48610	1·55133	1·68948
10	1·34392	1·41060	1·48024	1·55297	1·62890	1·79085
11	1·38423	1·45997	1·53945	1·62285	1·71034	1·89830
12	1·42576	1·51107	1·60103	1·69588	1·79586	2·01220
13	1·46853	1·56396	1·66507	1·77220	1·88565	2·13293
14	1·51259	1·61869	1·73168	1·85194	1·97993	2·26090
15	1·55797	1·67535	1·80094	1·93528	2·07893	2·39656
16	1·60471	1·73399	1·87298	2·02237	2·18287	2·54035
17	1·65285	1·79468	1·94790	2·11338	2·29202	2·69277
18	1·70243	1·85749	2·02582	2·20848	2·40662	2·85434
19	1·75351	1·92250	2·10685	2·30786	2·52695	3·02560
20	1·80611	1·98979	2·19112	2·41171	2·65330	3·20714
21	1·86029	2·05943	2·27877	2·52024	2·78596	3·39956
22	1·91610	2·13151	2·36992	2·63365	2·92526	3·60354
23	1·97359	2·20611	2·46472	2·75217	3·07152	3·81975
24	2·03279	2·28333	2·56330	2·87601	3·22510	4·04893
25	2·09378	2·36324	2·66584	3·00543	3·38635	4·29187
26	2·15659	2·44596	2·77247	3·14068	3·55567	4·54938
27	2·22129	2·53157	2·88337	3·28201	3·73346	4·82235
28	2·28793	2·62017	2·99870	3·42970	3·92013	5·11169
29	2·35657	2·71188	3·11865	3·58404	4·11614	5·41839
30	2·42726	2·80679	3·24340	3·74532	4·32194	5·74349

Years.	At 3 per Cent.	At 3½ per Cent.	At 4 per Cent.	At 4½ per Cent.	At 5 per Cent.	At 6 per Cent.
31	2·50008	2·90503	3·37313	3·91386	4·53804	6·08810
32	2·57508	3·00671	3·50806	4·08998	4·76494	6·45339
33	2·65234	3·11194	3·64838	4·27403	5·00319	6·84059
34	2·73191	3·22086	3·79432	4·46636	5·25335	7·25103
35	2·81386	3·33359	3·94609	4·66735	5·51602	7·68609
36	2·89828	3·45027	4·10393	4·87738	5·79182	8·14725
37	2·98523	3·57103	4·26809	5·09686	6·08141	8·63609
38	3·07478	3·69601	4·43881	5·32622	6·38548	9·15425
39	3·16703	3·82537	4·61637	5·56590	6·70475	9·70351
40	3·26204	3·95926	4·80102	5·81636	7·03999	10·28572

With the aid of the foregoing table we may calculate the interest, or amount, of any principal sum for any time, not more than forty years. For an example, take £523 for fifteen years, at five per cent. per annum, compound interest. In the table on the line 15, and column 5 per cent. is the amount of £1 viz.— . . 2·07893
This multiplied by the principal . 523

gives the amount . . 1087·28039
or £1087 *5s. 7½d.* Therefore the interest is *£564 5s. 7½d.*

The lawfulness of taking any interest whatever has been sometimes agitated; and the school divines have stigmatised it as contrary to the divine law both natural and revealed. But the Mosaical precept was clearly a branch of the jurisprudential or political law of the Jews, and not a moral precept; for while it prohibited the Jews from taking usury of their brethren, it in express words (Deut. xxiii. 20), permitted them to take it of a stranger, which proves that the taking of moderate usury, as a reward for the use, for so the word signifies, is not malum in se; since it was allowed where any but an Israelite was concerned. As to the reason, deduced from the natural barrenness of money, ascribed to Aristotle, the same may with equal force be alleged of houses, which never breed houses; and of various other things, which nobody doubts it is lawful to let on hire. He who demands an exorbitant price for the accommodation wanted, acts unjustly and immorally in either case; but there is no good cause for blaming him in the one more than in the other.

Upon the two principles of inconvenience and hazard, compared together, different nations have at different times established different rates of interest. The Romans at one time allowed centissimæ, one per cent. monthly, or twelve per cent. per annum, to be taken for common loans; but Justinian reduced it to trientes, or one-third of the as or centissimæ, that is four per cent.; but allowed higher interest to be taken of merchants, because there the hazard is greater. Grotius informs us, that in Holland the rate of interest was then eight per cent. in common loans, but twelve to merchants. Our law establishes one standard for all alike, where the pledge or security itself is not put in jeopardy; lest, under the general pretence of vague and indeterminate hazards, a door should be opened to fraud and usury; leaving specific hazards to be provided against by specific insurances, or by loans upon respondentia or bottomry. But, as to the rate of legal interest, it has varied and decreased for 200 years past, according as the quantity of specie in the kingdom has increased by accessions of trade, the introduction of paper credit, and other circumstances. The statute 37 Hen. VIII. c. 9, confined interest to ten per cent. and so did the statute 13 Eliz. c. 8. But as, through the encouragements given in her reign to commerce, the nation grew more wealthy; so, under her successor, the statute 21 Jac. I. c. 17 reduced it to eight per cent.; as did the statute 12 Car. II. c. 13, to six: and lastly, by the statute 12 Ann. st. 2, c. 16, it was brought down to five per cent. yearly, which is now the extremity of legal interest that can be taken. But yet, if a contract which carries interest be made in a foreign country, our courts will direct the payment of interest according to the law of that country in which the contract was made. Thus Irish, American, Turkish, and Indian interest, have been allowed in our courts to the amount of even twelve per cent. For the moderation or exorbitance of interest depends upon local circumstances; and the refusal to enforce such contracts would put a stop to all foreign trade. And, by statute 14 Geo. III. c. 79, all mortgages and other securities upon estates or other property in Ireland or the plantations, bearing interest not exceeding six per cent., shall be legal, though executed in the kingdom of Great Britain: unless the money lent shall be known at the time to exceed the value of the thing in pledge; in which case also, to prevent usurious contracts at home, under color of such foreign securities, the borrower shall forfeit treble the sum so borrowed.

The only case, in which compound interest is allowed, by the laws of Great Britain, is that of annuities.

INTERFERE', *v. n.* Lat. *inter* and *ferio.* To interpose; to intermeddle; to clash; to oppose each other. A horse is said to interfere, when the side of one of his shoes strikes against and hurts one of his fetlocks; or the hitting one leg against another, and striking off the skin.

If each acts by an independent power, their commands may *interfere.* *Smalridge's Sermons.*

So cautious were our ancestors in conversation, as never to *interfere* with party disputes in the state. *Swift.*

I made no wars, I added no new imposts
I *interfered* not with their civic lives.
Byron. Tragedy. Sardanapalus.

So firm is my reliance on the arbitration of chance, that I can assure my readers, many is the good paper for the subject of which they are indebted to her *interference.* *Canning. Microcosm.*

INTER'FLUENT, *adj.* Latin *interfluens.* Flowing between.

Air may consist of any terrene or aqueous corpuscles, kept swimming in the *interfluent* celestial matter. *Boyle.*

INTERFUL'GENT, *adj.* Lat. *inter* and *fulgens.* Shining between.

INTERFUSED', *adj.* Lat. *interfusus.* Poured or scattered between.

The ambient air wide *interfused,*
Embracing round this florid earth. *Milton.*

INTERJA'CENCY, *n. s.* } Lat. *interjaceo.* INTERJA'CENT, *adj.* } The act of lying INTERJEC'TION, *n. s.* } between; the thing lying between; the state of being interposed: and thus interjection is a part of speech that discovers the mind to be seized or affected with some passion: such as are in English, O! alas! ah!

The sea itself must be very broad, and void of little islands *interjacent,* else will it yield plentiful argument of quarrel to the kingdoms which it serveth. *Raleigh.*

Laughing causeth a continual expulsion of the breath, with the loud noise which maketh the *interjection* of laughing. *Bacon.*

England and Scotland is divided only by the *interjacency* of the Tweed and some desert ground. *Hale.*

Their wild natural notes, when they would express their passions, are at the best but like natural *interjections,* to discover their passions or impressions.
Id. Origin of Mankind.

Its fluctuations are but motions, which winds, storms, shores, and every *interjacency* irregulates. *Browne.*

INTERIM, *n. s.* Lat. *interim.* Mean time; intervening time.

I a heavy *interim* shall support,
By his dear absence. *Shakspeare. Othello.*

One bird happened to be foraging for her young ones, and in this *interim* comes a torrent that washes away nest, birds, and all. *L'Estrange.*

In this *interim* my women asked what I thought. *Tatler.*

INTERIM, a name given to a formulary, or kind of confession of the articles of faith, obtruded upon the Protestants after Luther's death by the emperor Charles V., when he had defeated their forces; so called because it was only to take place in the interim, till a general council should have decided all points in dispute between the Protestants and Romanists. It retained most of the doctrines and ceremonies of the Romanists, excepting that of marriage, which was allowed to the clergy, and communion to the laity under both kinds. Most of the Protestants rejected it. There were two other interims; one of Leipsic, the other of Franconia.

INTERJOIN', *v. a.* *Inter* and join. To join mutually; to intermarry.

So fellest foes,
Whose passions and whose plots have broke their sleep,
To take the one the other, by some chance,
Some trick not worth an egg, shall grow dear friends,
And *interjoin* their issues.
Shakspeare. Coriolanus, act. iv.

INTE'RIOR, *adj.* Lat. *interior;* Fr. *interieur.* Internal; inner; not outward; not superficial.

The fool-multitude, that chuse by show,
Not learning more than the fond eye doth teach,
Which pry not to the *interiour.* *Shakspeare.*

The grosser parts, thus sunk down, would harden, and constitute the *interiour* parts of the earth. *Burnet.*

INTERKNOWL'EDGE, *n. s.* *Inter* and knowledge. Mutual knowledge.

All nations have *interknowledge* one of another, either by voyage into foreign parts, or by strangers that come to them. *Bacon.*

INTERLACE', *v. a.* Fr. *entrelasser.* To intermix; to put one thing within another.

Some are to be *interlaced* between the divine readings of the law and prophets. *Hooker.*

The ambassadors *interlaced,* in their conference, the purpose of their master to match with the daughter of Maximilian. *Bacon.*

They acknowledge what services he had done for the commonwealth, yet *interlacing* some errors, wherewith they seemed to reproach him. *Hayward.*

INTERLAPSE', *n. s.* *Inter* and lapse. The flow of time between any two events.

These dregs are calcined into such salts, which, after a short *interlapse* of time, produce coughs. *Harvey.*

INTERLARD', *v. a.* Fr. *entrelarder.* To mix meat with bacon, or fat; to diversify lean with fat: to interpose; to insert between.

Jests should be *interlarded,* after the Persian custom, by ages young and old. *Carew.*

To diversify by mixture.

The laws of Normandy were the defloration of the English laws, and a transcript of them, though mingled and *interlarded* with many particular laws of their own, which altered the features of the original. *Hale's Laws of England.*

Phillips has used this word very harshly, and probably did not understand it.

They *interlard* their native drinks with choice
Of strongest brandy. *Phillips.*

INTERLEAVE', *v. a.* Inter and leave. To chequer a book by the insertion of blank leaves.

INTERLINE', *v. a.* } Lat. *inter* and *linea.* INTERLINEA'TION, *n. s.* } To write in alternate lines; to correct by interposed lines.

When, by *interlining* Latin and English one with another, he has got a moderate knowledge of the Latin tongue, he may then be advanced farther. *Locke.*

Three things render a writing suspected: the person producing a false instrument, the person that frames it, and the *interlining* and rasing out of words contained in such instruments. *Ayliffe's Parergon.*

The muse invoked, sit down to write,
Blot out, correct, and *interline.* *Swift.*

Many clergymen write in so diminutive a manner,

with such frequent blots and *interlineations*, that they are hardly able to go on without perpetual hesitations. *Id.*

INTERLINK', *v. a.* Inter and link. To connect chains one to another; to join one in another.

The fair mixture in pictures causes us to enter into the subject which it imitates, and imprints it the more deeply into our imagination and our memory: these are two chains which are *interlinked*, which contain, and are at the same time contained. *Dryden.*

INTERLOCU'TION, *n. s.*, INTERLOCU'TOR, *n. s.*, INTERLOC'UTORY, *adj.* Lat. *inter* and *loquor*. Dialogue; alternate speech; a preparatory proceeding in law, before final decision, is called an interlocution: a person who talks with another, an interlocutor: interlocutory, a mode of speech which consists of dialogue.

The plainest and the most intelligible rehearsal of the psalms they favor not, because it is done by *interlocution*, and with a mutual return of sentences from side to side. *Hooker.*

When the minister by exhortation raiseth them up, and the people by protestation of their readiness declare he speaketh not in vain unto them; these *interlocutory* forms of speech, what are they else but most effectual, partly testifications, and partly inflammations of all piety? *Id.*

Some morose readers shall find fault with my having made the *interlocutors* compliment with one another. *Boyle.*

These things are called accidental, because some new incident in judicature may emerge upon them, on which the judge ought to proceed by *interlocution*. *Ayliffe's Parergon.*

INTERLOCUTORY DECREE, in English law. In a suit in equity, if any matter of fact be strongly controverted, the fact is usually directed to be tried at the bar of the court of king's bench, or at the assizes, upon a feigned issue. If a question of mere law arises in the course of a cause, it is the practice of the court of chancery to refer it to the opinion of the judges of the court of king's bench, upon a case stated for the purpose. In such cases, interlocutory decrees or orders are made.

INTERLOCUTORY JUDGMENTS are such as are given in the middle of a cause, upon some plea proceeding on default, which is only intermediate, and does not finally determine or complete the suit. But the interlocutory judgments most usually spoken of are those incomplete judgments whereby the right of the plaintiff is established, but the quantum of damages sustained by him is not ascertained, which is the province of a jury. In such a case a writ of enquiry issues to the sheriff, who summons a jury, enquires of the damages, and returns to the court the inquisition so taken, whereupon the plaintiff's attorney taxes costs, and signs final judgment. Interlocutory order is that which decides not the cause, but only settles some intervening matter relating to the cause. As, where an order is made in chancery for the plaintiff to have an injunction, to quit possession till the hearing of the cause; this order, not being final, is called interlocutory.

INTERLO'PER, *n. s.*, INTERLOPE', *v. n.* Lat. *inter* and Dut. *loopen*. To run between parties and intercept the advantage that one should gain from the other; to traffic without a proper license; to forestall; to anticipate irregularly: interloper, one who runs into business where he has no right; an officious intruder.

The swallow was a fly-catcher, and was no more an *interloper* upon the spider's right, than the spider was upon the swallow's. *L'Estrange.*

The patron is desired to leave off this *interloping* trade, or admit the knights of the industry to their share. *Tatler.*

INTERLU'CENT, *adj.* Latin, *interlucens* Shining between.

INTERLUDE, *n. s.* Lat. *inter* and *ludus*. Something played at the intervals of festivity; a farce.

When there is a queen, and ladies of honor attending her, there must sometimes be masques, and revels, and *interludes*. *Bacon.*

Dreams are but *interludes*, which fancy makes;
When monarch reason sleeps, this mimick wakes. *Dryden.*

INTERLU'ENCY, *n. s.* Latin, *interluo*. Water interposited; interposition of a flood.

Those parts of Asia and America, which are now disjoined by the *interluency* of the sea, might have been formerly contiguous. *Hale.*

INTERLU'NAR, *adj.*, INTERLU'NARY, *adj.* Lat. *inter* and *luna*. Belonging to the time when the moon, about the change, is invisible

The sun to me is dark,
And silent as the moon,
When she deserts the night,
Hid in her vacant *interlunar* cave. *Milton.*

We add the two Egyptian days in every month, the *interlunary* and plenilunary exemptions. *Browne.*

INTERMAR'RY, *v. n.*, INTERMAR'RIAGE, *n. s.* Inter and marriage. Marriage between two families.

Because the alliances and *intermarriages*, among so small a people, might obstruct justice, they have a foreigner for judge of St. Marino. *Addison.*

About the middle of the fourth century from the building of Rome, it was declared lawful for nobles and plebeians to *intermarry*. *Swift.*

INTERMED'DLE, *v. n.* & *v. a.*, INTERMED'DLER, *n. s.* Fr. *entremêler*. To interpose officiously; to intermix, or mingle; perhaps for intermelled: intermeddler, one who interferes in the business of others without right.

Many other adventures are *intermeddled*; as the love of Britomert and the virtuousness of Belphœbe. *Spenser.*

The practice of Spain hath been by war, and by conditions of treaty, to *intermeddle* with foreign states, and declare themselves protectors-general of Catholicks. *Bacon.*

There were no ladies who disposed themselves to *intermeddle* in business. *Clarendon.*

There's hardly a greater pest to government and families, than officious tale-bearers, and busy *intermeddlers*. *L'Estrange.*

Shall strangers, saucy *intermeddlers*! say,
Thus far, and thus, are you allowed to punish? *A. Philips.*

INTERME'DIACY, *n. s.*, INTERME'DIAL, *adj.*, INTERME'DIATE, *adj.*, INTERME'DIATELY, *adv.* Lat. *inter* and *medius*. Interposition for good: intermedial, lying between: intermediate, holding the middle

place between extremes: intermediately, by way of intervention.

The love of God makes a man temperate in the midst of feasts, and is active enough without any *intermedial* appetites. *Taylor.*

A gardener prepares the ground, and in all the *intermedial* spaces he is careful to dress it. *Evelyn.*

Do not the most refrangible rays excite the shortest vibrations for making a sensation of a deep violet, the least refrangible the largest for making a sensation of deep red, and the several *intermediate* sorts of rays, vibrations of several *intermediate* bignesses, to make sensations of the several *intermediate* colors? *Newton's Opticks.*

Those general natures, which stand between the nearest and most remote, are called *intermediate*. *Watts.*

INTERMELL', *v. a.* Fr. *entremêler*. To mix; to mingle. Not in use.

By occasion hereof many other adventures are *intermelled*, but rather as accidents than intendments. *Spenser.*

INTER'MENT, *n. s.* Fr. *interment*; and from *inter*. Burial; sepulchre. See INTER.

By the ducal order
To forward the preparatory rites
For the late Foscari's *interment*.
Byron. Tragedy. Two Foscari.

INTERMENT is the act of burying or depositing a deceased person in the earth. Placing the body in a cave was probably the most ancient method of disposing of the dead; and appears to have been propagated by the Phœnicians throughout the countries to which they sent colonies. When an ancient hero died or was killed in a foreign expedition, as his body was liable to corruption, and for that reason unfit to be transported entire, they fell on the expedient of burning, in order to bring home the ashes, to oblige the manes to follow; that so his country might not be destitute of the benefit of his tutelage. Hence burning seems to have had its origin; and by degrees it became common to all who could bear the expense of it, and took place of the ancient burying: thus catacombs became disused among the Romans, after they had borrowed the manner of burning from the Greeks, and then none but slaves were laid in the ground. See BURIAL, CATACOMBS, and FUNERAL RITES.

History records many traces of the respect which the Indians, Egyptians, and Syrians, paid to the dead. The Romans, in the infancy of their empire, paid little attention to their dead. Acilius Aviola, having fallen into a lethargic fit, was supposed to be dead; he was therefore carried to the funeral pile; the fire was lighted up; and, though he cried out he was still alive, he perished for want of speedy assistance. The Prætor Lamia met with the same fate. Tubero, who had been Prætor, was saved from the funeral pile. Diogenes Laertius tells us, that Empedocles, in the 84th Olympiad, restored to life Ponthia, a women of Agrigentum, when she was about to be interred. Asclepiades, a physician, who lived in the time of Pompey the Great about A. A. C. 120, returning from his country house, observed near the walls of Rome a grand convoy and a crowd of people, who were in mourning assisting at a funeral. He approached the supposed dead body, and, imagining that he perceived signs of life in it, he ordered the bystanders to take away the flambeaux, to extinguish the fire, and to pull down the funeral pile. A murmur on this arose among the company. Some said that they ought to believe the physician, while others turned both him and his profession into ridicule. The relations, however, yielded to the remonstrances of Asclepiades; they consented to defer the obsequies for a little; and the consequence was the restoration of the supposed dead person to life. These examples, and several others of the like nature, induced the Romans to delay funerals longer, and to enact laws to prevent precipitate interments.

The Greeks also established laws for the protection of the dead. At Athens the law required that no person should be interred before the third day; and in the greater part of the cities of Greece a funeral did not take place till the sixth or seventh. When a man appeared to have breathed his last, his body was generally washed by his nearest relations, with warm water mixed with wine. They afterwards anointed it with oil; and covered it with a dress made of fine linen. The body was afterwards laid upon a couch in the entry of the house, where it remained till the time of the funeral. At the magnificent obsequies with which Alexander honored Hephæstion the body was not burned till the tenth day. At Rome the nearest relations generally closed the eyes of the deceased; and the body was bathed with warm water, either to render it fitter for being anointed with oil, or to reanimate the principle of life, which might remain suspended without manifesting itself. On the second day, after the body had been washed a second time, it was anointed with oil and balm. On the third day the body was clothed according to its dignity and condition. On the fourth, the body was placed on a couch, and exposed in the vestibule of the house, with the face turned towards the entrance, and the feet near the door; in this situation it remained till the end of the week. Near the couch were lighted wax-tapers, a small box in which perfumes were burnt, and a vessel full of water for purification, with which those who approached the body besprinkled themselves. On the eighth day the funeral rites were performed (see FUNERAL); but, to prevent the body from corrupting before that time, salt, wax, the resinous gum of the cedar, myrrh, honey, balm, gypsum, lime, asphaltes, or bitumen of Judea, and several other substances, were employed. The body was carried to the pile with the face uncovered, unless wounds or the nature of the disease had rendered it loathsome and disgusting. In such a case a mask was used, made of a kind of plaster. This method of concealment was employed by Nero, after having caused Germanicus to be poisoned: for the effect of the poison had become very visible, by livid spots and the blackness of the body; but a shower of rain happening to fall, it washed the plaister entirely away, and thus the horrid crime of fratricide was discovered. In the primitive church the dead were washed and then anointed;

the body was wrapped up in linen, or clothed in a dress of more or less value according to circumstances, and it was not interred until after being exposed and kept some days in the house.

In Britain bodies generally remain unburied three or four days, often not so long. In many other places, and on many occasions in all places, too much precipitation attends this office; or at least there is a great neglect of due precautions in regard to the body. As soon as the semblance of death appears, the chamber of the sick is generally deserted by friends, relatives, and physicians; and the apparently dead, though frequently living body, is committed to the management of an ignorant and unfeeling nurse, whose care extends no farther than laying the limbs straight, and securing her accustomed perquisites. The bed-clothes are immediately removed, and the body is exposed to the air. This, when cold, must extinguish any spark of life that may remain, and which, by a different treatment, might have been kindled into a flame; or it may only continue to repress it, and the unhappy person afterwards revive amidst the horrors of the tomb.

The difficulty of distinguishing a person apparently dead from one who is really so, has, in all countries where bodies have been interred too precipitately, rendered it necessary for the law to interfere. At Geneva there are people appointed to inspect all dead bodies; to examine whether the person be really dead, and whether one died naturally or by violence. In the north, as well as in Genoa, it is usual not to bury the dead till after three days. In Holland people carry their precautions much farther, and delay the funerals longer.

Not only the ordinary signs of death are very uncertain, but we may say the same of the stiffness of the limbs, which may be convulsive; of the dilation of the pupil of the eye, which may proceed from the same cause. Haller, convinced of the uncertainty of all these signs, proposes a new one, which he considers as infallible. 'If the person,' says he, 'be still in life, the mouth will immediately shut of itself, because the contraction of the muscles of the jaw will awaken their irritability.' Life is preserved a long time in the passage of the intestines. The sign pointed out by Dr. Fothergill appears to deserve more attention. 'If the air blown into the mouth,' says this physician, 'passes freely through all the alimentary channel, it affords a strong presumption that the irritability of the internal sphincters is destroyed, and consequently that life is at an end.' The Turks wash the bodies of their dead before interment. As their ablutions are complete, and no part of the body escapes their attention, they easily perceive whether one be dead or alive, by examining, among other things, whether the sphincter ani has lost its power of contraction. If this muscle still remains contracted, they warm the body and endeavour to recal it to life.

INTERMIGRA'TION, *n. s.* Fr. *intermigration;* Lat. *inter* and *migro.* Act of removing from one place to another, so as that, of two parties removing, each takes the place of the other.

Men have a strange variety in colour, stature, and humour; and all arising from the climate, though the continent be but one, as to point of access, mutual intercourse, and possibility of *intermigrations.* *Hale's Origin of Mankind.*

INTER'MINABLE, *adj.*
INTER'MINATE, *adj.*
INTERMINA'TION, *n. s.*
Lat. *in* and *terminus.* Immense, without limit or boundary: an intermination is a menace or threat, from Lat. *intermino.*

Within a thicket I reposed; when round
I ruffled up fallen leaves in heaps, and found,
Let fall from heaven, a sleep *interminate.*
Chapman's Odyssey.

The threats and *interminations* of the Gospel, those terrors of the Lord, as goads may drive those brutish creatures who will not be attracted. *Decay of Piety.*

As if they would confine the' *interminable,*
And tie him to his own prescript.
Milton. Agonistes.

What are ye? what
Is this blue wilderness of *interminable*
Air, where ye roll along, as I have seen
The leaves along the limpid streams of Eden?
Byron. Cain.

INTERMIN'GLE, *v. a.* Inter and mingle. To mingle; to mix; to put some things amongst others.

The church in her liturgies hath *intermingled,* with readings out of the New Testament, lessons taken out of the law and prophets. *Hooker.*

My lord shall never rest:
I'll *intermingle* every thing he does
With Cassio's suit. *Shakspeare. Othello.*

Here sailing ships delight the wandering eyes;
There trees and *intermingled* temples rise. *Pope.*

INTERMIS'SION, *n. s.*
INTERMIS'SIVE, *adj.*
INTERMIT', *v. a.*
INTERMIT'TENT, *adj.*
Fr. *intermission;* Lat. *inter* and *mitto.* Cessation for a time; pause; intervenient time; the state of intermission: the space between the paroxysms of fever is an intermission: intermit, to come by fits; to deviate from regularity; thus an intermittent pulse loses a beat at intervals; to grow mild and free from fever when the paroxysm is over; to cease from giving severe pain.

If nature should *intermit* her course, and leave altogether, though it were but for a-while, the observation of her own laws. *Hooker.*

Came a reeking post,
Delivered letters, spight of *intermission,*
Which presently they read.
Shakspeare. King Lear.

Run to your houses, fall upon your knees;
Pray to the gods to *intermit* the plague
That needs must light on this ingratitude.
Shakspeare.

I count *intermission* almost the same thing as change; for that that hath been *intermitted* is after a sort new. *Bacon.*

Words borrowed of antiquity have the authority of years, and out of their *intermission* do win to themselves a kind of grace-like newness.
Ben Jonson.

Pleasure is nothing but the *intermission* of pain, the enjoying of something I am in great trouble for till I have it. *Selden.*

Rest or *intermission* none I find. *Milton.*

Adam estranged in look and altered style,
Speech intermitted thus to Eve renewed:
Would thou hadst hearkened to my words and staid
With me as I besought thee. *Id. Paradise Lost.*

As though there were any feriation in nature, or justitiums imaginable in professions, whose subject is under no intermissive but constant way of mutation, this season is commonly termed the physicians' vacation. *Browne's Vulgar Errours.*

We are furnished with an armour from Heaven, but if we are remiss, or persuaded to lay by our arms, and *intermit* our guard, we may be surprised. *Rogers.*

But, as he had some lucid *intermissions*,
She next decided he was only bad,
Yet, when they asked her for her depositions,
No sort of explanation could be had. *Byron.*

INTERMIX', *v. a.* & *v. n.* } Lat. *inter* and
INTERMIX'TURE, *n. s.* } *misceo*. To mingle or mix together: intermixture, a mass formed by mingling bodies together; a mixture.

In this height of impiety there wanted not an *intermixture* of levity and folly. *Bacon's Henry VI.*

Her persuasions she *intermixed* with tears, affirming, that she would depart from him. *Hayward.*

Reveal
To Adam what shall come in future days,
As I shall thee enlighten: *intermix*
My covenant in the woman's seed renewed. *Milton.*

I doubt not to perform the part of a just historian to my royal master, without *intermixing* with it any thing of the poet. *Dryden.*

INTERMUN'DANE, *adj.* Lat. *inter* and *mundus*. Subsisting between worlds, or between orb and orb.

The vast distances between these great bodies are called *intermundane* spaces; in which, though there may be some fluid, yet it is so thin and subtile, that it is as much as nothing. *Locke.*

INTERMU'RAL, *adj.* Lat. *inter, muralis, murus*. Lying between walls.—*Ainsworth.*

INTERMU'TUAL, *adj.* Inter and mutual. Mutual; interchanged. Inter before mutual is improper.

A solemn oath religiously they take,
By *intermutual* vows protesting there,
This never to reveal, nor to forsake
So good a cause. *Daniel's Civil War.*

INTERN', *adj.* } Fr. *interne*; Lat. *in-*
INTE'RNAL, *adj.* } *ternus*. Inward; intes-
INTER'NALLY, *adv.* } tine; intrinsic; real: internally, within; mentally; intellectually.

The midland towns are most flourishing, which shews that her riches are *intern* and domestick. *Howel.*

We are symbolically in the sacrament, and by faith and the spirit of God *internally* united to Christ. *Taylor.*

That ye shall be as gods, since I as man,
Internal man, is but proportion meet. *Milton.*
Myself, my conscience, and *internal* peace. *Id.*

If we think most men's actions to be the interpreters of their thoughts, they have no such *internal* veneration for good rules. *Locke.*

For praise too dearly loved, or warmly sought,
Enfeebles all *internal* strength of thought.
Goldsmith. Traveller.

But there is a wide distinction between her *internal* regulations and foreign aggressions upon her. *Canning's Speeches.*

INTERNE'CINE, *adj.* } Lat. *internecinus*.
INTERNE'CION, *n. s.* } Endeavouring mutual destruction: massacre; slaughter.

That natural propension of self-love, and natural principle of self-preservation, will necessarily break out into wars and *internecions*. *Hale's Origin of Mankind.*

The Egyptians worshipped dogs, and for
Their faith made *internecine* war. *Hudibras.*

INTERNUN'CIO, *n. s.* Lat. *internuncius*. Messenger between two parties.

INTERPELLA'TION, *n. s.* Fr. *interpellation*; Lat. *interpellatio*. A summons; a call upon.

In all extracts judicial one citation, monition, or extrajudicial *interpellation*, is sufficient. *Ayliffe.*

INTER'POLATE, *v. a.* } Fr. *interpoler*;
INTERPOLA'TION, *n. s.* } Lat. *interpolo*. To
INTER'POLATOR, *n. s.* } put any thing into a place to which it does not belong; to renew: interpolation is something added between the original matter.

This motion of the heavenly bodies themselves seems to be partly continued and unintermitted, as that motion of the first moveable, partly *interpolated* and interrupted. *Hale.*

I have changed the situation of some of the Latin verses, and made some *interpolations*. *Cromwell to Pope.*

The Athenians were put in possession of Salamis by another law, which was cited by Solon, or, as some think, *interpolated* by him for that purpose. *Pope.*

You or your *interpolator* ought to have considered. *Swift.*

INTERPO'SAL, *n. s.* } Fr. *interposer*; Lat.
INTERPOSE', *v. a.* & *v. n.* } *interpono*. Agency
INTERPO'SER, *n. s.* } between two par-
INTERPOSIT'ION, *n. s.* } ties; any thing coming between: to place between; to thrust in as an obstruction; to offer as a relief; to mediate or interrupt: interposition, any thing interposed; a mediation, generally in a good sense.

I will make haste; but, 'till I come again,
No bed shall e'er be guilty of my stay;
No rest be *interposer* 'twixt us twain. *Shakspeare.*

The nights are so cold, fresh, and equal, by reason of the intire *interposition* of the earth, as I know of no other part of the world of better or equal temper. *Raleigh.*

Some weeks the king did honourably *interpose*, both to give space to his brother's intercession, and to show that he had a conflict with himself what he should do. *Bacon.*

A shelter, and a kind of shading cool
Interposition, as a summer's cloud. *Milton.*

Our overshadowed souls may be emblemed by crusted globes, whose influential emissions are intercepted by the *interposal* of the benighting element. *Glanville's Scepsis.*

The *interposal* of my lord of Canterbury's command, for the publication of this mean discourse, may seem to take away my choice. *South.*

The town and abbey would have come to an open rupture, had it not been timely prevented by the *interposition* of their common protectors. *Addison.*

There never was a time when the *interposition* of the magistrate was more necessary to secure the honour of religion. *Atterbury.*

Human frailty will too often *interpose* itself among persons of the holiest function. *Swift.*

Suppose, unlooked for in a scene so rude,
Long hid by *interposing* hill or wood. *Cowper.*

With regard to myself, as well as others, the rage of despotism has been checked, and the triumphs of tyranny interrupted, by the *interposition* of parental authority. *Canning. Microcosm.*

INTER'PRET, *v. a.*
INTER'PRETABLE, *adj.*
INTERPRETA'TION, *n. s.*
INTERP'RETATIVE, *adj.*
INTERP'RETATIVELY, *adv.*
INTER'PRETER, *n. s.*
Fr. *interpreter;* Latin *interpretor.* To decipher; to give a solution; to expound: interpretable, capable of being expounded: interpretation, the act of interpreting; the sense given; the power of explaining: interpretatively, as may be collected by interpretation: interpreter, an expositor or translator.

Pharaoh told them his dreams: but there was none that could *interpret* them unto him. *Gen.* xli. 8.

It it be obscure or uncertain what they meant, charity, I hope, constraineth no man, which standeth doubtful of their minds, to lean to the hardest and worst *interpretation* that their words can carry. *Hooker.*

Look how we can, or sad, or merrily,
Interpretation will misquote our looks. *Shakspeare.*
You should be women,
And yet your beards forbid me to *interpret*
That you are so. *Id. Macbeth.*
What we oft do best,
By sick *interpreters*, or weak ones, is
Not ours, or not allowed: what worst, as oft,
Hitting a grosser quality, is cried up
For our best act. *Id. Henry VIII.*

We beseech thee to prosper this great sign, and to give us the *interpretation* and use of it in mercy. *Bacon.*

Though the creed apostolick were sufficient, yet when the church hath erected that additional bulwark against hereticks, the rejecting their additions may justly be deemed an *interpretative* siding with heresies. *Hammond.*

We think most men's actions to be the *interpreters* of their thoughts. *Locke.*

By this provision the Almighty *interpretatively* speaks to him in this manner: I have now placed thee in a well-furnished world. *Ray on the Creation.*

In the beginning the earth was without form and void; a fluid, dark, confused mass, and so it is understood by *interpreters*, both Hebrew and Christian. *Burnet.*

How shall any man, who hath a genius for history, undertake such a work with spirit, when he considers that in an age or two he shall hardly be understood without an *interpreter.* *Swift.*

Sacred *interpreter* of human thought,
How few respect or use thee as they ought.
Cowper. Conversation.
Why, what other
Interpretation should it bear?
Byron. Tragedy. Sardanapalus.

INTERPUNCTION, *n. s.* Fr. *interpunction;* Lat. *interpungo.* Pointing between words or sentences.

INTERREIGN', *n. s.*
INTERREG'NUM, *n. s.*
Lat. *inter* and *regno.* The time in which a throne is vacant between the death of a prince and accession of another.

The king knew there could not be any *interreign* or suspension of title. *Bacon's Henry VII.*

He would shew the queen my memorial, with the first opportunity, in order to have it done in this *interregnum* or suspension of title. *Swift.*

An INTERREGNUM can only happen in an elective kingdom, or in those anarchical governments where the rules of succession to the throne are not fixed by law. In an hereditary monarchy, whether absolute like that of Spain, or limited like that of Great Britain, there can be no interregnum, as no vacancy occurs between the death of one monarch and the accession of another; unless in the case of a disputed succession or a revolution, such as happened upon the abdication and flight of James II. The interregnum on that occasion lasted two months longer in Scotland than in England. See ENGLAND.

INTERREX, a magistrate who governs during an interregnum, or in the interval between the death of a monarch and the election or inauguration of his successor. This magistrate was first established in ancient Rome, and was almost as old as the city itself. After the death of Romulus there was an interregnum of a year, during which the senators were each interrex in their turn, five days a-piece. After the establishment of consuls, and a commonwealth, although there were no kings, yet the name and functions of the interrex were still preserved; for when the magistrates were absent, or when there was any irregularity in their election, or they had abdicated, so that the comitia could not be held, provided they were unwilling to create a dictator, they chose an interrex, whose office and authority were to last five days. To the interrex was delegated all the regal and consular authority, and he performed all their functions. He assembled the senate, held comitia, or courts, and took care the election of magistrates was according to the rules. The patricians alone had the right of electing an interrex.

INTERROGA'TE, *v.n.* & *v.a.*
INTERROGA'TION, *n. s.*
INTERROG'ATIVE, *adj.* & *n. s.*
INTERROG'ATIVELY, *adv.*
INTERROGA'TOR, *n. s.*
INTERROGA'TORY, *n. s.* & *adj.*
Fr. *interroger;* Lat. *inter* and *rogo.* To examine; to question: the act of questioning: interrogatory, a sentence which contains a question: interrogatively, in a manner which expresses a question: interrogation, a note that marks a question: interrogator, the person enquiring: interrogative, a pronoun used in putting questions, as who? or what?

But all his fantasie
Was turned for to lerne astrologie;
And coude a certain of conclusions
To demen by *interrogations*,
If that men asked him, in certain houres,
Whan that men shulde have drought or elles shoures.
Chaucer. The Milleres Tale.

Nor time, nor place,
Will serve long *interrogatories.*
Shakspeare. Cymbeline.

By his instructions, touching the queen of Naples, it seemeth he could *interrogate* touching beauty. *Bacon's Henry VII.*

His proof will be retorted by *interrogating*, shall the adulterer and the drunkard inherit the kingdom of God? *Hammond.*

He with no more civility began in captious manner to put *interrogatories* unto him. *Sidney.*

The examination was summed up with one question, Whether he was prepared for death? The boy

was frightened out of his wits by the last dreadful *interrogatory*. *Addison.*

Pray you, spare me
Further *interrogation*, which boots nothing
Except to turn a trial to debate.
Byron. Marino Faliero.

INTERROGATION, Gr. ερωτησις, erotesis, in rhetoric, is a figure in which the speaker introduces something by way of question, to make its truth more conspicuous. This figure is suited to express most passions and emotions of the mind; it serves also to bear down an adversary, and generally adds force, and variety, to discourse.

INTERROGATORY, in law, is a particular question demanded of a witness examined in a cause, especially in the court of Chancery. These interrogatories must be exhibited by the parties in suit on each side; which are either direct for the party that produces them, or counter, on behalf of the adverse party; and generally both plaintiff and defendant may exhibit direct, and counter, or cross interrogatories. They must be pertinent, and only to the points necessary; and either drawn or perused by counsel, and signed by them.

INTERRUPT', *v. a.* & *adj.* } Fr. *interrompre*; Lat. *inter* and *rumpo*. To hinder, whether persons or processes; to rescind; to divide: interrupt, containing a chasm: interruption, interposition; hindrance; intermission.
INTERRUP'TEDLY, *adv.*
INTERRUP'TER, *n. s.*
INTERRUP'TION, *n. s.*

Answer not before thou hast heard the cause; neither *interrupt* men in the midst of their talk.
Ecclus. xi. 8.

Bloody England into England gone,
O'erbearing *interruption*, spite of France.
Shakspeare.

Rage doth rend
Like *interrupted* waters, and o'erbear
What they are used to bear. *Id.*

Seest thou what rage
Transports our adversary, whom no bounds,
Nor yet the main abyss wide *interrupt*, can hold?
Milton.

Places severed from the continent by the *interruption* of the sea. *Hale's Origin of Mankind.*

This motion of the heavenly bodies seems partly uninterrupted, as that of the first moveable interpolated and *interrupted*. *Hale.*

The incident light that meets with a grosser liquor will have its beams either refracted or imbibed, or else reflected more or less *interruptedly* than they would be, if the body had been unmoistened.
Boyle on Colours.

You are to touch the one as soon as you have given a stroke of the pencil to the other, lest the *interruption* of time cause you to lose the idea of one part. *Dryden's Dufresnoy.*

Amidst the *interruptions* of his sorrow, seeing his penitent overwhelmed with grief, he was only able to bid her be comforted. *Addison.*

It suffers *interruption* and delay,
And meets with hindrance in the smoothest way.
Cowper. Progress of Error.

INTERSCAPU'LAR, *adj.* Lat. *inter* and *scapula*. Placed between the shoulders.

To INTERSCIND', *v. a.* Lat. *inter* and *scindo*. To cut off by interruption.

To INTERSCRIBE', *v. a.* Lat. *inter* and *scribo*. To write between.

INTERSE'CANT, *adj.* } Lat. *inter* and *seco*. To divide each other mutually; to cut; to meet and cross each other: intersection, the point where lines cross each other.
INTERSECT', *v. a.* & *v. n.*
INTERSEC'TION, *n. s.*

Perfect and vivaporous quadrupeds so stand in their position of proneness, that the opposite joints of neighbour legs consist in the same plane; and a line descending from their navel *intersects* at right angles the axis of the earth. *Browne.*

The first star of Aries, in the time of Meton the Athenian, was placed in the very *intersection* which is now elongated, and moved eastward twenty-eight degrees. *Id.*

The sagittal suture usually begins at that point where these lines *intersect*. *Wiseman's Surgery.*

Lands *intersected* by a narrow frith
Abhor each other. *Cowper's Task.*

INTERSECTION, in mathematics, is the cutting of one line, or plane, by another; or the point or line wherein two lines, or two planes cut each other. The mutual intersection of two planes is a right line. The centre of a circle is in the intersection of two diameters. The central point of a regular or irregular figure of four sides, is the point of intersection of the two diagonals.

INTERSERT', *v. a.* } Lat. *intersero*. To put in between other things.
INTERSER'TION, *n. s.*

These two *intersertions* were clear explications of the apostle's old form, God the father, ruler of all, which contained an acknowledgment of the unity.
Hammond.

If I may *intersert* a short speculation, the depth of the sea is determined in Pliny to be fifteen furlongs.
Brerewood.

INTERSPERSE', *v. a* } Lat. *interspersus*. To scatter about here and there.
INTERSPER'SION, *n. s.*

It is the editor's interest to insert what the author's judgment had rejected; and care is taken to *intersperse* these additions, so that scarce any book can be bought without purchasing something unworthy of the author. *Swift.*

For want of the *interspersion* of now and then an elegiac or a lyrick ode. *Watts on the Mind.*

Parks in which art preceptress Nature weds,
Nor gardens *interspersed* with flowery beds.
Cowper. Retirement.

It would be an endless task to point out every latent beauty, every unnoticed elegance, with which these productions are *interspersed*.
Canning. Microcosm.

INTERSTEL'LAR, *adj.* Lat. *inter* and *stella*. Intervening between the stars.

The *interstellar* sky hath so much affinity with the star, that there is a rotation of that as well as of the star. *Bacon.*

INTERSTELLAR is used to express those parts of the universe, that are beyond the limits of our solar system. In the interstellar regions, it is supposed there are many other systems of planets moving round the fixed stars, as the centres of their respective motions. And as it is probable that each fixed star is thus a sun to a number of habitable orbs, or earths, that move round it, the interstellar world must be infinitely the greatest part of the universe. See ASTRONOMY.

INTER'STICE, *n. s.* } Fr. *interstice*; Lat. *inter* and *sto*. Space between one thing and another: containing interstices.
INTERSTI'TIAL, *adj.*

In oiled papers, the *interstitial* division, being actuated by the accession of oil, becometh more transparent. *Browne.*

The sun shining through a large prism upon a comb placed immediately behind the prism, his light, which passed through the *interstices* of the teeth, fell upon a white paper: the breadths of the teeth were equal to their *interstices*, and seven teeth together with their *interstices* took up an inch. *Newton.*

INTERTEX'TURE, *n. s.* Lat. *intertexo.* Diversification of things mingled or woven one among another.

INTER-TIES, or INTERDUCES, in architecture, small pieces of timber, which lie horizontally between the summers, or between them and the cell or raising plate.

INTERTWINE', *v. a.* } Inter and twine, or
INTERTWIST'. } twist. To unite by twisting one in another.

Under some concourse of shades,
Whose branching arms thick *intertwined* might shield
From dews and damps of night his sheltered head.
Milton.

'Tis sad to hack into the roots of things,
They are so much *intertwisted* with the earth:
So that the branch a goodly verdure flings,
Freck not if an acorn gave it birth.
Byron. Don Juan.

IN'TERVAL, *n. s.* Fr. *intervalle:* Lat. *intervallum.* Space between places; interstice; vacuity; space unoccupied; void place; vacancy; vacant space.

With any obstacle let all the light be now stopped which passes through any one *interval* of the teeth, so that the range of colours which comes from thence may be taken away, and you will see the light of the rest of the ranges to be expanded into the place of the range taken away, and there to be coloured.
Newton's Opticks.

Time passing between two assignable points.

The century and half following was a very busy period, the *intervals* between every war being so short.
Swift.

These were the chief: each *interval* of Night
Was graced with many an undulating light.
Cowper. Table Talk.

Short as the *interval* is since I last met you in this place on a similar occasion, the events which have filled up that *interval* have not been unimportant.
Canning's Speeches.

Remission of a delirium or distemper.

Though he had a long illness, considering the great heat with which it raged, yet his *intervals* of sense being few and short, left but little room for the offices of devotion. *Atterbury.*

Some *intervals* of abstinence are sought
To edge the appetite; thou seekest none. *Blair.*

INTERVAL, in music. The distance between any given sound and another, strictly speaking, is neither measured by any common standard of extension nor duration; but either by immediate sensation, or by computing the difference between the numbers of vibrations produced by two or more sonorous bodies, in the act of sounding during the same given time. As the vibrations are slower and fewer during the same instant, for example, the sound is proportionally lower or graver; on the contrary, as during the same period the vibrations increase in number and velocity, the sounds are proportionably higher or more acute. An interval in music therefore, is properly the difference between the number of vibrations produced by one sonorous body of a certain magnitude and texture, and of those produced by anotner of a different magnitude and texture in the same time.

Intervals are divided into consonant and dissonant. A consonant interval is that whose extremes, or whose highest and lowest sounds, when simultaneously heard, coalesce in the ear, and produce an agreeable sensation, called by lord Kames a tertium quid. A dissonant interval, on the contrary, is that whose extremes, simultaneously heard, far from coalescing in the ear, and producing one agreeable sensation, are each of them plainly distinguished from the other, produce a grating effect upon the sense, and repel each other with an irreconcileable hostility. In proportion to the vibrations of different sonorous bodies, or of the same given time, the chords are more or less perfect, and consequently the intervals more or less consonant. When these vibrations never coincide at all, in the same given time, the discord is consummate, and consequently the interval absolutely dissonant.

Intervals are not only divided according to their natures, but also with respect to their degrees. In this view they are either enharmonic, chromatic, or diatonic. Of these therefore in their order, from the least to the greatest. An enharmonic interval is what they call the eighth part of a tone, or the difference between a major and minor semitone, generally distinguished by the name of a comma. For a more minute disquisition of this matter, our readers may consult the article COMMA in the Musical Dictionary, or the article MUSIC in this work. A chromatic interval consists properly of a minor semitone, but may also admit the major. A diatonic interval consists of a semitone-major at least, but may consist of any number of tones within the octave. When an octave higher or lower is assumed, it is obvious that we enter into another scale which is either higher or lower, but still a repetition of the former degrees of sound.

Intervals again are either simple or compound. All the intervals within any one octave are simple; such as the second major or minor, the third, the fourth, the fifth, the sixth, th seventh, &c.—Of these afterwards. All interva', whose extremes are contained in different octaves, such as the ninth, the tenth, the eleventh, the twelfth, the thirteenth, the fourteenth, the fifteenth, &c., may be termed compound intervals. The semitone either exactly or nearly divides the tone into two equal parts. In the theory of har monical computation three kinds of semitone are recognised, viz. the greatest, the intermediate, and the smallest semitone. But in practice, to which these explications are chiefly adapted, the semitone is only distinguished into major and minor. The semitone major is the difference between the third major and the fourth, as E F. Its ratio is as fifteen to sixteen, and it forms the least of all diatonic intervals. The semitone minor consists of the difference between the third major and minor: it may be marked in the same degree by a sharp or a flat, and it only forms a chromatic interval; its ratio

is as 24 to 25. Though some distinction is made between these semitones by the manner of marking them, yet on the organ and harpsichord no distinction can be made; nor is there any thing more common for us than to say, that D sharp in rising is E flat in descending, and so through the whole diapason above or below; besides the semitone is sometimes major and sometimes minor, sometimes diatonic, and sometimes chromatic, according to the different modes in which we compose or practise; yet in practice these are called semitones-minor, which are marked by sharps or flats, without changing the degree; and semitones major are those which form the interval of a second. With respect to the three semitones recognised in theory, the greatest semitone is the difference between a tone major and a semitone minor; and its ratio is as 25 to 27. The intermediate semitone is the difference between a semitone major and a tone major; and its ratio is as 128 to 135. In a word, the small semitone consists of the difference between the greatest and the intermediate semitone; and its ratio is as 125 to 128. Of all these intervals, there is only the semitone major, which is sometimes admitted as a second in harmony. The interval of a tone which characterises the diatonic species of composition, is either major or minor. The former consists of the difference between the fourth and fifth; and its ratio is as 8 to 9; and the latter, whose ratio is as 9 to 10, results from the difference between the third minor and the fourth. Seconds are distinguished into four kinds: two of which are not in practice sufficiently momentous to be mentioned. The second major is synonymous with the intervals of a tone; but, as that tone may be either major or minor, its ratio may be either as 8 to 9, or as 9 to 10. The second minor consists of the distance from B to C, or from EF; and its ratio is as 15 to 16. The third is so called because it consists of two gradations, or three diatonic sounds, as from G to B ascending, or from A to C, inclusive of the extremes; of which the first is a third major, composed of two full tones, and its ratio as 4 to 5; the second, a third minor, consisting of a tone and a semitone major, and its ratio as 5 to 6. The fourth has by some been reckoned an imperfect, but more justly, by others, a perfect chord. It consists of three diatonic degrees, but takes its name from the four different sounds of which it is formed; or, in other words, the number by which it is denominated includes the extremes. It is composed of a tone major, a tone minor, and a semitone major, as from C to F ascending; its ratio as 3 to 4. The fifth, next to the octave, is perhaps the most perfect interval, as least susceptible of alteration. The number whence it assumes its name likewise includes its extremes. It consists of two tones major, one minor, and a semitone major, as from A to E ascending; its ratio is as 2 to 3. The sixth is not found among the natural order of consonances, but only admitted by combination. It is not here necessary to mention its various distinctions and uses, as we only give an account of intervals in general. The sixth major consists of four tones and a semitone major, as from G to E ascending; its ratio is as 3 to 5. The sixth minor contains three tones and two semitones major, as from E to C ascending; its ratio is as 5 to 8. The seventh, as a reduplication of the second, is a dissonance. When major, it consists diatonically of five tones, three major, and two minor; and a major semitone, as from C to B ascending; its ratio is as 8 to 15. When minor, it consists of four tones, three major and one minor, and two major semitones, as from E to D ascending; its ratio is as 5 to 9. The octave is the most perfect of all chords, and in many cases hardly to be distinguished by the ear from a unison; that is to say, from that coincidence of sound produced by two musical strings, whose matter, lengths, diameters, and tensions are the same. As the vibrations of two strings in unison, during any given time, are precisely coincident; so whilst the lowest extreme of the octave vibrates once, the highest vibrates twice; and consequently its ratio is as 1 to 2, as from c to C ascending. It consists of six full tones and two semitones major. Its name is derived from the Latin octo, eight; because that number likewise includes its extremes. It may likewise be divided into twelve semitones. It contains the whole diatonic scale; and every series above or below consists only of the same returning sounds. From whence the natures, distances, and powers, of every interval greater than the octave, as the ninth, the tenth, the eleventh, the twelfth, the thirteenth, the fourteenth, the fifteenth, the triple octave, &c., may easily be computed. The celebrated M. Rousseau has the following judicious observations on this subject:—'We divide,' says he, 'as did the ancients, intervals into consonant and dissonant. The consonances are perfect or imperfect (See CHORD, and CONSONANCE,); dissonances are either such by nature, or become such by accident. There are only two intervals naturally dissonant, viz. the second and seventh, including their octaves or replications; nay, still these two may be reduced to one alone, as the seventh is properly no more than a replication of the second; for B, the seventh above the lowest C, where we have generally begun the scale, is really an octave above B, the note immediately below that C: and consequently the interval between these lower sounds is no more than that of a second major, to which all dissonances may therefore be ultimately reduced, whether considered as major or minor; but even all the consonances may become dissonant by accident. (See DISCORD.) Besides, every interval is either simple or reduplicated. Simple intervals are such as the limits of a single octave comprehend. Every interval which surpasses this extent is reduplicated; that is to say, compounded of one or more octaves, and of the simple interval whose replication it is. Simple intervals are likewise divided into direct and inverted. Take any simple interval whatever for a direct one; the quantity which, added to itself, is required to complete the octave, will be found an inverted interval; and the same observation holds reciprocally true of such as are inverted. There are only six kinds of simple intervals; of which three contain such quantities, as, added to the other three, are required to

complete the octave; and of consequence likewise the one must be inversions of the other. If you take at first the smallest intervals, you will have, in the order of direct intervals, the second, the third, and fourth; for inverted the seventh, the sixth, and fifth. Suppose these to be direct, the others will be inverted; every thing here is reciprocal. To find the name of any interval whatever, it is only necessary to add the denomination of unity to the degree which it contains. Thus the interval of one degree shall give a second; of two, a third; of three, a fourth; of seven, an octave; of nine a tenth; &c. But this is not sufficient to determine an interval with accuracy; for under the same name it may be either major or minor, true or false, diminished or redundant. The consonances which are imperfect, and the two natural dissonances, may be major or minor; which, without changing their degree, occasions in the interval the difference of a semitone; so that if, from a minor interval, we still deduce a semitone, it becomes an interval diminished; if, by a semitone, we increase a major interval, it becomes an interval redundant. The perfect consonances are by their nature invariable. When their intervals are such as they ought to be, we call them just, true: and, if we dilate or contract this interval by a semitone, the consonance is termed false, and becomes a dissonance; redundant, if the semitone be added; diminished, if it be abstracted. We improperly give the name of a false fifth to the fifth diminished; this is taking the genus for the species; the fifth redundant is every jot as false as the diminished, it is even more so in every respect.' In Rousseau's Musical Dictionary (plate C, fig. 2) may be seen a table of all the simple intervals practicable in music, with their names, their degrees, their values, and their ratios. Having ascertained the distinction between major and minor intervals, it is only necessary to add, that these may be natural or artificial. Of the natural we have already given some account, by ascertaining the distances and ratios of such as have been mentioned. Of the artificial, we may observe, that they are such as change their position from what it naturally is in the diatonic scale, to what the conveniency of composition or transposition requires it to be. A note thus artificially heightened by a semitone, together with the character which expresses that elevation, is called a sharp; on the contrary, a note artificially depressed by a semitone, together with the character by which that depression is signified, is called a flat. The character which restores a note thus depressed or raised to its primary state, is called a natural. Major or minor intervals, as they prevail, characterise the major or minor mode. See MODE.

INTERVENE', *v. n.* & *n. s.*
INTERVE'NIENT, *adj.*
INTERVEN'TION, *n. s.*
Latin, *inter* and *venio*. To come between things or persons; to cross unexpectedly: intervention, agency between persons, or between antecedents and consecutives; interposition.

There be *intervenient* in the rise of eight, in tones, two bemolls or half-notes. *Bacon.*

While so near each other thus all day
Our task we chuse, what wonder, if so near,
Looks *intervene*, and smiles! *Milton.*

Sound is shut out by the *intervention* of that lax membrane, and not suffered to pass into the inward ear. *Holder.*

God will judge the world in righteousness by the *intervention* of the man Christ Jesus, who is the Saviour, as well as the judge of the world. *Atterbury.*

But Providence himself will *intervene*,
To throw his dark displeasure o'er the scene.
Cowper. Table Talk.

Even sad vicissitude amused his soul:
And if a sigh would sometimes *intervene*,
And down his cheek a tear of pity roll,
A sigh, a tear, so sweet, he wished not to control.
Beattie. Minstrel.

The swift Rhone cleaves his between
Heights which appear as lovers who have parted
In hate, whose mining depths so *intervene*
That they can meet no more though broken-hearted.
Byron. Childe Harold.

INTERVERT', *v. a.* Lat. *interverto.* To turn to another course.

The duke *interverted* the bargain, and gave the poor widow of Erpinus for the books five hundred pounds. *Wotton.*

IN'TERVIEW, *n. s.* Fr. *entrevue.* Mutual sight; sight of each other. It is commonly used for a formal, appointed, or important meeting or conference.

His fears were, that the *interview* betwixt
England and France might, through their amity,
Breed him some prejudice.
Shakspeare. Henry VIII.

Such happy *interview*, and fair event
Of love, and youth not lost, songs, garlands, flowers,
And charming symphonies, attached the heart
Of Adam. *Milton's Paradise Lost.*

And he and I
Must purchase by renewal of the rack
The *interview* of husband and of wife,
The holiest tie beneath the heavens.
Byron. Tragedy. The Two Foscari.

INTERVOLVE', *v. a.* Lat. *intervolvo.* To involve one within another.

Mystical dance! which yonder starry sphere
Of planets, and of fixed, in all her wheels
Resembles nearest; mazes intricate,
Eccentrick, *intervolved*, yet regular,
Then most, when most, irregular they seem.
Milton.

INTERWEAVE', *v. a.* Pret. interwove, part. pass. interwoven, interwove, or interweaved. Inter and weave. To mix one with another in a regular texture; to intermingle.

Then laid him down
Under the hospitable covert nigh
Of trees thick *interwoven*. *Milton.*
At last
Words *interwove* with sighs found out their way.
Id.

I sat me down to watch upon a bank
With ivy canopied and *interwoven*.
Milton's Comus.

The proud theatres disclose the scene,
Which *interwoven* Britons seem to raise,
And show the triumph which their shame displays.
Dryden.

He so *interweaves* truth with probable fiction, that he puts a pleasing fallacy upon us. *Id.*

It appeared a vast ocean planted with islands, that were covered with fruits and flowers, and *interwoven*

with a thousand little shining seas that ran among them. *Addison.*

Are we not one? are we not joined by heaven?
Each *interwoven* with the other's fate? *Rowe.*

The Supreme Infinite could not make intelligent creatures, without implanting in their natures a most ardent desire, *interwoven* in the substance of their spiritual natures, of being re-united with himself. *Cheyne's Philosophical Principles.*

I do not altogether disapprove the *interweaving* texts of scripture through the style of your sermon. *Swift.*

First, then, with regard to criticism; to select a few examples from a multitude of others, are we not entertained in the works of Longinus, and the Gentleman's Magazine, with delectable dissertations on the weaving of plots and the *interweaving* of episodes? *Canning.*

INTERWISH', *v. a.* Inter and wish. To wish mutually to each other.

The venom of all stepdames, gamester's gall,
What tyrants and their subjects *interwish*,
All ill fall on that man. *Donne.*

INTES'TABLE, *adj.* } Fr. *intestat;* Lat.
INTES'TATE, *adj.* } *intestabilis, intestatus.*
Disqualified to make a will: intestate, dying without a will.

Why should calamity be full of words?
—Windy attorneys to their client woes,
Airy succeeders to *intestate* joys,
Poor breathing orators of miseries. *Shakspeare.*

Present punishment pursues his maw,
When surfeited and swelled, the peacock raw,
He bears into the bath; whence want of breath,
Repletions, apoplex, *intestate* death. *Dryden.*

A person excommunicated is rendered infamous and *intestable* both actively and passively. *Ayliffe.*

Dying *intestate*, Juan was sole heir
To a chancery suit, and messuages, and lands,
Which, with a long minority and care,
Promised to turn out well in proper hands. *Byron.*

INTES'TINAL, *adj.* } Fr. *intestin;* Lat.
INTES'TINE, *adj.* & *n. s.* } *intestinus.* Belonging to the guts; internal; contained in the body: domestic, not foreign. I know not, says Dr. Johnson, whether the word be properly used in the following example of Shakspeare: perhaps for mortal and intestine should be read mortal internecine: intestine, the bowel; most commonly used in the plural only.

Since the mortal and *intestine* jars
'Twixt thy seditious countrymen, and us,
It hath in solemn synods been decreed,
T' admit no traffick to our adverse towns. *Shakspeare.*

At last they climb up to the castle's height;
From which they viewed the deeds of every knight
And marked the doubtful end of this *intestine* fight. *Fletcher's Purple Island.*

Of these inward and *intestine* enemies to prayer there are our past sins to wound us, our present cares to distract us, our distempered passions to disorder us, and a whole swarm of loose and floating imaginations to molest us. *Duppa.*

Intestine stone, and ulcer, cholick pangs
And moon-struck madness. *Milton's Paradise Lost.*

But God, or Nature, while they thus contend,
To these *intestine* discords put an end. *Dryden.*

The *intestines* or guts may be inflamed by an acrid substance taken inwardly. *Arbuthnot on Diet.*

Intestine war no more our passions wage,
Even giddy factions bear away their rage. *Pope.*

Instead of harmony, 'tis jar,
And tumult, and *intestine* war. *Cowper.*

INTESTINES. See ANATOMY.

INTHRALL', *v. a.* } See ENTHRALL.
INTHRAL'MENT, *n. s.* }

What though I be *inthralled*, he seems a knight
And will not any way dishonour me. *Shakspeare.*

The Turk has sought to extinguish the ancient memory of those people which he has subjected and *inthralled.* *Raleigh.*

These suburbs many call the Island's face;
Whose charming beauty and bewitching grace,
Oft times the prince himself *inthralls* in fetters base *Fletcher's Purple Island.*

Moses and Aaron, sent from God to claim
His people from *enthralment*, they return
With glory and spoil back to their promised land. *Milton.*

INTHR'ONE, *v. a.* In and throne. To raise to royalty; to seat on a throne: commonly enthrone.

One chief, in gracious dignity *inthroned*,
Shines o'er the rest. *Thomson's Seasons. Summer.*

IN'TIMACY, *n. s.* } Fr. *intimer;*
IN'TIMATE, *adj.*, *n. s.*, & *v. a.* } Span. *intimado;*
IN'TIMATELY, *adv.* } Lat. *intimus, in-*
IN'TIMA'TION, *n. s.* } *timare.* The lead-
IN'TIME, *adj.* } ing idea is innermost; and it is applied to friendship, as near and familiar: intimate, to hint; to point out indirectly: intimately, closely; nearly; inseparably: intimation, a hint: intime, inward; an old obsolete word.

So both conspiring, gan to *intimate*,
Each others griefe with zeale affectionate,
And 'twixt them twaine with equal care to cost
How to save whole her hazarded estate. *Spenser. Faerie Queene.*

As to the composition or dissolution of mixed bodies, which is the chief work of elements, and requires an *intime* application of the agents, water hath the principality and excess over earth. *Digby on Bodies.*

They knew not
That what I mentioned was of God, I knew
From *intimate* impulse. *Milton's Agonistes.*

United by this sympathetick bond,
You grow familiar, *intimate*, and fond. *Roscommon.*

Alexander Van Suchten tells us, that, by a way he *intimates*, may be made a mercury of copper, not of the silver colour of other mercuries, but green. *Boyle.*

Fear being so *intimate* to our natures, it is the strongest bond of laws. *Tillotson.*

The names of simple ideas and substances, with the abstract ideas in the mind, *intimate* some real existence, from which was derived their original pattern. *Locke.*

Let him strictly observe the first stirrings and *intimations;* the first hints and whispers of good and evil that pass in his heart. *South.*

Moses was with him in the retirements of the Mount, received there his private instructions; and, when the multitude were thundered away from any approach, he was honoured with an *intimate* and immediate admission. *Id.*

Quality, as it regards the mind, has its rise from knowledge and virtue, and is that which is more essential to us, and more *intimately* united with us. *Addison's Spectator.*

It is in our power to confine our friendships and *intimacies* to men of virtue. *Rogers.*

I crown the king of *intimate* delights,
Fire-side enjoyments, home-born happiness. *Cowper.*

But whene'er
He bears the jarring of a distant door,
Or ought that *intimates* a coming step.
Byron. Tragedy. Marino Faliero.

INTIM'IDATE, *v. a.* Fr. *intimider;* Latin, *in* and *timidus*. To make fearful; to dastardise; to make cowardly.

At that tribunal stands the writing tribe,
Which nothing can *intimidate* or bribe;
Time is the judge. *Young.*
Now guilt, once harboured in the conscious breast,
Intimidates the brave, degrades the great. *Irene.*

INTIRE', *adj.* } Fr. *entier;* Lat. *integer*.
INTIRE'NESS, *n. s.* } Whole; undiminished.
See ENTIRE.

So shall all times find me the same;
You this *intireness* better may fulfil,
Who have the pattern with you still.
Donne.

IN'TO, *prep.* In and to.

Noting entrance with regard to place; opposed to *out of*.

Upon a day befell that he for his disportis
Went *into* the feldes to play.
Chaucer. Tale of Melibeus.

Water introduces *into* vegetables the matter it bears along with it. *Woodward's Natural History.*

Noting entrance of one thing into another.

If iron will acquire by mere continuance an habitual inclination to the site it held, how much more may education, being a constant plight and inurement, induce by custom good habits *into* a reasonable creature! *Wotton.*

Noting penetration beyond the outside, or some action which reaches beyond the superficies or open part.

To look *into* letters already opened or dropt is held an ungenerous act. *Pope.*

Noting inclusion real or figurative.

They have denominated some herbs solar and some lunar, and such like toys put *into* great words.
Bacon.

Noting a new state to which any thing is brought by the agency of a cause.

Compound bodies may be resolved *into* other substances than such as they are divided *into* by the fire.
Boyle.

It concerns every man that would not trifle away his soul, and fool himself *into* irrecoverable misery, with the greatest seriousness to enquire *into* these matters. *Tillotson.*

A man must sin himself *into* a love of other men's sins; for a bare notion of this black art will not carry him so far. *South.*

He is not a frail being, that he should be tired *into* compliance by the force of assiduous application.
Smalridge.

That prodigy, Miss Anramirta Smith
(Who at sixteen translated 'Hercules Fureus'
Into as furious English) with her best look
Set dow his sayings in her common-place book.
Byron.

INTOL'ERABLE, *adj.* } Lat. *intolerabilis*, *in*
INTOL'ERABLENESS, *n. s.* } and *tolero;* Fr. *into-*
INTOL'ERABLY, *adv.* } *lerant*. Insufferable;
INTOL'ERANT, *adj.* } not to be endured;
not to be borne: having any quality in a degree too powerful to be endured: intolerant, not able to endure; these words are generally used to express extreme suffering; a dislike.

This wo and anguish is *intollerable*
If I bide here, life can I not sustain.
Chaucer. Lament of Mary Magdaleine.

If we bring into one day's thoughts the evil of many, certain and uncertain, what will be and what will never be, our load will be as *intolerable* as it is unreasonable. *Taylor.*

Who would not rather get him gone
Beyond the *intolerablest* zone,
Or steer his passage through those seas
That burn in flames, or those that freeze,
Than see one nation go to school,
And learn of another like a fool? *Butler.*

Intolerable, vanity! your sex
Was never in the right! you're always false
Or silly! *Otway's Orphan.*

Too great moisture affects human bodies with one class of diseases, and too great dryness with another; the powers of human bodies being limited and *intolerant* of excesses. *Arbuthnot.*

Religion harsh, *intolerant*, austere,
Parent of manners like herself severe.
Cowper, Table Talk.

INTOMB', *v. a.* In and tomb. To enclose in a funeral monument; to bury.

What commandment had the Jews for the ceremony of odours used about the bodies of the dead, after which custom notwithstanding our Lord was contented that his own most precious blood should be *intombed?* *Hooker.*

Is't night's predominance or the day's shame,
That darkness does the face of earth *intomb?*
Shakspeare.

INTO'NATE, *v. a.* Lat. *intono*. To thunder
INTONA'TION, *n. s.* Fr. *intonation*, from intonate. The act of thundering.

INTONATION, in music, is the action of sounding the notes in the scale with the voice, or any other given order of musical tones. Intonation may be either true or false, either too high or too low, either too sharp or too flat; and then intonation, attended with an epithet, must be understood concerning the manner of performing the notes. In executing an air, to form the sounds, and preserve the intervals as they are marked with justness and accuracy, is no inconsiderable difficulty, and scarcely practicable, but by the assistance of the common idea, to which, as to their ultimate test, these sounds and intervals must be referred: these common ideas are those of the key, and the mode in which the performer is engaged. We feel more difficulty in our intonation of such intervals as are greater or less than those of the diatonic order; because, in the first case, the vocal organs are modified by gradations too large; or too complex in the second.

INTONE', *v. n.* Fr. *intonner*, from Lat. *intono*, or rather from tone. To make a slow protracted noise.

So swells each wind-pipe; ass *intones* to ass
Harmonic twang. *Pope's Dunciad.*

INTORT', *v. a.* Lat. *intortus*. To twist; to wreath; to wring.

The brain is a congeries of glands, that separate the finer parts of the blood, called animal spirits: and a gland is nothing but a canal variously *intorted* and wound up together. *Arbuthnot.*

With reverent hand the king presents the gold;
Which round the *intorted* horns the gilder rolled.
Pope.

INTOX'ICATE, *v. a.* } Ital. *tossicare;* Lat.
INTOXICA'TION, *n. s.* } *in* and *toxicum*. To inebriate or make drunk: a state of drunkenness.

That king, being in amity with him, did so burn in hatred towards him, as to drink of the lees and dregs of Perkin's *intoxication*, who was every where else detected. *Bacon.*

The more a man drinketh of the world, the more it *intoxicateth;* and age doth profit rather in the powers of understanding, than in the virtues of the will and affections. *Id.*

As with new wine *intoxicated* both,
They swim in mirth, and fancy that they feel
Divinity within them breeding wings,
Wherewith to scorn the earth. *Milton.*

Others, after having done fine things, yet spoil them by endeavouring to make them better; and are so *intoxicated* with an earnest desire of being above all others, that they suffer themselves to be deceived. *Dryden's Dufresnoy.*

King was a name too proud for man to wear
With modesty and meekness, and the crown,
So dazzling in their eyes who set it on,
Was sure to' *intoxicate* the brows it bound. *Cowper's Task.*

At which my soul aches to think,
Intoxicated with Eternity? *Byron. Cain.*

INTOXICATION, or Drunkenness. The ancient Lacedemonians used to make their slaves drunk to give their children an aversion and horror for the vice. The Indians hold drunkenness a species of madness; and, in their language, the same term that signifies drunkard, signifies also a mad person.

Drunkenness, by the English law, is considered as an aggravation rather than an excuse for any criminal behaviour. 'A drunkard,' says Sir Edward Coke, 'who is voluntarius dæmon, has no privilege thereby; but whatsoever he doth, his drunkenness doth aggravate it: nam omne crimen ebrietas et incendit et detergit.' In Greece, a law of Pittacus enacted, 'that he who committed a crime when drunk should receive a double punishment; one for the crime itself, and the other for the ebriety which prompted him to commit it. The Roman law indeed made great allowances for this vice; per vinum delapsis capitalis pœna remittitur. But the law of England, considering how easy it is to counterfeit this excuse, and how weak an excuse it is, though real, will not suffer any man thus to privilege one crime by another. For the offence of drunkenness a man may be punished in the ecclesiastical court, as well as by justices of peace by statute. And by 4 Jac. I. c. 5, and 21 Jac. I. c. 7, if any person shall be convicted of drunkenness by a justice, oath of one witness, &c., he shall forfeit 5*s*. for the first offence, to be levied by distress and sale of his goods; and, for want of a distress, shall sit in the stocks six hours: and, for the second offence, he is to be bound with two sureties in £10 each, to be of good behaviour, or to be committed. And he who is guilty of any crime, through his own voluntary drunkenness, shall be punished for it as if he had been sober. It has been held that drunkenness is a sufficient cause to remove a magistrate: and the prosecution for this offence, by the statute of 4 Jac. I. c. 5, was to be, and still may be, before justices of peace in their sessions by way of indictment, &c. Equity will not relieve against a bond, &c., given by a man when drunk, unless the drunkenness is occasioned through the management or contrivance of him to whom the bond is given.

INTRACT'ABLE, *adj.* } Fr. *intraitable;*
INTRACT'ABLENESS, *n. s.* } Latin, *intractabilis*.
INTRACT'ABLY, *adv.* } Ungovernable; furious; not to be led or restrained: obstinacy; perverseness.

To love them who love us is so natural a passion, that even the most *intractable* tempers obey its force. *Rogers.*

By what means serpents, and other noxious and more *intractable* kinds, as well as the more innocent and useful, got together. *Woodward.*

INTRANQUIL'LITY, *n. s.* In and tranquillity. Unquietness; want of rest.

Jactations were used for amusement, and allay in constant pains, and to relieve that *intranquillity* which makes men impatient of lying in their beds. *Temple.*

INTRAN'SITIVE, *adj.* Lat. *intransitivus*. In grammar. A verb intransitive is that which signifies an action not conceived as having an effect upon any object; as, curro, I run.—Clarke's Latin Grammar.

INTRANSMU'TABLE, *adj.* In and transmutable. Unchangeable to any other substance.

Some of the most experienced chemists do affirm quicksilver to be *intransmutable*, and therefore call it liquor æternus. *Ray on the Creation.*

INTREAS'URE, *v. a.* In and treasure. To lay up as in a treasury.

There is a history in all men's lives
Figuring the nature of the times deceased;
The which observed, a man may prophesy,
With a near aim, of the main chance of things
As yet not come to life, which in their seeds
And weak beginnings lie *intreasured*. *Shakspeare.*

INTRENCH', *n. a.* & *v. n.* } Fr. *intrencher*.
INTRENCH'ANT, *adj.* } To invade or en-
INTRENCH'MENT, *n. s.* } croach; to break with hollows; to fortify with a trench, which is called intrenchment. See ENTRENCHMENT. This word (intrenchant), says Dr. Johnson, 'which is, I believe, found only in Shakspeare, is thus explained: the intrenchant air means the air which suddenly encroaches and closes upon the space left by any body which had passed through it.—Hanmer. I believe Shakspeare intended rather to express the idea of indivisibility or invulnerableness, and derived intrenchant from in privative, and trencher to cut; intrenchant is indeed, properly, not cutting, rather than not to be cut; but this is not the only instance in which Shakspeare confounds words of active and passive signification.' Not to be divided; not to be wounded; indivisible.

As easy mayest thou the *intrenchant* air
With thy keen sword impress, as make me bleed. *Shakspeare.*

Darkened so, yet shone
Above them all the archangel: but his face
Deep scars of thunder had *intrenched*, and care
Sat on his faded cheek, but under brows
Of dauntless courage and considerate pride
Boasting revenge. *Milton.*

Little I desire my sceptre should *intrench on* God's sovereignty, which is the only king of men's consciences. *King Charles.*

Intrenchment, in the military art, is any work that fortifies a post against an enemy. It is generally used for a ditch or trench with a parapet. Intrenchments are sometimes made of fascines with earth thrown over them, of gabions, hogsheads, or bags filled with earth, to cover the men from the enemy's fire.

INTREP'ID, *adj.* } Fr. *intrepide;* Lat. *in*
Intrepid'ity, *n. s.* } and *trepidus.* Fearless;
Intrep'idly, *adv.* } brave; daring: courage; boldness.

I could not sufficiently wonder at the *intrepidity* of these diminutive mortals, who durst venture to walk upon my body, without trembling. *Gulliver.*

He takes the globe for the scene; he launches forward *intrepidly*, like one to whom no place is new. *Pope.*

Argyle
Calm and *intrepid* in the very throat
Of sulphurous war, on Tenier's dreadful field.
Thomson.

INTRICATE, *adj.* & *v. a.* } Fr. *intrigue;*
In'tricacy, *n. s.* } Lat. *intricatus.*
In'tricately, *adv.* } That which
In'tricateness, *n. s.* } hinders or entangles, perplexes, or obscures: intricacy is a complication of facts or notions which obscure a subject: intricately, in an involved or confused manner. The meaning of these words is from tricæ, hairs or feathers, which hinder chickens from running.

Much of that we are to speak may seem to a number perhaps tedious, perhaps obscure, dark and *intricate.* *Hooker.*

He found such *intricateness*, that he could see no way to lead him out of the maze. *Sidney.*

That variety of factions into which we are so *intricately* engaged, gave occasion to this discourse. *Swift.*

The part of Ulysses in Homer's Odyssey is much admired by Aristotle, as perplexing that fable with very agreeable plots and *intricacies*, by the many adventures in his voyage, and the subtilty of his behaviour. *Addison.*

His style was fit to convey the most *intricate* business to the understanding with the utmost clearness. *Id.*

The ways of Heaven are dark and *intricate*,
Puzzled in mazes, and perplexed with errors.
Addison's Cato.

Contrivance *intricate*, expressed with ease,
Where unassisted sight no beauty sees.
Cowper. Retirement.

INTRIGUE', *n. s.* & *v. n.* | Fr. *intrigue.* A
Intriu'guer, *n. s.* | plot; a transac-
Intrig'uingly, *adv.* | tion or affair of love, in which many are engaged; intricacy; the complication, or artful involution of a tale or poem. Intriguer, one who busies himself in private transactions, or pursues women.

I desire that *intriguers* will not make a pimp of my lion, and convey their thoughts to one another. *Addison.*

As causes are the beginning of the action, the opposite designs against that of the hero are the middle of it, and form that difficulty or *intrigue* which makes up the greatest part of the poem. *Pope.*

The hero of a comedy is represented victorious in all his *intrigues.* *Swift.*

Now love is dwindled to *intrigue*,
And marriage grown a money league. *Id.*

Are we not continually informed that the author unravels the web of his *intrigue*, or breaks the thread of his narration? *Canning.*

INTRIN'SICAL, *adj.* } Lat. *intra, in, secus.*
Intrin'sically, *adv.* } Internal; solid; sub-
Intrin'sic, *adj.* } stantial; intimate;
Intrin'secate, *adj.* } not depending on accident or collateral circumstances, but fixed in the nature of the thing. Intrinsicate, perplexed: not in use.

Such smiling rogues as these,
Like rats, oft bite the holy cords in twain,
Too *intrinsecate* to unloose.
Shakspeare. King Lear.

Intrinsick goodness consists in accordance, and sin in contrariety to the secret will of God, as well as to his revealed. *Hammond's Fundamentals.*

The difference between worth and merit, strictly taken; that is, a man's *intrinsick:* this, his current value. *Grew.*

A lye is a thing absolutely and *intrinsecally* evil. *South.*

Every one of his pieces is an ingot of gold, *intrinsecally* and solidly valuable. *Prior.*

His fame, like gold, the more 'tis tried,
The more shall its *intrinsick* worth proclaim.
Id.

He falls into *intrinsecal* society with Sir John Graham, who dissuaded him from marriage. *Wotton.*

The near and *intrinsecal*, and convincing argument of the being of God, is from human nature itself. *Bentley.*

If once bereaved of motion, matter cannot of itself acquire it again; nor till it be thrust by some other body from without, or *intrinsecally* moved by an immaterial self-active substance that can pervade it. *Id.*

INTRODUCE', *v. a.* } Lat. *introduco, in-*
Introdu'cer, *n. s.* } *troductio.* To conduct
Introduc'tion, *n. s.* } or usher into a place;
Introduc'tive, *adj.* } to bring into notice;
Introduc'tory, *adj* } to produce; to bring into writing or discourse. Introducer, one who conducts another to a place or person, or brings him into notice: introduction, the act of introducing; the preface to a book; the exordium of a discourse: introductive, introductory, serving as a means to something else.

Thus maketh he his *introduction*
To bringen folk to hir destruction.
Chaucer. The Chanones Yemannes Tale.

The *introduction* of noble inventions seems to hold by far the most excellent place among all human actions. *Bacon.*

This vulgar error whosoever is able to reclaim, he shall *introduce* a new way of cure, preserving by theory as well as practice.
Browne's Vulgar Errours.

This *introductory* discourse itself is to be but an essay, not a book. *Boyle.*

Mathematicians of advanced speculations may have other ways to *introduce* into their minds ideas of infinity. *Locke.*

The truth of Christ crucified, is the Christian's philosophy, and a good life is the Christian's logick that great instrumental *introductive* art, that must guide the mind into the former. *South.*

It is commonly charged upon the army, that the beastly vice of drinking to excess hath been lately, from their example, restored among us; but whoever the *introducers* were, they have succeeded to a miracle. *Swift.*

Here the twelfth Canto of our *introduction*
Ends. When the body of the book's begun,
You'll find it of a different construction.

From what some people say 'twill be when done,
The plan's at present simply in concoction.
Byron. Don Juan.

INTROGRES'SION, *n. s.* Lat. *introgressio.* Entrance; the act of entering.

INTROMIS'SION, *n. s.* Lat. *intromissio.* The act of sending in.

If sight be caused by *intromission*, or receiving in the form of that which is seen, contrary species or forms shall be received confusedly together, which Aristotle shews to be absurd. *Peacham.*

All the reason that I could ever hear alledged by the chief factors for a general *intromission* of all sects and persuasions into our communion, is, that those who separate from us are stiff and obstinate, and will not submit to the rules of our church, and that therefore they should be taken away. *South.*

In the Scotch law. The act of intermeddling with another's effects: as, he shall be brought to an account for his intromissions with such an estate.

INTROMIT', *v. a.* Lat. *intromitto.* To send in; to let in; to admit; to allow to enter; to be the medium by which any thing enters.

Glass in the window *intromits* light without cold to those in the room. *Holder.*

Tinged bodies and liquors reflect some sorts of rays, and *intromit* or transmit other sorts. *Newton.*

INTROSPECT', *v. a.* Lat. *introspectus.* To take a view of the inside.

INTROSPEC'TION, *n. s.* From introspect. A view of the inside.

The actings of the mind or imagination itself, by way of reflection or *introspection* of themselves, are discernible by man. *Hale.*

INTROVE'NIENT, *adj.* Lat. *intro* and *venio.* Entering; coming in.

Scarce any condition which is not exhausted and obscured, from the commixture of *introvenient* nations, either by commerce or conquest. *Browne.*

INTRUDE', *v. n.* & *v. a.*, INTRU'DER, *n. s.*, INTRU'SION, *n. s.* } Fr. *intrusion;* Lat. *intrudo.* To come in as an unwelcome guest without invitation or permission; to encroach; to force in or into: intruder, an unwelcome visitor; an impertinent, officious fellow: intrusion, encroachment on any person or in any place; uncalled undertaking.

Let no man beguile you of your reward, in a voluntary humility, and worshipping of angels, *intruding* into those things which he hath not seen by his fleshly mind. *Col.* ii. 18.

I think myself in better plight for a lender than you are, the which hath something emboldened me to this unseasoned *intrusion:* for they say, if money go before, all ways do lie open. *Shakspeare.*

Unmannerly *intruder* as thou art! *Id.*

Thy years want wit, thy wit wants edge
And manners to *intrude* where I am graced. *Id.*

They were but *intruders* upon the possession, during the minority of the heir: they knew those lands were the rightful inheritance of that young lady. *Davies on Ireland.*

Frogs, lice, and flies, must all this palace fill
With loathed *intrusion.* *Milton's Paradise Lost.*

Many excellent strains have been jostled off by the *intrusions* of poetical fictions. *Browne.*

Will you, a bold *intruder*, never learn
To know your basket, and your bread discern?
Dryden.

The separation of the parts of one body, upon the *intrusion* of another, and the change from rest to motion upon impulse, and the like, seem to have some connection. *Locke.*

The Jewish religion was yet in possession; and therefore that this might so enter, as not to *intrude*, it was to bring its warrant from the same hand of omnipotence. *South.*

Forgive me fair one, if officious friendship
Intrudes on your repose, and comes thus late
To greet you with the tidings of success. *Rowe.*

How's this, my son? Why this *intrusion?*
Were not my orders that I should be private?
Addison's Cato.

It will be said, I handle an art no way suitable either to my employment or fortune. and so stand charged with *intrusion* and impertinency. *Wotton.*

Let me shake off the *intrusive* cares of day,
And lay the meddly senses all aside. *Thomson.*

But if perchance on some dull drizzling day,
A thought *intrude* that says or seems to say.
Cowper. Hope.

There is a pleasure in the pathless woods,
There is a rapture on the lonely shore,
There is society where none *intrudes*,
By the deep sea, and music in its roar.
Byron. Childe Harold.

INTRUST', *v. a.* In and trust. To treat with confidence; to charge with any secret commission, or thing of value; as, we intrust another with something; or we intrust something to another.

His majesty had a solicitous care for the payment of his debts; though in such a manner, that none of the duke's officers were *intrusted* with the knowledge of it. *Clarendon.*

Receive my counsel, and securely move;
Intrust thy fortune to the powers above. *Dryden.*

Are not the lives of those, who draw the sword
In Rome's defence, *intrusted* to our care? *Addison.*

Is duty a mere sport, or an employ?
Life an *intrusted* talent, or a toy?
Cowper. Retirement.

INTUI'TION, *n. s.*, INTU'ITIVE, *adj.*, INTU'ITIVELY, *adv.* } Fr. *intuitif;* Lat. *intueor, intuitus;* Ital. *intuitio.* The act of seeing into; the insight into any thing; obtaining knowledge not by deduction of reason, but instantaneously from the ideas which are its object: intuitive, seeing, as opposed to believing; having the power of discovering truth without reasoning: intuitively, in a manner implying instant perception of the subject proposed.

The rule of ghostly or immaterial natures, as spirits and angels, is their *intuitive* intellectual judgment, concering the amiable beauty and high goodness of that object, which, with unspeakable joy and delight, doth set them on work. *Hooker.*

Faith, beginning here with a weak apprehension of things not seen, endeth with the *intuitive* vision of God in the world to come. *Id.*

The soul receives
Discursive or *intuitive.* *Milton.*

All knowledge of causes is deductive; for we know none by simple *intuition*, but through the mediation of their effects; for the casualty itself is insensible.
Glanville.

He that single virtues did survey,
By *intuition* in his own large breast. *Dryden.*

Immediate perception of the agreement and disagreement of two ideas is when, by comparing them together in our minds, we see their agreement or disagreement; this therefore is called *intuitive* knowledge.
Locke.

Lofty flights of thought, and almost *intuitive* perception of abstruse notions, or exalted discoveries of mathematical theorems, we sometimes see existent in one person. *Bentley.*

INTUMES'CENCE, *n. s.* } Fr. *intumescence;*
INTUMES'CENCY. } Lat. *intumesco.*
Swell; tumor; the act or state of swelling.

According to the temper of the terreous parts at the bottom, as they are more hardly or easily moved, they variously begin, continue, or end their *intumescencies.* *Browne.*

This subterranean heat causes a great rarefaction and *intumescence* of the water of the abyss, putting it into very great commotions, and occasions an earthquake. *Woodward.*

INTURGES'CENCE, *n. s.* Lat. *in* and *turgesco.* Swelling; the act or state of swelling.

Not by attenuation of the upper part of the sea, but *inturgescencies* caused first at the bottom, and carrying the upper part of it before them. *Browne.*

INTUSE', *n. s.* Lat. *intusus.* Bruise.

She did search the swelling bruze,
And having searched the *intuse* deep,
She bound it with her scarf. *Spenser.*

INTWINE', *v. a.* In and twine. To twist, or wreath together.

This opinion, though false, yet *intwined* with a true, that the souls of men do never perish, abated the fear of death in them. *Hooker.*

To be inserted by being wreathed or twisted.

The vest and veil divine,
Which wandering foliage and rich flowers *intwine.*
Dryden.

INVADE', *v. a.* } Lat. *invado.* To go in, or
INVA'DER, *n. s.* } into; to make hostile en-
INVA'SION, *n. s.* } trance; to attack or assault;
INVA'SIVE, *adj.* } to violate by the first act of aggression: invader, one who enters with hostility; an assailant, encroacher, or intruder: invasion, hostile entrance: invasive, opposed to defensive.

We made an *invasion* upon the Cherethites.
1 *Sam.* xxx.

There shall be sedition among men, and *invading* one another; they shall not regard their kings.
2 *Esdras.*

The thiefe
Lay sleeping soundly in the bushes shade,
Whom Coridon him counseld to *invade*
Now all unwares, and take the spoyle away.
Spenser. Faerie Queene.

Should he *invade* any part of their country, he would soon see that nation up in arms. *Knolles.*

Thou thinkest 'tis much, that this contentious storm
Invades us to the skin; so 'tis to thee;
But, where the greater malady is fixed,
The lesser is scarce felt. *Shakspeare. King Lear.*

The breath of Scotland the Spaniards could not endure; neither durst they, as *invaders,* land in Ireland. *Bacon.*

That knowledge, like the coal from the altar, serves only to embroil and consume the sacrilegious *invaders.* *Decay of Piety.*

The substance was formerly comprised in that uncompounded style, but afterwards prudently enlarged for the repelling and preventing heretical *invaders.*
Hammond.

Were he lost, the naked empire
Would be a prey exposed to all *invaders.*
Denham's Sophy.

Their piety
In sharp contest of battle found no aid
Against *invaders,* *Milton's Paradise Lost.*
With dangerous expedition they *invade*
Heaven, whose high walls fear no assault.
Id.

When force *invades* the gift of nature, life,
The eldest law of nature bids defend. *Dryden.*

I must come closer to my purpose, and not make more *invasive* wars abroad, when, like Hannibal, I am called back to the defence of my country. *Id.*

The nations of the' Ausonian shore
Shall hear the dreadful rumour from afar,
Of armed *invasion,* and embrace the war.
Id. Æneid.

William the Conqueror *invaded* England about the year 1060, which means this; that taking the duration from our Saviour's time 'till now, for one entire length of time, it shews at what distance this *invasion* was from the two extremes. *Locke.*

Reason finds a secret grief and remorse from every *invasion* that sin makes upon innocence, and that must render the first entrance and admission of sin uneasy. *South.*

Secure, by William's care, let Britain stand;
Nor dread the bold *invader's* hand. *Prior.*

What demonstrates the plague to be endemial to Egypt, is its *invasion* and going off at certain seasons.
Arbuthnot

Let other monarchs, with *invasive* bands,
Lessen their people, and extend their lands;
By gasping nations hated and obeyed,
Lords of the desarts that their swords had made.
Id.

Esteem and judgment with strong fancy join,
To call the fair *invader* in;
My darling favourite inclination, too,
All, all conspiring with the foe. *Granville.*

The country about Attica was the most barren of any in Greece, through which means it happened that the natives were never expelled by the fury of *invaders.* *Swift.*

Knowest thou not yet, when love *invades* the soul
That all her faculties receive her chains.
Dr. Johnson's Irene.

It is therefore idle to say that it is not in truth and in fact a foreign *invasion.* *Canning's Speeches.*

INVALES'CENCE, *n. s.* Lat. *invalesco.* Strength; health: force.

INVAL'ID, *adj.* } Fr. *invalide;* Lat. *in*
INVAL'IDATE, *v. a.* } and *validus.* Weak; with-
INVALIDE', *n. s.* } out weight or cogency.
INVALID'ITY, *n. s.* } Invalidate, to deprive of force or efficacy. Invalide, one disabled by sickness or injury. Invalidity, weakness; want of strength, bodily or mental.

But this I urge,
Admitting motion in the heavens, to shew
Invalid, that which thee to doubt it moved.
Milton.

To *invalidate* such a consequence, some things might be speciously enough alledged. *Boyle.*

He ordered, that none who could work should be idle, and that none who could not work by age, sickness, or *invalidity,* should want. *Temple.*

Tell a man, passionately in love, that he is jilted, bring a score of witnesses of the falsehood of his mistress, and it is ten to one but three kind words of her's shall *invalidate* all their testimonies. *Locke.*

What beggar in the *invalides,*
With lameness broke, with blindness smitten,
Wished ever decently to die? *Prior.*

INVAL'UABLE, *adj.* In and valuable. Precious above estimation; inestimable.

The faith produced by terrour would not be so free an act as it ought, to which are annexed all the glorious and *invaluable* privileges of believing.
Atterbury.

INVA'RIABLE, *adj.* } Lat. *in* and *varius*.
INVA'RIABLENESS, *n.s.* } Unchangeable; im-
INVA'RIABLY, *adv.* } mutable: constantly.

Being not able to design times by days, months, or years, they thought best to determine these alterations by some known and *invariable* signs, and such did they conceive the rising and setting of the fixed stars. *Browne.*

The rule of good and evil would not appear uniform and *invariable*, but different, according to men's different complexions and inclinations. *Atterbury.*

He who steers his course *invariably* by this rule, takes the surest way to make all men praise him. *Id.*

INVECTIVE, *n.s.* & *adj.* } Lat. *invehor.*
INVEC'TIVELY, *adv.* } To inveigh is to
INVEIGH, *v. n.* } utter censure or
INVEIGH'ER, *n.s.* } reproach, used
with *against* and *at*. Invective, a censure in speech or writing. Invectively, satirically; abusively. Inveigher, a railer or scorner.

Thus most *invectively* he pierceth through
The body of the country, city, court,
Yea, and of this our life; swearing that we
Are mere usurpers, tyrants. *Shakspeare.*

Casting off respect, he fell to bitter *invectives* against the French king. *Bacon's Henry VII.*

Whilst we condemn others, we may indeed be in the wrong; and then all the *invectives* we make *at* their supposed errours fall back with a rebounded force upon our own real ones. *Decay of Piety.*

Let him rail on: let his *invective* muse
Have four and twenty letters to abuse.
Dryden.

I cannot blame him for *inveighing* so sharply against the vices of the clergy in his age. *Id.*

One of these *inveighers against* mercury, in seven weeks, could not cure one small herpes in the face.
Wiseman.

INVEI'GLE, *v. a.* } Fr. *aveugler, enaveugler.*
INVEIG'LER, *n. s.* } —Skinner and Junius.
Italian *invogliare*.—Minsheu. To persuade to something bad or hurtful; to wheedle; to allure; to seduce. Inveigler, a seducer to ill.

Being presented to the emperor for his admirable beauty, the prince clapt him up as his *inveigler*.
Sandys.

Achilles hath *inveigled* his fool from him.
Shakspeare.

Yet have they many baits and guileful spells,
To *inveigle* and invite the' unwary sense
Of them that pass unweeting by the way. *Milton.*
Both right able
To' *inveigle* and draw in the rabble.
Hudibras.

The *inveigling* a woman, before she is come to years of discretion, should be as criminal as the seducing of her before she is ten years old.
Spectator.

INVEGES (Augustin), a celebrated Jesuit and historian, a native of Siacca, in Sicily, was born in 1595. He quitted the Jesuit's society after teaching philosophy and theology, and devoted himself to the composition of history. He died at Palermo in 1677. His works are, The History of Palermo, 3 vols. folio; History of the Terrestrial Paradise, 4to.; La Cartagine Siciliana, 4to.; and the History of Cascamo. In the last work he mentions the Sicilian vespers as deserving the applause of all historians.

INVENT, *v. a.* } French *inventer*;
INVEN'TER, *n. s.* } Lat. *invenio, inven-*
INVEN'TION, *n. s.* } *torium*. To come
INVEN'TIVE, *adj.* } upon; to discover;
INVEN'TOR, *n. s.* } to produce some-
INVENTO'RIALLY, *adv.* } thing not made be-
IN'VENTORY, *n. s.* & *v. a.* } fore; to forge;
INVEN'TRESS, *n. s.* } feign; to meet with:
the person who thus acts is an inventer, inventor, or inventress. Inventory, a catalogue of goods; to place in a catalogue. Inventorially, after the manner of an inventory.

Woe to them that *invent* to themselves instruments of musick. *Amos.*

The well and grounde of the firste *invencion*
To knowe, the ortographie we must derive.
Chaucer. The Remedie of Love.

For my devocion and my hole entent
Was gevyn to pleasure, such as I did *invent*
Nowe I repent, therefore my necligence to God,
Who hathe me corrected with his dyvyn rod.
G. Cavendish's Metrical Visions.

How vainly then do ydle wits *invent*.
That beautie is nought else but mixture made
Of colours faire, and goodly temp'rament
Of pure complexions that shall quickly fade.
Spenser's Hymnes.

The substance of the service of God, so far forth as it hath in it any thing more than the law of reason doth teach, may not be *invented* of men, but must be received from God himself. *Hooker*

We hear our bloody cousins, not confessing
Their cruel parricide, filling their hearers
With strange *invention*. *Shakspeare. Macbeth.*

In this upshot, purpose mistook,
Fallen on the *inventors'* heads. *Shakspeare.*
I would *invent* as bitter searching terms,
With full as many signs of deadly hate,
As lean-faced envy in her loathsome cave. *Id.*
I found,
Forsooth, an *inventory*, thus importing,
The several parcels of his plate. *Shakspeare.*

To divide *inventorially*, would dizzy the arithmetick of memory. *Id. Hamlet.*

I will give out divers schedules of my beauty: it shall be *inventoried*, and every particle and utensil labelled. *Shakspeare.*

We have the statue of your Columbus, that discovered the West Indies, also the *inventor* of ships; your Monk, that was the *inventor* of ordnance, and of gunpowder. *Bacon.*

Whoe'er looks,
For themselves dare not go, o'er Cheapside books,
Shall find their wardrobe's *inventory*. *Donne.*

His eyes deep sunken been
With often thoughts, and never slacked intention:
Yet he the fount of speedy apprehension,
Father of wit, the well of arts, and quick *invention*.
Fletcher's Purple Island.

Studious they appear
Of arts that polish life; *inventors* rare,
Unmindful of their maker.
Milton's Paradise Lost.

We may *invent*
With what more forcible we may offend
Our enemies. *Id.*

The garden, a place not fairer in natural ornaments than artificial *inventions*. *Sidney.*

By improving what was writ before,
Invention labours less, but judgment more.
Roscommon

Here is a strange figure *invented*, against the plain sense of the words. *Stillingfleet.*

At last divine Cecilia came,
Inventress of the vocal frame.
Dryden. Alexander's Feast.

That *inventive* head
Her fatal image from the temple drew,
The sleeping guardians of the castle slew.
Dryden.

Invention is a kind of muse, which, being possessed of the other advantages common to her sisters, and being warmed by the fire of Apollo, is raised higher than the rest. *Id.*

As a translator, he was just; as an *inventer*, he was rich. *Garth.*

In Persia the daughters of Eve are reckoned in the *inventory* of their goods and chattles; and it is usual, when a man sells a bale of silk, to toss half a dozen women into the bargain. *Addison.*

Why are these positions charged upon me as their sole author and *inventor*, and the reader led into a belief, that they were never before maintained by any person of virtue? *Atterbury.*

The chief excellence of Virgil is judgment, of Homer is *invention*. *Pope.*

Necessity may be the mother of lucrative *invention*, but it is the death of poetical *invention*.
Shenstone's Detached Thoughts.

Sure my *invention* must be down at Zero,
And I grown one of many 'wooden spoons'
Of verse (the name with which we Cantabs please
To dub the last of honours in degrees).
Byron. Don Juan.

An INVENTORY, in law, is a catalogue made of all a deceased person's goods and chattels, at the time of his death, with their value appraised by indifferent persons, which every executor or administrator is obliged to exhibit to the ordinary at such times as he shall appoint. By 21 Hen. VIII. c. v. executors and administrators are to deliver in upon oath, to the ordinary, indented inventories, one part of which is to remain with the ordinary, and the other part with the executor or administrator; this is required for the benefit of the creditors and legatees, that the executor or administrator may not conceal any part of the personal estate from them. The statute ordains, that the inventory shall be exhibited within three months after the person's decease: yet it may be done afterwards; for the ordinary may dispense with the time, and even with its being ever exhibited, as in cases where the creditors are paid, and the will is executed.

In the British army when any commissioned officer happens to die, or is killed on service, it is directed by the Articles of War, that the major of the regiment, or the officer doing the major's duty in his absence, shall immediately secure all his effects or equipage then in camp or quarters; and shall, before the next regimental court-martial, make an inventory thereof, and forthwith transmit the same to the office of the secretary at war, to the end that the executors of such officer may, after payment of his regimental debts and quarters, and the expenses attending his interment, receive the overplus, if any be, to his or their use.

When any non-commissioned officer or private soldier happens to die, or is killed on service, the then commanding officer of the troop or company shall, in the presence of two other commissioned officers, take an account of whatever effects he dies possessed of, above his regimental clothing, arms and accoutrements, and transmit the same to the office of the secretary at war. These effects are to be accounted for and paid to the representative of such deceased non-commissioned officer or soldier; and in case any of the officers, so authorised to take care of the effects of deceased officers and soldiers, should, before they have accounted to their representatives for the same, have occasion to leave the regiment by preferment, or otherwise, they are ordered, before they be permitted to quit the same, to deposit in the hands of the commanding officer, or of the agent of the regiment, all the effects of such deceased non-commissioned officers and soldiers, in order that the same may be secured for, and paid to, their respective representatives. See Articles of War, sect. XIX.

INVERARAY, or INVERARY, a royal borough of Scotland, in a parish of the same name, and capital of Argyllshire, pleasantly situated on a small bay formed by the junction of the Ary or Aoreidh with Loch Fyne, where the latter is a mile broad, and sixty fathoms deep. Here is a castle, the principal seat of the dukes of Argyll. It is a modern building of a quadrangular form, with a round tower at each corner; and in the middle rises a square one glazed on every side to give light to the staircase and galleries, which has, from without, rather a heavy appearance. This castle is built of a coarse lapis ollaris, brought from the other side of Loch Fyne, of the same kind with that found in Norway, of which the king of Denmark's palace is built. The principal manufactures are linen, woollen, iron, carpentry, &c. The planting around Inverary is extensive beyond conception, and admirably variegated; every crevice, glen, and mountain, displaying taste. One of the hills rises immediately from the house a great height, in the form of a pyramid, and is clothed to the summit with a thick wood of vigorous ornamental trees. On this summit, duke Archibald built a Gothic tower, or observatory. The ascent by the road seems to be half a mile, and the perpendicular height about 800 feet. Inverary is forty-five miles north-west of Glasgow, and seventy-five of Edinburgh.

INVERKEITHING, a royal borough of Fifeshire, on the north coast of the Frith of Forth. King William I. granted its first charter, and extended its liberties considerably, which were renewed and confirmed by James VI. in 1598. It has a provost, two bailies, dean of guild, treasurer, and an unlimited number of counsellors, who continue for life. It joins with Queensferry, Culross, Stirling, and Dunfermline, in electing a member of parliament. In the time of David I. it became a royal residence. The Moubrays had large possessions in this town, which were forfeited in the reign of Robert II. The Franciscans and Dominicans had convents in it. To this harbour ships of war sometimes come from Leith roads, to avoid the winter storms; and merchant ships from the Mediterranean formerly used to perform quarantine here.

The harbour itself is a small bay, at the mouth of which, on the west side, lies a floating lazaretto, where the infected goods were received and aired under the inspection of a proper officer. At the head of the bay is a quay, and a narrow channel has been cut further down to admit ships up to it. It has a considerable trade in coals and other articles. It lies eighteen miles north-west of Edinburgh.

INVERLOCHY CASTLE, an ancient castle near Fort William in Inverness-shire; adorned with large towers, which seem to have been the work of the English in the time of Edward I., who laid large fines on the Scottish barons for the purpose of erecting castles. The largest of these is called Cumin's Tower. 'The castle now stands alone in ancient magnificence, after having seen the river Lochy, that formerly filled its ditches, run in another course, and having outlived all history, and all tradition of its own builder and age. It is a quadrangular building, with round towers at the angles, measuring thirty yards every way within the walls. The towers and ramparts are solidly built of stone and lime, nine feet thick at the bottom, and eight feet above. The towers are not entire, nor are they all equally high. The western is the highest and largest, and does not seem to have been less than fifty feet when entire: the rampart between them, from twenty-five to thirty.—Ten or twelve yards without the walls the ditch begins, which surrounded the castle, from thirty to forty feet broad. The whole building covers about 1600 yards; and within the outside of the ditch are 7000 square yards, nearly one acre and a half English.—The whole building would require from 500 to 600 men to defend it.—From the name of the western tower, it is probable this castle was occupied by the Cummings in the time of Edward I., and there is a tradition that this castle was once a royal residence, and that the famous league between Charles the Great of France, and Achaius king of Scots, had been signed there on the part of the Scotch monarch.' A.D. 790.

INVERNESS-SHIRE, an important county of Scotland, bounded on the north by Ross-shire, on the east by the shires of Nairne, Murray, and Aberdeen; on the south by those of Perth and Argyll; and on the west by the Atlantic Ocean. Its extent from north to south is above fifty miles, from east to west about ninety-four. A small insulated district between Banff and Moray is also annexed to it; and some of the Hebrides are politically attached to the county; i.e. Harris, North and South Uist, Benbecula, Sky, Barra, Eigg, and the smaller islets on the coast. The vale of Glenmore-nahalabin extends through the centre of the county from east to west, having a chain of lakes, Loch Ness, Loch Oich, Loch Lochy, and an arm of the sea called Lochiel, through which is cutting the navigable canal, to unite the eastern and western oceans; on each side of this extensive vale the surface is wild, barren, and mountainous. Loch Ness, which is the largest of the lakes, is twenty-two miles in length, and from one to two in breadth. Its general depth is 116 or 120 fathoms; but in some parts is 135 fathoms.

The banks of the lakes, and the valleys, have many tracts of good arable land, and the county is every where intersected by numerous rapid currents, which unite and form rivers, the whole of them abounding with trout and salmon. On the borders are several extensive tracts of fir wood, the evident remains of large forests.

The principal rivers are the Ness, the Lochy, the Beauly, and the Spey; those of note are the Findhorn, the Nairne, and the Nevis, all of which are fed by numerous smaller streams. Of these may be mentioned the Foyers, noted for its tremendous cataract. Almost all the rivers have clear and rapid streams, and generally a rocky channel; and those discharging into the German Ocean have longer courses than those which run into the Atlantic. Pure springs of water are every where found. Mineral springs are rare; but sulphurous and chalybeate springs are found in various situations. The western shore is broken by numerous creeks and arms of the sea.

Among the mountains, Bennevis, near Fort William, is the most lofty elevation in Great Britain, being 4370 feet above the level of the sea; the summit is always covered with snow; a great part of it is composed of beautiful brown porphyry, among which is found green porphyry mixed with quartz: the red granite found in this mountain is the most beautiful of any known. There are several other mountains adjoining Bennevis, of nearly the same elevation.

Agriculture is conducted, on the eastern side of the county, with as much skill, spirit, and success, as in any tract northward of the Grampians. But in the interior, and on the western coast, it languishes under the obstructions of the soil and climate; for along the whole of the western it is much more rainy than on the eastern side of the island; it is seldom fair weather there, with a westerly wind; they do not therefore depend on saving their corn in the open air; drying-houses are contrived, where the sheaves hung single, each upon a peg, become fit in a few days, even of rain, to be built in a small stack, to make way on the pegs for the sheaves of another field. The crops, in a great degree uncertain, are inadequate to the support of the people; they are, almost without exception, restricted to oats, with the hairy-bearded husk, a light small kind of bear, and potatoe, which forms a great proportion of their vegetable diet. The principal employment of the farmer is the management of black cattle and sheep, and there are numerous herds of goats; and the mountains and forests are inhabited by immense herds of red deer and roes: Alpine, and the common hares, with a variety of other game, are likewise found in abundance.

The exports of this county may be enumerated under the articles of cattle, wool, corn, the skins of goats, deer, roes, foxes, hares, and rabbits; salmon, herring, some dry and salted fish, some fir timber, with the labors of the hempen and thread manufactures. The spinning of flax and wool is the occupation of the women over the whole county. A small proportion of the wool is manufactured into the home-spun stuffs.

Though the Erse is the language of the country, very good English is spoken in the town of Inverness, and its neighbourhood, and also in the vicinity of the forts. The inhabitants were indebted for the introduction of the English, and for several useful arts, to the soldiers under Oliver Cromwell, who were stationary here for a considerable time.

The military roads through this once impenetrable region, made by the soldiers under general Wade, never fail to excite the astonishment of travellers, being often carried over mountains, and extensive morasses. His object was to open a communication with the other parts of the country, so as to keep the Highlanders in subjection, by connecting the two forts, Fort William and Fort George; for which purpose, he built another in the centre, which he called Fort Augustus. A material benefit which has been derived from these forts, and the roads connected with them, has been the civilisation of the Highlanders.

In the district of Glenelg, are the ruins of some of those circular towers, similar to what is met with in the Western Isles; they are round and tapering like glass-houses; within, horizontal galleries go quite round, connected by stairs which ascend quite to the top, the roof being open. Antiquaries have not decided for what purpose these towers were built; by some they are thought to be Danish forts, by others Druidical temples. The vitrified fort on the summmit of Craig Phatric, near Inverness, is a very remarkable structure.

Near Fort William, in the bed of the river Nevis, is a singular vein of marble of a black ground, with a beautiful white flowering, like needle-work. Here are also veins of lead and iron, and one of silver has been wrought, but unsuccessfully. The want of coal, and indeed the scarcity of fuel of every description, is severely felt in this county.

Inverness-shire comprehends the districts of Badenoch, Lochaber, and Glenelg, which are subdivided into thirty-one parochial districts. The principal towns are Inverness, Fort William or Inverlochy, and Fort Augustus.

INVERNESS, a royal borough, and capital of the county of that name, finely seated on the south bank of the Ness, over which there is a stone bridge of seven arches. It is large, well built, and populous. Its first charter was granted by king Malcolm Canmore, and its last by James VI. From that period to the Revolution, in 1688, it had a great trade in skins, corn, and malt, &c., but it afterwards declined. After the Rebellion in 1745 this town, however, revived, and is still enlarging in every direction. It has a plentiful market, and more money and business than could be expected in such a remote part of of the island. The salmon fishery in the Ness is very considerable, and is let to London-fishmongers. The principal manufactures are those of hemp and flax. The first has been established about fifty years; and employs above 1000 persons in spinning, dressing, and weaving. The raw material is imported from the Baltic, and manufactured into sail-cloth and sacking. A white thread manufactory has been established nearly forty years; and employs in its various branches of heckling, spinning, twisting, bleaching, and dyeing, no fewer than 10,000 individuals. The company have, in this and the neighbouring countries, several agents for the management of the spinning departments. The flax is also chiefly imported from the Baltic, and the greatest part of the thread sent to London. Tanneries, brick-works, chandleries, &c., are also carried on; and, in consequence of the excellent military roads, there is a great proportion of inland trade. The harbour is safe and commodious, and is kept in good repair. Vessels of 200 tons can unload at the quay, and those of 500 tons ride in safety in the Frith, within a mile of the town. The ships of the town are chiefly employed in carrying salmon and the manufactures of the country to London, and in bringing back various articles of haberdashery, and hardware. Inverness has several good schools, and an academy was erected in 1787, on an extensive scale, wherein all the usual branches of education are taught. There are two parish churches; in the one sermons are delivered in English, and in the other in Gaelic, and, in the chapel of ease, in English and Gaelic alternately. There are also Episcopalian and Methodist chapels. Nearly in the centre of the town stands the court-house, connected with the tolbooth, a handsome modern building, with a fine tower, terminated by an elegant spire, which received considerable injury from the earthquake of 1816. The town is governed by a provost, four bailies, dean of guild, treasurer, and fifteen counsellors; and has six incorporations, two of whose deacons, with their convener, are members of council. It has five fairs, and lies fifty miles north-east of Fort-William, and 106 north of Edinburgh.

INVERNESS, NEW, a town of Georgia, on the Alatamaha, erected in 1735 by a company of emigrants from the Highlands of Scotland. In 1738 they presented a most pathetic remonstrance to general Oglethorp against the introduction of slaves. It lies twenty miles from Frederica.

INVERSE', *adj.*
INVER'SION, *n. s.*
INVERT', *v. a.*
INVER'TEDLY, *adv.*
} Fr. *inverse;* Lat. *inverto.* Inverted; reciprocal: opposed to direct. It is so called in proportion, when the fourth term is so much greater than the third, as the second is less than the first; or so much less than the third as the second is greater than the first: inversion, change of order or time, so as that the last is first and the first last; change of place: invert, to turn upside down; to divert into another channel: invertedly, in contrary or reversed order.

Solyman charged him bitterly with *inverting* his treasures to his own private use, and having secret intelligence with his enemies.
Knolles's History of the Turks.

If he speaks truth, it is upon a subtile *inversion* of the precept of God, to do good that evil may come of it. *Browne.*

With fate *inverted*, shall I humbly woo,
And some proud prince, in wild Numidia born,
Pray to accept me, and forget my scorn!
Waller.

Ask not the cause why sullen Spring
So long delays her flowers to bear,
And Winter storms *invert* the year. *Dryden.*

Every part of matter tends to every part of matter, with a force which is always in a direct proportion of the quantity of matter, and an *inverse* duplicate proportion of the distance. *Garth.*

Yes, every poet is a fool;
By demonstration Ned can shew it.
Happy, could Ned's *inverted* rule
rove every fool to be a poet. *Prior.*

Placing the forepart of the eye to the hole of the window of a darkened room, we have a pretty landskip of the objects abroad, *invertedly* painted on the paper, on the back of the eye. *Derham.*

And who but wishes to *invert* the laws
Of order, sins against the Eternal Cause. *Pope.*

Oh Winter! ruler of the *inverted* year,
Thy scattered hair with sleet-like ashes filled.
Cowper.

INVERSE PROPORTION. See ARITHMETIC.

INVERSE METHOD OF FLUXIONS is the method of finding fluents, from the fluxions being given; and is similar to the calculus integralis. See FLUXIONS.

INVERSE METHOD OF TANGENTS is the method of finding the curve belonging to a given tangent; as opposed to the direct method, or the finding the tangent to a given curve. As, to find a curve whose subtangent is a third proportioned to $r-y$ and y, or whose subtangent is equal to the semiordinate, or whose subnormal is a constant quantity. The solution of this problem depends chiefly on the inverse method of fluxions.

INVERSION means also the act whereby any thing is turned backwards. Problems in geometry and arithmetic are often proved by inversion; that is, by contrary rule or operation.

INVERSION, invertendo, or by Inversion, according to Euclid's fourteenth definition, lib. v., is inverting the terms of a proportion, by changing the antecedents into consequents, and the consequents into antecedents. As in these $a : b :: c : d$, then by inversion $b : a :: d : c$.

INVERSION, in grammar, is where the words of a phrase are ranged in a manner not so natural as they might be; *e. g.* 'Of all vices, the most abominable, and that which least becomes a man, is impurity.' Here is an inversion; the natural order being this; Impurity is the most abominable of all vices, and that which least becomes a man. Inversions are very much used in Latin poetry.

INVERSION, in rhetoric, is a method of confutation, by which the orator shows that the reasons adduced by the opposite party are favorable to his cause. So when Cæcilius urged that the province of accusing Verres ought to be granted to him in preference to Cicero, because he had been his treasurer in Sicily, at the time when the crimes were committed, and consequently was best acquainted with the whole affair, Cicero turns the argument against him, and shows, that, for that very reason, he was the most unfit of any man to be intrusted with his prosecution; since, having been concerned with him in his crimes, he would certainly do all in his power to conceal or lessen them.

INVERTED, in music, signifies a change in the order of the notes which form a chord, or in the parts which compose harmony: which happens by substituting in the bass those sounds which ought to have been in the upper part: an operation not only rendered practicable, but greatly facilitated, by the resemblance which one note has to another in different octaves; whence we derive the power of exchanging one octave for another with so much propriety and success, or by substituting in the extremes those which ought to have occupied the middle station: and vice versâ. In every chord there must be a fundamental and natural order, which is the same with that of its generation; but the circumstances of succession, taste, expression, the beauty of melody, and variety, the approximation of harmony, frequently oblige the composer to change that order by inverting the chords, and consequently the disposition of the parts. See CHORD. Every time, therefore, when the fundamental bass is heard in the lowest parts, or if the fundamental bass be retrenched, every time when the natural order is preserved in the chords, the harmony is direct. As soon as that order is changed, or as soon as the fundamental sounds, without being in the lower parts, are heard in some of the others, the harmony is inverted. The perfect knowledge of inversion depends on art and study alone. See MUSIC.

INVERURY, an ancient royal borough of Aberdeenshire, seated at the conflux of the Don and the Ury, in the district of the Garioch, fourteen miles north-west of Aberdeen. It was made a royal burgh by king Robert I. upon his obtaining a signal victory near it, over Comyn earl of Buchan, Edward I's. general. Its charters being lost during the civil wars, Mary queen of Scots granted a new one. It is governed by a provost, three bailies, dean of guild, treasurer, and three counsellors. By the exertions of the earl of Kintore and Dr. Thom, the provost, an elegant bridge was built over the Don in 1790, at the south end of the town, at an expense of £2000. It lies fifty-one miles N. N. E. of Dundee.

INVEST', *v. a.*
INVES'TIENT, *adj.*
INVES'TITURE, *n. s.*
INVEST'MENT, *n. s.*
Fr. *investir;* Lat. *investio.* To dress; to clothe; to array: it has *in* or *with* before the thing superinduced or conferred. To place in possession of rank or office; to adorn or grace; to confer; to enclose; to surround so as to intercept succours: investiture, the right of giving possession of any manor or benefice; the act of giving possession: investment, dress; clothes; habit.

When we sanctify or hallow churches, that which we do is only to testify that we make places of publick resort, that we *invest* God himself with them, and that we sever them from common uses.
Hooker

Ophelia, do not believe his vows; for they are brokers,
Not of that die which their *investments* shew.
Shakspeare.

Their gesture sad,
Invest in lank lean cheeks and war-worn coats,
Presented them unto the gazing moon,
So many horrid ghosts. *Id. Henry V*

He had refused to yield up to the pope the *investiture* of bishops, and collation of ecclesiastical dignities within his dominions. *Raleigh's Essays.*

If there can be found such an inequality between man and man, as there is between man and beast; or between soul and body, it *investeth* a right of government. *Bacon.*

Let thy eyes shine forth in their full lustre;
Invest them *with* thy loveliest smiles, put on
Thy choicest looks. *Denham's Sophy.*

After the death of the other archbishop, he was *invested in* that high dignity, and settled in his palace at Lambeth. *Clarendon.*

Some great potentate,
Or of the thrones above; such majesty
Invests him coming. *Milton.*

The shells served as plasms or moulds to this sand, which, when consolidated and freed from its *investient* shell, is of the same shape as the cavity of the shell. *Woodward.*

The practice of all ages, and all countries, hath been to do honour to those who are *invested with* publick authority. *Atterbury.*

INVES'TIGABLE, *adj.*
INVES'TIGATE, *v. a.*
INVESTIGA'TION, *n. s.*
Latin *investigo.* To be searched out: to investigate is to examine; to search for unknown truth: to find out by rational disquisition.

In doing evil, we prefer a less good before a greater, the greatness whereof is by reason *investigable*, and may be known. *Hooker.*

Investigate the variety of motions and figures made by the organs for articulation. *Holder on Speech.*

From the present appearances *investigate* the powers and forces of nature, and from these account for future observations. *Cheyne.*

Your travels I hear much of: my own shall never more be in a strange land, but a diligent *investigation* of my own territories. *Pope to Swift.*

Not only the *investigation* of truth, but the communication of it also, is often practised in such a method as neither agrees precisely to synthetick or analytick. *Watts.*

INVESTITURE, in law, the giving livery of seisin, was anciently attended with a great variety of ceremonies. At first they were made by a certain form of words, and afterwards by such things as had the greatest resemblance to the thing to be transferred: thus, where lands were intended to pass, a turf, &c., was delivered by the granter to the grantee. In the church it was customary for princes to make investiture of ecclesiastical benefices, by delivering to the person chosen a pastoral staff and a ring. The kings of England and France, the emperor of Germany, &c., had anciently this right; so that on the death of a prelate, his clergy sent the crosier, &c., to their sovereign, to be used at the ceremony of investing his successor. It appears, indeed, that in the ninth century, the greater part of the European princes made no opposition to the right of electing the bishops, which was exercised by the clergy and the people. The first who disputed the right of investiture with the emperors was Gregory VII., who excommunicated the emperor Henry IV. and forbade all ecclesiastics to receive investiture at the hands of secular princes. This occasioned a long and bloody war; the civil and ecclesiastical powers being divided into two great factions, of which one maintained the rights of the emperor, while the other seconded the ambitious views of the pontiff. The laws of Gregory for the abolition of regal investitures were confirmed and renewed by Victor III. and Urban II. Pascal II. in a council assembled at Rome, A. D. 1102, renewed the decrees of his predecessors against investitures by secular princes, and the excommunications they had thundered out against Henry IV. Pascal, however, in 1111, was obliged to confirm Henry V. in the right of giving investitures; but in 1112 he assembled a council in the church at Lateran, which solemnly annulled his treaty with the emperor, who was excommunicated. At length, however, Calixtus II. engaged him to renounce his right of investing bishops, and peace was concluded between the emperor and the pope's legates, at a general diet held at Worms, A. D. 1122. This was confirmed the following year in the general council of Lateran, and remains still in force.

INVET'ERACY, *n. s.*
INVET'ERATE, *adj.* & *v. a.*
INVET'ERATENESS, *n. s.*
INVETERA'TION, *n. s.*
Fr. *inveteré*; Lat. *in* and *vetus.* Confirmed obstinacy in any thing evil; long continuance of a disease: inveterate, old; long established; obstinate by continuance: inveteration, the act of hardening, or confirming, by long continuance. These words are applicable to any thing which derives strength from age.

The vulgar conceived, that now there was an end given, and a consummation to superstitious prophecies, and to an ancient tacit expectation, which had by tradition been infused and *inveterated* into men's minds. *Bacon.*

As time hath rendered him more perfect in the art, so hath the *inveterateness* of his malice made him more ready in the execution.
Browne's Vulgar Errours.

He who writes satire honestly is no more an enemy to the offender, than the physician to the patient, when he prescribes harsh remedies to an *inveterate* disease. *Dryden.*

It is not every sinful violation of conscience that can quench the spirit; but it must be a long *inveterate* course and custom of sinning, that at length produces and ends in such a cursed effect. *South.*

The *inveteracy* of the people's prejudices compelled their rulers to make use of all means for reducing them. *Addison.*

Let not Atheists lay the fault of their sins upon human nature, which have their prevalence from long custom and *inveterated* habit. *Bentley.*

Though Time hath taught
My mind to meditate what then it learned,
Yet such the *inveteracy* wrought
By the impatience of my early thought,
That, with the freshness wearing out before
My mind could relish what it might have sought,
If free to chuse, I cannot now restore
Its health, but, what it then detested, still abhor.
Byron. Childe Harold.

INVID'IOUS, *adj.*
INVID'IOUSLY, *adv.*
INVID'IOUSNESS, *n. s.*
Lat. *invidiosus.* Envious, combined with malignity; likely to incur hatred: invidiousness, quality of provoking envy.

I shall open to them the interior secrets of this mysterious art, without imposture or *invidious* reserve. *Evelyn.*

The clergy murmur against the privileges of the laity; the laity *invidiously* aggravate the immunities of the clergy. *Sprat.*

Not to be further tedious, or rather *invidious*, these are a few causes which have contributed to the ruin of our morals. *Swift.*

INVIG'ORATE, *v. a.* } Lat. *in* and *vigor.* INVIGORA'TION, *n. s.* } To endue with vigor; to strengthen: the act or state of invigorating.

Gentle warmth
Discloses well the earth's all-teeming womb,
Invigorating tender seeds. *Phillips.*

I find in myself an appetitive faculty, which is always in the very height of activity and *invigoration.* *Norris.*

I have lived when the prince, instead of *invigorating* the laws, assumed a power of dispensing with them. *Addison.*

Christian graces and virtues they cannot be, unless fed, *invigorated*, and animated by universal charity. *Atterbury.*

INVIN'CIBLE, *adj.* } Fr. *invincible*; Lat. INVIN'CIBLENESS, *n. s.* } *in* and *vinco.* Insupe- INVIN'CIBLY, *adv.* } rable; not to be conquered or subdued.

O thou most rigorous Queene Thamyris, *invincible*
Upon the strong and hideous peple of citees reigning.
Chaucer. The Nine Ladies Worthie.

I would have thought her spirits had been *invincible* against all assaults of affection. *Shakspeare.*

Neither invitations nor threats avail with those who are *invincibly* impeded, to apply them to their benefit. *Decay of Piety.*

The spirit remains *invincible.* *Milton.*

Ye have been fearless in his righteous cause;
And as ye have received, so have ye done
Invincibly. *Id.*

That mistake, which is the consequence of *invincible* errour, scarce deserves the name of wrong judgment. *Locke.*

Who firmly stood, in a corrupted state,
Against the rage of tyrants, single stood
Invincible! *Thomson.*

INVI'OLABLE, *adj.* } Fr. *inviolable*; Lat- INVI'OLABLY, *adv.* } *in* and *violo.* Not to INVI'OLATE, *adj.* } be profaned, injured, or broken: inviolably, without breach or failure: inviolate, unhurt; unpolluted; unbroken; applied both to persons and things.

What is the best dower
That may be to a wife appropriate?
A clene life, was the clerkes answer,
Without sinne, all chaste and *inviolate*,
From all deceits and speeches inornate,
Or countenance which shall be to dispise:
No fire make, and no smoke woll arise.
Chaucer. Goodlie Questions.

See, see, they join, embrace, and seem to kiss,
As if they vowed some league *inviolable.*
Shakspeare.

His fortune of arms was still *inviolate.*
Bacon's Henry VII.

But let *inviolate* truth be always dear
To thee, even before friendship, truth prefer.
Denham.

Thou, be sure, shall give account
To him who sent us, whose charge is to keep
This place *inviolable*, and these from harm.
Milton.

In vain did Nature's wise command
Divide the waters from the land,
If daring ships, and men prophane,
Invade the *inviolable* main;
Th' eternal fences overleap,
And pass at will the boundless deep.
Dryden.

My love your claim *inviolate* secures;
'Tis writ in fate, I can be only yours. *Id.*

This birthright, when our author pleases, must and must not be sacred and *inviolable.* *Locke.*

The true profession of Christianity *inviolably* engages all its followers to do good to all men. *Sprat.*

IN'VIOUS, *adj.* Lat. *invius.* Impassable; untrodden.

If nothing can oppugn his love,
And virtue *invious* ways can prove,
What may not be confide to do,
That brings both love and virtue too?
Hudibras.

INVISIBIL'ITY, *n. s.* } French, *invisibilité*; INVIS'IBLE, *adj.* } Lat. *invisibilis.* The INVIS'IBLY, *adv.* } state of being imperceptible to sight: not seen or visible.

The threaden sails,
Borne with the *invisible* and creeping wind,
Drew the huge bottoms to the furrowed sea.
Shakspeare.

Age by degrees *invisibly* doth creep,
Nor do we seem to die, but fall asleep.
Denham.

Hypocrisy, the only evil that walks
Invisible except to God alone
By his permissive will through heaven and earth.
Milton.

He was *invisible* that hurt me so;
And none *invisible*, but spirits, can go. *Sidney.*

He that believes a God, believes such a being as hath all perfections; among which this is one, that he is a spirit, and consequently that he is *invisible*, and cannot be seen. *Tillotson.*

It seems easier to make one's self *invisible* to others, than to make another's thoughts visible to me, which are not visible to himself. *Locke.*

They may be demonstrated to be innumerable, substituting their smallness for the reason of their *invisibility.* *Ray.*

Still round him clung *invisibly* a chain,
Which galled for ever, fettering though unseen,
And heavy though it clanked not.
Byron. Childe Harold.

INVIS'CATE, *v. a.* Lat. *in* and *viscus.* To lime; to entangle in glutinous matter.

The cameleon's food being flies, it hath in the tongue a mucous and slimy extremity, whereby, upon a sudden emission, it *inviscates* and entangleth those insects. *Browne.*

INVITA'TION, *n. s.* } Fr. *inviter*; Lat. *in-* INVI'TATORY, *adj.* } *vito.* The act of bid- INVITE', *v. a.* & *v. n.* } ding, or calling to any INVI'TER, *n. s.* } thing with ceremony or INVI'TINGLY, *adv.* } civility: to bid as to a feast; to ask to one's house; to allure, persuade, or induce; to ask, or call to any thing pleasing. Inviter, invitingly, the person inviting, and the manner of an invitation.

If thou be *invited* of a mighty man, withdraw thyself. *Ecclus.*

A war upon the Turks is more worthy than upon any other Gentiles, though facility and hope of success might *invite* some other choice. *Bacon.*

Then you my peers, whose quiet expectation
Seemeth my backward tale would fain *invite*,
Deign gently hear this Purple Island's nation,
A people never seen, yet still in sight.
Fletcher. Purple Island.

If he can but dress up a temptation to look *invitingly*, the business is done. *Decay of Piety.*

That other answered with a lowly look,
And soon the gracious *invitation* took. *Dryden.*

Forbidding me to follow thee *invites* me. *Id.*

Wines and cates the tables grace,
But most the kind *inviter's* cheerful face.
Pope's Odyssey.

What beckoning ghost along the moonlight shade
Invites my steps and points to yonder glade?
Id. Elegy to the Memory of an Unfortunate Lady.

When much company is *invited*, then be as sparing as possible of your coals. *Swift.*

Here enthroned,
Celestial Venus, with divinest airs
Invites the soul to never-fading joy. *Akenside.*

Come, Myrrha, let us on to the Euphrates,
The hour *invites*, the galley is prepared.
Byron. Sardanapalus.

For my part I will not consent to take one step without knowing on what principle I am *invited* to take it, and (which is perhaps of more consequence), without declaring on what principle I will not consent that any step, however harmless, shall be taken.
Canning's Speeches.

INULA, elecampane, a genus of the polygamia superflua order, and syngenesia class of plants; natural order forty-ninth, compositæ. The receptacle naked; the pappus simple; the antheræ, at the base, ending in two bristles. There are thirty-seven species, of which the most remarkable is

I. helenium, or common elecampane. It is a native of Britain; but is cultivated in gardens for the sake of the root, which is used in medicine. The root is perennial, thick, branching, and of a strong odor. The lower leaves are eight or nine inches long, and four broad in the middle, rough on the upper side, but downy on the under. The stalks rise about four feet high, and divide toward the top into several smaller branches, garnished with oblong oval leaves indented on their edges, ending in acute points. Each branch is crowned with one large yellow radiated flower, succeeded by narrow four-cornered seeds, covered with down. It may be propagated in autumn by seeds or offsets. The root, especially when dry, has an agreeable aromatic smell; its taste, on chewing, is glutinous and somewhat rancid; in a little time it discovers an aromatic bitterness, which by degrees becomes considerably acrid and pungent. It possesses the general virtues of alexipharmics, and is principally recommended for promoting expectoration in humoral asthmas and coughs.

In examining this plant, Mr. Rose discovered a new vegetable product to which the name of Inulin has been given. It is white and pulverulent like starch. When thrown on red-hot coals it melts, diffusing a white smoke, with a smell of burning sugar. It yields, on distillation in a retort, all the products furnished by gum. It dissolves readily in hot water; and precipitates almost entirely on cooling, in the form of a white powder; but, before falling down, it gives the liquid a mucilaginous consistence. It precipitates quickly on the addition of alcohol. The above substance is obtained by boiling the root of this plant in four times its weight of water, and leaving the liquid to settle. MM. Pelletier and Caventou have found the same starch-like matter in abundance in the root of colchicum; and M. Gautier in the root of pellitory. Starch and inulin combine, and, when the former is in excess, it is difficult to separate them. The only method is to pour infusion of galls into the decoction, and then to beat the liquid: if inulin be present, a precipitate will fall, which does not disappear till the temperature rises to upwards of 212° Fahrenheit.

INUM'BRATE, *v. a.* Lat. *inumbro.* To shade; to cover with shades.

INUNC'TION, *n. s.* Lat. *inungo, inunctus.* The act of smearing or anointing.

The wise Author of Nature hath placed on the rump two glandules, which the bird catches hold upon with her bill, and squeezes out an oily liniment, fit for the *inunction* of the feathers, and causing their filaments to cohere. *Ray.*

INUNDA'TION, *n. s.* Fr. *inundation;* Lat. *inundatio.* The overflow of waters; flood; deluge. Inundation, says Cowley, implies less than deluge.

Many good towns through that *inundation* of the Irish were utterly wasted. *Spenser.*

Her father counts it dangerous
That she should give her sorrow so much sway;
And in his wisdom hastes our marriage,
To stop the *inundation* of her tears. *Shakspeare.*

The next fair river all the rest exceeding,
Topping the hill, breaks forth in fierce evasion,
And sheds abroad his Nile-like *inundation*,
So gives to all the Isle their food and vegetation.
Fletcher's Purple Island.

All fountains of the deep,
Broke up, shall heave the ocean to usurp
Beyond all bounds, 'till *inundation* rise
Above the highest hills.
Milton's Paradise Lost.

Your cares about your banks infers a fear
Of threatening floods, and *inundations* near.
Dryden.

One day as I was looking on the fields withering with heat, I felt in my mind a sudden wish that I could send rain on the southern mountains, and raise the Nile to an *inundation*. In the hurry of my imagination I commanded rain to fall, and, by comparing the time of my command with that of the *inundation*, I found that the clouds had listened to my lips *Johnson's Rasselas.*

IN'VOCATE, *v. a.*, INVOCA'TION, *n. s.*, INVOKE', *v. a.* } Lat. *in* and *voco.* To invoke; to call upon or pray to: invocation, the act of prayer; the form of calling for aid, or for the presence of any being. Invoke, synonymous with invocate.

Is not the name of prayer usual to signify even all the service that ever we do unto God? And that for no other cause, as I suppose, but to shew that there is in religion no acceptable duty, which devout *invocation* of the name of God doth not either presuppose or infer. *Hooker.*

My *invocation* is
Honest and fair, and in his mistress' name.
Shakspeare.

Poor key-cold figure of a holy king!
Be't lawful, that I *invocate* thy ghost,
To hear the lamentations of poor Anne. *Id.*

And over them triumphant death his dart
Shook, but delayed to strike, though oft *invoked*
With vows, as their chief good, and final hope.
Milton.

The power I will *invoke* dwells in her eyes.
Sidney

The whole poem is a prayer to Fortune, and the *invocation* is divided between the two deities.
Addison on Italy.

The skilful bard,
Striking the Thracian harp, *invokes* Apollo,
To make his hero and himself immortal.
Prior.

He not in vain
Invokes the gentle deity of dreams. *Armstrong.*

Where shall I seek thy presence?
How unblamed *invoke* thy dread perfection?
Barbauld. A Summer Evening's Meditation.

INVOCATION, in divinity, the difference between the invocation of God and of the saints, as practised by the Papists, is thus explained in the catechism of the council of Trent:—We beg of God, to give us good things, and to deliver us from evil; but we pray to the saints, to intercede with God and obtain those things which we stand in need of. Hence we use different forms in praying to God and to the saints: to the former we say, hear us, have mercy on us; to the latter we only say, pray for us. The council of Trent expressly teaches, that the saints who reign with Jesus Christ offer up their prayers to God for men; and condemn those who maintain the contrary doctrine. The Protestants reject this practice as contrary to Scripture, deny the truth of the fact, and think it absurd to suppose, that a limited finite being should be in a manner omnipresent, and at one and the same time hear and attend to prayers offered to him in England, China, and Peru. Hence they infer, that, if the saints cannot hear us, it is folly to pray to them.

IN'VOICE, *n. s.* This word is perhaps corrupted from the French word *envoyez*, send. A catalogue of the freight of a ship, or of the articles and price of goods sent by a factor.

INVOLVE', *v. a.* } Lat. *involvo.* To en-
INVOLU'TION, *n. s.* } wrap; to entwist; to imply or comprise; to include; to entangle; to complicate or blend. Involution, the act of wrapping; the state of being entangled; that which is wrapped round any thing.

No man could miss his way to heaven for want of light; and yet so vain are they as to think they oblige the world by *involving* it in darkness.
Decay of Piety.

Leave a singed bottom all *involved*
With stench and smoke. *Milton.*
He knows his end with mine *involved.* *Id.*

Great conceits are raised of the *involution* or membraneous covering called the silly-how, sometimes found about the heads of children.
Browne's Vulgar Errours.

In a cloud *involved*, he takes his flight,
Where Greeks and Trojans mixed in mortal fight.
Dryden.

As obscure and imperfect ideas often *involve* our reason, so do dubious words puzzle men's reason.
Locke.

All things are mixed, and causes blended by mutual *involutions.* *Glanville.*

The gathering number, as it moves along,
Involves a vast involuntary throng. *Pope.*

One death *involves*
Tyrants and slaves. *Thomson's Summer.*

What *involution!* what extent! what swarms
Of worlds that laugh at earth! immensely great!
Young.

Now night's dim shades again *involve* the sky,
Again the wanderers want a place to lie,
Again they search and find a lodging nigh.
Parnell. Hermit.

Much learned dust
Involves the combatants, each claiming truth
And truth disclaiming both. *Cowper.*

INVOL'UNTARILY, *adv.* } Fr. *involon-*
INVOL'UNTARY, *adj.* } *taire;* Lat. *in* and *volo.* Not by choice: not having the power of choice; not done willingly.

The forbearance of that action, consequent to such command of the mind, is called voluntary; and whatsoever action is performed without such a thought of the mind, is called *involuntary.* *Locke.*

But why, ah tell me, ah too dear?
Steals down my cheek the' *involuntary* tear?
Pope.

INURE', *v. a.* } Lat. *in* and *uro.* To
INURE'MENT, *n. s.* } accustom by practice; to habituate; it had anciently *with* before the thing practised: inurement, practice; habit; custom.

That it may no painful work endure,
It to strong labour can itself *inure.*
Hubberd's Tale.

Because they so proudly insult, we must a little *inure* their ears *with* hearing how others, whom they more regard, are accustomed to use the self-same language with us. *Hooker.*

The forward hand, *inured* to wounds, makes way
Upon the sharpest fronts of the most fierce. *Daniel.*

They, who had been most *inured* to business, had not in their lives ever undergone so great fatigue for twenty days together. *Clarendon.*

To *inure*
Our prompt obedience. *Milton. Paradise Lost.*

If iron will acquire by mere continuance a secret appetite, and habitual inclination to the site it held, then how much more may education, being nothing else but a constant plight and *inurement*, induce by custom good habits into a reasonable creature.
Wotton.

Sermons he read, and lectures he endured
And homilies, and lives of all the saints;
To Jerome and to Chrysostom *inured*,
He did not take such studies for restraints.
Byron. Don Juan.

INURN', *v. a.* In and urn. To intomb; to bury.

The sepulchre
Wherein we saw thee quietly *inurned*,
Hath oped its ponderous and marble jaws
To cast thee up again. *Shakspeare. Hamlet.*
Amidst the tears of Trojan dames *inurned*,
And by his loyal daughters truly mourned.
Dryden.

INU'TILE, *adj.* } Fr. *inutile, inutilité;* Lat.
INUTIL'ITY, *n. s.* } *inutilis, inutilitas.* Useless; unprofitable: uselessness; unprofitableness.

To refer to heat and cold is a compendious and *inutile* speculation. *Bacon's Natural History.*

INVUL'NERABLE, *adj.* Fr. *invulnerable;* Lat. *invulnerabilis.* Not to be wounded; secure from wound.

Our cannon's malice vainly shall be spent
Against the' *invulnerable* clouds of heaven.
Shakspeare.

Nor vainly hope
To be *invulnerable* in those bright arms,
That mortal dint none can resist. *Milton*

INWALL', *v. a.* In and wall. To enclose or fortify with a wall.

Three such towns in those places with the garrisons would be so augmented as they would be able with little to *inwall* themselves strongly.
Spenser on Ireland.

IN'WARD, *adv., adj.* & *n. s.* }
IN'WARDS, *adv.*
IN'WARDLY, *adv.*
IN'WARDNESS, *n. s.* } Sax. ınpeapꝺ. Within; with inflection or incurvity into the mind or thoughts: internal; reflecting; deeply thinking; intimate; familiar; seated in the mind: inward, an intimate acquaintance: inwardness, intimacy; familiarity.

Mine bill now maketh finall mention,—
That ye ben ladie, in myne *inward* thought.
Chaucer. The Court of Love.

His heart with vengeance *inwardly* did swell,
And forth at last did break in speaches sharpe and fell.
Spenser. Faerie Queene.

Though the lord of the liberty do pain himself all he may to yield equal justice unto all, yet can there not but great abuses lurk in so *inward* and absolute a privilege.
Spenser.

That which *inwardly* each man should be, the church outwardly ought to testify.
Hooker.

Looking *inward* we were stricken dumb; looking upward we speak and prevail.
Id.

You know my *inwardness* and love
Is very much unto the prince and Claudio.
Shakspeare.

Sir, I was an *inward* of his; a sly fellow was the duke; and I know the cause of his withdrawing.
Id.

The parts of living creatures that be more *inwards*, nourish more that the outward flesh.
Bacon's Natural History.

The medicines which go to these magical ointments are so strong, that if they were used *inwards* they would kill; and therefore they work potently, though outwards.
Bacon.

Yet all these stars which deck this beauteous sky
By force of the' *inward* sun both shine and move;
Throned in her heart sits love's high majesty;
In highest majesty the highest love.
Fletcher's Purple Island.

If of his outward-meanes, theeves make a prise;
Hee, more occasion hath to exercise
His *inward* Riches: and they prove a wealth,
More usefull and lesse lyable to stealth. *G. Withers,*

Nor can be easily
Repulsed, without much *inward* passion felt,
And secret sting of amorous remorse.
Milton's Samson Agonistes.

He stretches out his arm in sign of peace, with his breast bending *inward*.
Dryden's Dufresnoy.

They esteem them most profitable, because of the great quantity of fat upon their *inwards*.
Mortimer.

Sickness, contributing no less than old age to the shaking down this scaffolding of the body, may discover the *inward* structure more plainly.
Pope.

Darkness has more divinity to me;
It strikes thought *inward*.
Young.

Upon her face there was a trait of grief,
The settled shadow of an *inward* strife,
And an unquiet drooping of the eye,
As if its lid were charged with unshed tears.
Byron.

INWEAVE'. Preter. inwove or inweaved, part. pass. inwove, inwoven, or inweaved. In and weave. To mix any thing in weaving, so that it forms part of the texture.

A fair border, wrought of sundry flowers,
Inwoven with an ivy winding trail.
Spenser.

Down they cast
Their crowns, *inwove* with amaranth and gold.
Milton.

To entertwine; to complicate.

The roof
Of thickest covert was *inwoven* shade.
Milton.

INWOOD', *v. a.* In and wood. To hide in a wood. Not used.

He got out of the river, *inwooded* himself so as the ladies lost the marking his sportfulness.
Sidney.

INWRAP', *v. a.* In and wrap.

To cover by involution: to involve.

And over them Arachne high did lift
Her cunning web, and spread her subtil net,
Inwrapped in foul smoak.
Faerie Queene.

This, as an amber drop *inwraps* a bee,
Covering discovers your quick soul; that we
May in your through-shine front our heart's thoughts see.
Donne.

To perplex; to puzzle with difficulty or obscurity.

The case is no sooner made than resolved; if it be made not *inwrapped*, but plainly and perspicuously.
Bacon.

It is doubtful whether the following examples should not be enrap or inrap, from Lat. *in* and *rap*, *rapio*, to ravish or transport.

This pearl she gave me I do feel't and see't:
And though 'tis wonder that *inwraps* me thus,
Yet 'tis not madness.
Shakspeare.

For if such holy song
Enwrap our fancy long
Time will run back, and fetch the age of gold.
Milton.

INWROUGHT', *adj.* In and wrought. Adorned with work.

Camus, reverend Sir, went footing slow,
His mantle hairy, and his bonnet sedge,
Inwrought with figures dim, and on the edge
Like to that sanguine flower inscribed with woe.
Milton.

INWREATHE', *v. a.* In and wreath. To surround as with a wreath.

Bind their resplendent locks *inwreathed* with beams.
Milton.

Nor less the palm of peace *inwreathes* thy brow.
Thomson.

IO, in fabulous history, the daughter of Inachus, or, according to others, of Jasus and Pirene, was priestess of Juno at Argos. Jupiter became enamoured of her; but, Juno having surprised him in her company, Jupiter changed Io into a beautiful heifer; and the goddess, knowing the fraud, obtained from her husband the animal whose beauty she pretended to commend. Juno commanded the hundred-eyed Argus to watch the heifer; but Jupiter sent Mercury to destroy Argus, and restore Io to her liberty. Juno then sent one of the Furies to torment her. She wandered over the greatest part of the earth, and crossed over the sea, till at last she stopped on the banks of the Nile, still exposed to the torments of the Fury. Here Jupiter restored her to her natural form, after which she brought forth Epaphus. Afterwards she married Osiris, king of Egypt, and treated her sub-

jects with such mildness, that after death she was worshipped under the name of Isis. According to Herodotus, Io was carried away by Phœnician merchants, who wished to make reprisals for Europa, who had been stolen by the Greeks.

JOAB, יואב, Heb. i. e. Fatherhood, a brave general of the Israelites under king David, and the son of Zeruiah, David's sister, and brother of Abishai and Asahel. His defeat of the army under Abner, his capture of the fort of Zion from the Jebusites, and his victories over the Moabites, Philistines, Edomites, Syrians, Ammonites, and the rebels under Absalom and Sheba; as well as his intercession for Absalom, and his judicious advice to David against mourning for his death, and against numbering the people, are recorded in 2 Sam. ii—xxiv. He was a faithful adherent to his royal uncle, in his adversity as well as in his prosperity. Joab's greatest crimes appear to have been his treacherously murdering ABNER and AMASA; see these articles; for there seems to have been nothing criminal or treasonable in his joining the party of Adonijah, the heir apparent; and for these murders he was justly put to death by Solomon's order, A. A. C. 1014.

JOACHIM, a celebrated monk, born at Celico, near Cosenza. He went on a pilgrimage to the Holy Land, and on his return joined the Cistercians; became abbot of Flora in Calabria, and founded several other monasteries, which he governed with great discretion. He was regarded by his followers, see next article, as a prophet, and his predictions were printed in a work entitled The Everlasting Gospel. He wrote several other books, and died in 1202.

JOACHIMITES, in church history, the disciples of Joachim. They were particularly fond of certain ternaries: The Father, they said, operated from the beginning till the coming of the Son; the Son, from that time to theirs; A.D. 1260; and from that time the Holy Spirit was to operate. They also divided every thing relating to men, to doctrine, and the manner of living, into three classes, according to the three persons in the Trinity: The first ternary was that of men, of whom the first class was that of married men, which had lasted during the whole period of the Father; the second was that of clerks, which had lasted during the time of the Son; and the last was that of the monks, in which there was to be an uncommon effusion of grace by the Holy Spirit: The second ternary was that of doctrine, viz. the Old Testament, the New, and the everlasting Gospel; the first they ascribed to the Father, the second to the Son, and the third to the Holy Spirit: A third ternary consisted in the manner of living, viz. under the Father, men lived according to the flesh; under the Son, they lived according to the flesh and the Spirit; and under the Holy Ghost, they were to live according to the Spirit only.

JOAN I. queen of Naples, daughter of Charles king of Sicily, was born in 1326; and began to reign in 1345. She married Andrew king of Hungary, whom she murdered, to make room for another husband, whom she also murdered. Lewis, king of Hungary, marched to avenge his brother's death, and compelled her to fly to Provence. Having afterwards recovered her kingdom, she married a third and fourth husband, but having no children adopted Charles de Duras, who, at the instigation of the king of Hungary, smothered her between two mattresses, in 1381.

JOAN (Pope), a fictitious character only worthy of notice as having been the subject of considerable controversy. The fable asserted that, in the middle of the ninth century, a female named Joan who had received an excellent education conceived a violent passion for a young monk at Mentz named Felda; and, in order to obtain admittance to his monastery, assumed the male habit. The plan succeeded, and after having long indulged in their amours undisturbed, they at length eloped, and travelled through many of the countries of Europe, engaging the assistance of the best masters in the sciences in the different cities through which they passed. On the death of her lover, Joan repaired to Rome, still in the dress of a man; and commenced the duties of professor, and persons of the highest rank and most considerable talents enlisted in the number of her disciples. At length, on the death of pope Leo S. in 855, she was unanimously elected his successor to the pontifical throne. At length she confided her secret to a domestic whom she took to her bed, the consequence of which was her pregnancy, and she was taken in labor at one of the most solemn processions, delivered of a child in the street, and died on the spot. It is likewise said, that, to perpetuate the memory of the adventure, a statue was erected on the place where it happened; that, in abhorrence of the crime, the succeeding popes in their annual processions from the Vatican to the Lateran have turned off from that street; and that, to prevent a similar imposition, a custom was introduced of examining each pope previously to his consecration, in order to ascertain his sex. Such are the particulars of a story that seems not to have been called in question till the time of Luther, but which the best informed historians usually abandon as fictitious. 'Till the reformation,' says Gibbon, 'the tale was repeated and believed without offence, and Joan's female statue long occupied her place among the popes in the cathedral of Sienna. She has been annihilated by two learned Protestants, Blondel and Bayle, but their brethren were scandalised by this equitable and generous criticism. Spanheim and L'Enfant attempted to save this poor engine of controversy; and even Mosheim condescends to cherish some doubt and suspicion.'

JOAN OF ARC, commonly called the Maid of Orleans, was born of low parentage at Domremi, a little village on the borders of Lorraine. She became servant at an inn and attended to the horses. At this time the affairs of France were in a deplorable state, and Orleans was so closely beseiged by the duke of Bedford that its capture appeared to be inevitable. In this exigency Joan pretended to have received a divine commission to expel the invaders. On being introduced to the French king Charles VII.

she offered to conduct him to the market place of Orleans to raise the siege, and attend his coronation at Rheims, then in possession of the English. She headed the French troops, and while they were elated by having, as they supposed, an inspired leader, the English were proportionally dismayed. Joan entered Orleans in triumph, and the coronation at Rheims followed; after which Charles caused a medal to be struck in honor of the heroine, and also ennobled her family. The town of Domremi, where she was born, was declared exempt from all imposts for ever. After the coronation, Joan intimated that her mission was at an end, and that she should now retire to private life; but Dunois persuaded her to remain with the army, to cheer the soldiers by her presence. This was to her fatal advice; for being taken with the garrison of Compeigne, the English, to their great disgrace, caused her to be burnt as a sorceress, in the nineteenth year of her age, 1431. Some doubts, however, have been raised against this part of the story; and it has been even said, that so far from being put to death, she lived and was married. Some time after, when public commiseration had succeeded to vindictive bigotry, a woman appeared at Metz, who declared herself to be Joan of Arc. She was every where welcomed with zeal. At Orleans, especially, where Joan was well known, she was received with the honors due to the liberatress of their town. She was acknowledged by both her brothers, Jean and Pierre d' Arc. On their testimony she was married by a gentleman of the house of Amboise, in 1436. At their solicitation her sentence was annulled in 1456. (Hist. de la Pucelle, par l' Abbé Lenglet. Melanges Curieux Monstrelet, &c.)

JOANNA, Anjuan, or Hinzuan, one of the largest and best known of the Comora Islands, between the north end of Madagascar and the continent of Africa, has been governed about two centuries by a colony of Arabs. It is of a triangular shape, and rises in well wooded mountains to a peak in the centre: the whole island abounding with a calcined substance, and other volcanic appearances. The climate is healthy, and the land of the interior tolerably fertile; but this is barren, and the whole neighbourhood has been of late greatly desolated by pirates. See Comora.

The valleys, or glens, have each their rivulet descending from the mountains which bound them, and whose summits are covered with timber trees, and their bases with cocoa nuts, bananas, oranges, and lemons. The sugar-cane comes to perfection as well as the indigo plant. The only wild animals known on the island are the makis and the common mouse; the domestic ones are small but well tasted; horned cattle with humps, and goats. The cattle are offered at about ten dollars each. The commonest birds are, Guinea fowl, doves, and quails. The population of the island in 1804 was not calculated at more than 6000 or 7000; though it appears to have been formerly much greater. The natives seem to be a mixture of Arabs and negroes; their religion is also a mixture of Mahommedanism and negro idolatry. They are good sailors, and have vessels, called trankys, of some burden, in which they trade to Bombay and Surat with cocoa-nuts and cowries.

Anjuan is governed by a chief or sultan, who pretends to a superiority over the other islands. The people are divided into nobles and peasants; the former are the only merchants, and monopolize the trade of supplying European vessels with fresh provisions, the only purpose for which they touch at this island.

The bay of Moochadon, on the north side of the island, is the place now usually visited by European ships: this bay occupies the whole of this side, the north-east and north-west points of the island being its limits. Off the former are some breakers, but it may be approached within half a mile; and off the north-west point is a small island, called the Paps, united to the point by a reef. Several rivulets fall into this bay, so that watering is easy. The town called Sultan is a mere assemblage of miserable hovels, surrounded by a wall fifteen feet high, flanked with square towers. It is also defended by a kind of fort, on an elevation; the ascent to which is by 300 or 400 steps, enclosed between two walls. There are also two villages on this bay, one on the east, and the other on the west. On a bay of the east side of the island was the town of Anjuan, formerly the usual anchorage of European vessels; but the town was destroyed by the Madagasses, in 1790.

Captain Tomlinson, who was here in 1809, says 'the people of Johanna are the most courteous and inoffensive I have ever met; tendering every assistance to strangers, and executing any commission entrusted to them with the greatest fidelity and care. They have lately been much reduced by the natives of Madagascar, who have annually invaded the islands for the purpose of carrying off slaves, which they sell to the French. The other islands, Comoro, Mohilla, and Mayotta, are nearly depopulated from the attacks of these marauders, and at this time Johanna, from twelve towns, is reduced to two.'

JOANNINA, a considerable city of European Turkey, the capital of Albania. The environs are extremely beautiful: on the one side is a fertile plain, of twelve or fourteen miles in length, covered with groves and plantations of the richest produce; on the other a noble lake, with its well wooded islands, stretches out for a distance of several miles. The town is about two miles and a half in length, its breadth is nearly one. The principal street runs nearly the whole length of the town, and another crosses it at right angles: both, as well as several of the others, are well paved; and the bazaar is large, and full of good shops. The dwelling-houses have generally a court yard planted with trees, or an adjoining garden. The ground-floor is generally used for stables or warehouses, and the windows of the houses are small. On a peninsula, in the lake, and surrounded with walls and fortifications, was the palace of the late pacha. Some of the mosques and churches are worth notice.

The inhabitants, composed of Greeks and Albanians, and in a small proportion of Turks and Jews, neither wear the dress nor speak the language of the surrounding country; but the Romaic or modern Greek: in their manners they

resemble the Greeks of Morea. There are here two academies; one for boys, the other, called a gymnasium, for youths farther advanced: at the latter are taught the languages, history, geography and the elementary parts of philosophy. Many of the better class pass several years of their youth at Trieste, Venice, and Vienna.

There are hardly any manufactures in Joannina, except of Turkey leather; but works of embroidery are carried to great perfection. An annual fair is held about a mile from the town, which continues a fortnight, and where a variety of articles of European manufacture are displayed. Large flocks of sheep, and droves of cattle, are likewise brought down from the mountains for sale. The principal articles of import are woollens, glass, hardware, paper, and fire-arms: those of export are wool, corn, oil, tobacco, and cattle.

Joannina is said to have been founded in the fifteenth century: but at the beginning of the nineteenth century it grew into notice as the capital of the celebrated Ali Pacha, whose life we have given. It is the see of an archbishop, and stands seventy miles from Larissa, 115 south-west of Salonica, and 400 west by south of Constantinople. Inhabitants about 40,000

JOANPORE, a district of Allahabad, Hindostan, situated between the Gogra and the Ganges, and intersected by the Goomty. It is extremely fertile and very well cultivated. The inhabitants are Mahommedans and Hindoos, in about equal proportions. Of the latter, the Rajecoomars were much addicted to the inhuman practice of female infanticide. This district was once annexed to Benares, and came into possession of the British about 1780. Its chief towns are Azimgur and Joanpore; and it is included in the collectorship of Benares.

JOANPORE, a city of Hindostan, the chief town of the above-mentioned district, was formerly the capital of a principality. The fortress, built in 1370, by sultan Feroze III. of Delhi, was erected around the ruins of a celebrated Hindoo temple, called Kerarbeer. When the empire of Mahmoud was overturned, in the end of the fourteenth century, the governor of the eastern districts, named Khuaje Jehan, assumed the royal dignity, and made Joanpore his capital. He was succeeded by his son Mobarik Shah, and shortly after by sultan Ibrahim, who, during a reign of forty years, spared no pains to improve the fortress and city; and several of his mosques and other public buildings still remain. In the next century Joanpore fell again to the empire of Delhi. It was often taken during the contest between the Afghauns and Moguls; but, about the year 1570, it was thoroughly repaired, during the government of Monaim Khan, of the court of Akbar. During his government the celebrated bridge of Joanpore was built.

The town surrounds the fort on three sides, and contains a good bazaar; but the vicinity for several miles is covered with the ruins of tombs and mosques. Of the latter, that of the Jamai Musjed is very handsome. It is said to have been erected by sultan Ibrahim, during seven years of famine, to give employment to the poor. The date on the great gateway is A H. 852. Joanpore is the station of a civil establishment, of judge, &c., and of a battalion of native infantry.

JOAO DEL REY, a town and district of Brasil, in the country of Minas Geraes. It is situated on the Rio das Mortes, which runs northwards into the Rio das Velhas. The neighbourhood is fertile, and produces excellent fruits.

JOASH, Heb. יואש, i. e. the fire of the Lord, the son of Ahaziah, king of Judah, the only one of the blood royal who was preserved from his grandmother's bloody massacre. See ATHALIAH. His preservation, coronation, relapse into idolatry, and ungrateful murder of his cousin Zechariah, the son of his benefactors, with his consequent misfortunes and merited death, A. M. 3165, and A. A. C. 839, are recorded in 2 Kings xi. xii. and 2 Chron. xxiii. xxiv.

JOASH, the son of Jehoaz, king of Israel. Though he copied the political idolatry of Jeroboam I. he seems to have had a great respect for Elishah. His last visit to that prophet, with his repeated victories over the Syrians, and over Amaziah king of Judah, with his pillage of Jerusalem, are recorded in 2 Kings xiii. xiv. and 2 Chron. xxv. He died A. M. 3197, and A. A.C. 810; and was succeeded by Jeroboam II.

JOB, *n. s.*, *v. a.* & *v. n.*
JOB'S-TEARS, *n. s.*
JOB'BER, *n. s.*
JOB'BERNOWL, *n. s.*

} Ital. *giobo*: etymology is doubtful. A piece of chance work; a low mean lucrative affair; a sudden stab with a sharp instrument: to strike suddenly, or drive in a pointed instrument; to buy and sell as a broker: to work occasionally: Job's-tears, an herb: jobber, one who sells stock for others; one who works occasionally: jobbernowl, most probably from Flem. *jobbe*, dull, and Sax. þnol, a head, loggerhead; blockhead.

> And like the world, men's *jobbernowls*
> Turn round upon their ears, the poles.
> *Hudibras.*

As an ass with a galled back was feeding in a meadow, a raven pitched upon him, and sat *jobbing* of the sore. *L'Estrange.*

The work would, where a small irregularity of stuff should happen, draw or *job* the edge into the stuff. *Moxon.*

He was now with his old friends, like an old favourite of a cunning minister after the *job* is over. *Arbuthnot.*

> The judge shall *job*, the bishop bite the town,
> And mighty dukes pack cards for half a crown.
> *Pope.*
> No cheek is known to blush, no heart to throb
> Save when they lose a question, or a *job*. *Id.*

> So cast it in the southern seas,
> And view it through a *jobber's* bill;
> Put on what spectacles you please,
> Your guinea's but a guinea still. *Swift.*

JOB, Heb. איוב, i. e. patient, an ancient inhabitant of the land of Uz, east of Gilead, remarkable for his patience in the midst of the most accumulated and extreme adversity. Many authors have supposed, with the Jewish rabbies, that the character of Job is entirely parabolical, or fictitious; but this is highly improbable, as not only the apostle James (ch. v. 11) mentions

him as a real character, but the language applied to him by the Almighty himself in Ezekiel xiv. 14, 20, puts the matter beyond all possibility of doubt. In that passage he is ranked with Noah and Daniel (who we are sure were no fictitious characters). The period in which Job lived has also been much disputed; but many passages in the book of Job plainly show that he flourished in the patriarchal age. The allusions to the deluge and the destruction of Sodom, and the total silence of Job and his friends with respect to the law (which is never once quoted), and to the departure of the Israelites out of Egypt, show that he must have lived between the former and the latter of these events. But what fixes the chronology of Job, almost to a certainty, is that his aged friend, Eliphaz the Temanite, is expressly recorded to have been the son of Esau, and the father of Teman (Gen. xxxvi. 10, 11), who is said to have built a city named after himself, in which his father resided, and was hence called a Temanite. Alstedius, in his Thesaurus Chronologiæ, proceeding upon this probability, fixes the era of Job's sufferings in the years of the world 2330 and 2331; and gives two genealogies of Job, by one of which he makes him the son of Uz, or Huz (mentioned Gen. xxii. 21), the eldest son of Nahor, Abraham's brother. The following is appended to the canonical book in the Greek, Arabic, and Vulgate, versions, and is supposed to have been copied from the old Syriac translation. It is therefore unquestionably of very high antiquity. 'Job dwelt in the Ausitis (land of Uz or Utz), on the confines of Idumea and Arabia. His name was at first Jobab. He married an Arabian woman, by whom he had a son called Ennon. He himself was the son of Zerah, of the posterity of Esau, and a native of Bozrah; so that he was the fifth from Abraham. He reigned in Edom (Idumea), and the kings before and after him reigned in the following order:—Balak, the son of Beor, in the city of Dinhabah (often spelt Denaba); and next in succession Job, otherwise called Jobab. To Job succeeded Husham, prince of Teman. After him reigned Hadad the son of Bedad, who defeated the Midianites in the field of Moab. The name of his city was Arith, The friends of Job, who came to visit him, were Eliphaz, of the line of Esau, and king of Teman; Bildad, king of the Shuhites; and Zophar the king of the Naamathites.' Dr. Watkins, in his Biographical and Historical Dictionary, fixes the birth of Job to about A.A.C. 1700. The descent of Elihu also (mentioned in ch. xxxii. ver. 2) from Buz, the second son of Nahor (Gen xxii. 21), is an additional confirmation that Job lived about this period.

Job, a canonical book of the Old Testament, contains a narrative of Job's misfortunes, the uncharitable surmises of his friends, and his final restoration to prosperity. Those who have supposed Job to be a fictitious character have fancied the book of Job to be dramatic. But this book will be read with most instruction by those who consider it as a simple narrative of facts, left on record to remind us that though 'Man is born to trouble,' and although many trials and difficulties frequently embitter the cup of mortals, yet the design of the Almighty, in permitting these afflictions, is for our ultimate profit and welfare. In the account we have of the 'Sons of God presenting themselves,' &c., and the agency by which Job was tried and afflicted, the attentive student of Scripture will find interesting information as to the nature and operation of that Evil Spirit distinguished by the name Satan. The style of this book is highly poetical, and it abounds with sublime imagery.

Bishop Warburton is of opinion that this book is an allegorical dramatic poem, written by Ezra, some time between the return of the Jews from the captivity of Babylon, and their thorough settlement in their own country: thus Job is designed to personate the Jewish people; his three friends, the three great enemies of the Jews, Sanballat, Tobiah, and Geshem. Job's wife was intended by the poet to represent the idolatrous wives which many of the Jews had taken, contrary to the law. Le Clerc also supposes that the book of Job was written after the Jews were carried into Babylon, and mentions, in proof of this, the frequent Chaldaisms that occur in it.

Grotius apprehends that this book contains a true history; that the events recorded in it happened in Arabia, whilst the Israelites wandered in the desert; and that the writer, who was a Hebrew, lived before the time of Ezekiel, but after David and Solomon; and that it was written for the use of the Edomites transported to Babylon, to confirm them in the worship of the true God, and to teach them patience in adversity. Schultens ascribes the poetical part of this book, the style of which, he says, has all the marks of the most venerable and remote antiquity, to Job himself; the rest he supposes to be the work of some Hebrew collector. Most of the Jewish doctors believe that Moses was the writer of this book; and M. Huet supposes that it was written by Moses in his exile in the land of Midian.

Dr. Mason Good also inclines to believe that Moses was the writer, and that the last two verses were added by some transcriber. See *Dr. Good's Translation of Job.*

Job, or Ayub (Solomon), an African prince, son of the king of Bondou, in Senegambia, was sent in 1730 by his father to the sea-coast to treat with the English traders, but, being taken prisoner by the Mandingoes, was himself sold as a slave to them. He was taken to Maryland, and employed as a field laborer: but having fled from his master, and excited curiosity, he was ransomed by general Oglethorpe and some other gentlemen, and sent, April 1733, to England. Here he translated, for Sir Hans Sloane, some Arabic MSS., was presented at court, and, having been furnished with valuable presents, set sail for Africa. He reached Fort James, on the Senegal, the 8th of August 1734; but, while preparing to proceed for Bondou, he learnt that his father was dead: his future fate was never known in this country. While in England he wrote three copies of the Koran, from memory.

JOBERT (Lewis), a pious and learned Jesuit, born at Paris in 1647. He distinguished himself as a preacher; and wrote a treatise, entitled La Science des Medailles, which is much esteemed, with several other tracts. He died in 1719: the best edition of this work is that of Paris in 1739, 2 vols. 12mo.

JOCASTA, in fabulous history, the daughter of Menœceus, and wife of Laius king of Thebes, by whom she had Œdipus. Having afterwards married Œdipus, without knowing him, when she discovered that she had been guilty of incest she hanged herself in despair. She is called Epicasta by some mythologists. See Œdipus.

JOCK'EY, *n. s.* & *v. a.* From Jack, the diminutive of John, comes Jackey, or, as the Scotch, jockey, used for any boy, and particularly for a boy that rides racehorses; a man that deals in horses; a cheat: jockey, to justle by riding against any one; to cheat or trick.

These were the wise ancients, who heaped up greater honours on Pindar's *jockies* than on the poet himself. *Addison.*

JOCOSE', *adj.*
Jocose'ly, *adv.*
Jocose'ness, *n. s.*
Jocos'ity, *n. s.*
Joc'ular, *adj.*
Jocular'ity, *n. s.*
Joc'und, *adj.*
Joc'undly, *adv.*

Lat. *jocosus* and *jocularis*. Merry; waggish: in jest or sport: merriment; jesting; used both of men and things: jocund, gay; airy; lively.

Then said our hoste; "certain it woulde seeme
Thy lord were wise, and so I may wel deme;
He is ful *jocunde*, also dare I leye.
Chaucer. Prologue to the Chanones Yemannes Tale.

There's comfort yet; then be thou *jocund*. *Shakspeare.*

A laugh there is of contempt or indignation, as well as of mirth or *jocosity*. *Browne's Vulgar Errours.*

They on their mirth and dance
Intent, with *jocund* musick charm his ear. *Milton.*

The satire is a dramatick poem; the stile is partly serious, and partly *jocular*. *Dryden.*

He has no power of himself to leave it; but he is ruined *jocundly* and pleasantly, and damned according to his heart's desire. *South.*

Fair nature seems revived, and even my heart
Sits light and *jocund* at the day's return.
Rowe's Royal Convert.

If the subject be sacred all ludicrous turns, and *jocose* or comical airs, should be excluded, lest young minds learn to trifle with the awful solemnities of religion. *Watts.*

How *jocund* did they drive their teams afield
How bowed the woods beneath their sturdy stroke.
Gray's Elegy.

If I must make a prison of our palace,
At least we'll wear our fetters *jocundly*.
Byron.

JODE (Peter de), an engraver of some note, born in Antwerp. He received his first instructions from Henry Goltzius: and afterwards went to Italy, where he engraved plates from different painters; and returned to Antwerp about 1601, where he resided till his death, A. D. 1634. His works are numerous, and possess considerable merit.

Jode (Peter de), the younger son to the former, was born in 1606. He learned the art of engraving from his father, and surpassed him in taste and the facility of handling the graver; but can hardly be said to have equalled him in correctness of drawing the naked parts of the human figure. They went together to Paris, where they engraved conjointly a considerable number of plates. The son's finest performances are from Rubens and Vandyck. Basan says of him, that in several of his engravings he has 'equalled the best engravers, and in others he has sunk below himself.' His son, Arnold, was also an engraver, but of very inferior merit.

JODELLE (Stephen), lord of Limodin, was born at Paris in 1532; and distinguished himself so greatly, by his poetical talents, that he was reckoned one of the Pleiades, celebrated by Ronsard. He is said to have been the first Frenchman who wrote plays in his own language according to the ancient style. In his younger years he embraced the reformed religion, and wrote a satire on the mass in 100 Latin verses; but afterwards returned to the Roman Catholic faith. He died in 1579, very poor.

IODINE, in chemistry, a peculiar undecompounded principle so called from the Greek ιωδης, violet-colored, on account of the violet color of its vapor. Gay Lussac gave it the appellation of Ione from ιον the violet: but Sir H. Davy conceiving that this term, in consequence of its derivatives Ionic and Ionian, would lead to ambiguity, suggested iodine, which is now universally adopted. It is preferable to iode; because more analogous to oxygen and chlorine the names of the only other two supporters of chemical combustion at present discovered. The investigation of this singular substance will always be regarded as an æra of the first importance in chemistry, as it was then that chemical philosophers first generally felt the necessity of abandoning Lavoisier's hypothesis of oxygenation. In 1812 iodine was accidently discovered by M. de Courtois, a manufacturer of saltpetre at Paris. In his processes for procuring soda from kelp, he found the metallic vessels much corroded; and, in searching for the cause of the corrosion, he made this important discovery. Finding that the cares of his manufactory would not allow him the leisure requisite for the investigation of the properties of this new substance, he communicated the secret to M. Clement, presented him with a quantity of iodine, and requested him to determine its nature. M. Clement accordingly made a number of experiments upon the subject, the results of which were communicated to the French Institute about the end of the year 1813, and afterwards published in the Annales de Chimie. He stated its specific gravity to be about 4; that it became a violet-colored gas at a temperature below that of boiling water; that it combined with the metals, and with phosphorus and sulphur, and likewise with alkalies and metallic oxides; that it formed a detonating compound with ammonia; that it was soluble in alcohol, and still more soluble in ether; and that by its action upon phosphorus, and upon hydrogen, a substance having the characters of muriatic acid was formed. In this communication he offered no decided opinion respecting its nature. M. Gay Lussac next undertook the examination of this interesting substance, and published his remarks on it under the title of Memoir sur l'Iode. Meanwhile M. Ampere having presented Sir H. Davy, who was then in Paris, with a quantity of iodine, he subjected it likewise to experiment, and drew similar conclusions with those of Gay Lussac. He published a paper on the subject

in the Philosophical Transactions for 1814, and has since prosecuted his investigation in several other papers published in subsequent volumes of the same work.

Iodine has been found in the following sea-weeds, the algæ aquaticæ of Linnæus :—

Fucus cartilagineus,	Fucus palmatus,
membranaceus,	filum,
filamentosus,	digitatus,
rubens,	saccharinus,
nodosus,	Ulva umbilicalis,
serratus,	pavonia,
siliquosus,	linza, and in sponge.

Dr. Fyfe has shown, in an ingenious paper, published in the first volume of the Edinburgh Philosophical Journal, that on adding sulphuric acid to a concentrated viscid infusion of these algæ in hot water, the vapor of iodine is exhaled. But it is from the incinerated sea-weed, or kelp, that iodine in quantities is to be obtained. Dr. Wollaston first communicated a precise formula for extracting it. Dissolve the soluble part of kelp in water. Concentrate the liquid by evaporation, and separate all the crystals that can be obtained. Pour the remaining liquid into a clean vessel, and mix with it an excess of sulphuric acid. Boil this liquid for some time. Sulphur is precipitated, and muriatic acid driven off. Decant off the clear liquid, and strain it through wool. Put it into a small flask, and mix it with as much black oxide of manganese as we used before of sulphuric acid. Apply to the top of the flask a glass tube, shut at one end. Then heat the mixture in the flask. The iodine sublimes into the glass tube. According to Dr. Fyfe no vestiges of iodine can be discovered in sea-water.

The common method of procuring muriatic acid from the saline matter of sea-water, by the addition of sulphuric acid, convinced me, says Dr. Fyfe, that, if this substance contained iodine, it could not in this way be got from it. I was therefore obliged to have recourse to other means. When sea-water is subjected to galvanism in a gold cup, a small quantity of a black powder is formed; this, it is supposed by Sir H. Davy, might be a compound of iodine and gold. To ascertain if this was the case, a quantity of sea-water, concentrated by evaporation, was put into a silver vessel, attached to one end of a galvanic battery; a gold wire from the other end was introduced into the fluid. The silver in a short time acquired a dark coating, and a minute portion of a black powder was formed. This was subjected to the action of fused potassa, and then to sulphuric acid, but without any appearance of iodine. During the preparation of kelp, from which iodine is procured, the vegetable matter is subjected to a high temperature Conceiving that, perhaps, the iodine might be a product of the combustion, some of the residue of the evaporation of sea-water was mixed with charcoal in powder, and a high heat applied to it. When cold, the mixture was treated with sulphuric acid, but without obtaining any iodine. The saline matter of sea-water was subjected to various other trials, but uniformly with the same result. Iodine is, however, found in various marine molluscous animals, as the doris, Venus, Ostrea, &c., and even in sponges and Gorgonia. Very lately, this curious substance has been detected by Vauquelin in combination with silver, in some specimens brought from America.

Iodine, however produced, is a solid, of a grayish-black color and metallic lustre. It is often in scales similar to those of micaceous iron ore, sometimes in rhomboidal plates, very large and very brilliant. It has been obtained in elongated octohedrons, nearly half an inch in length; the axes of which were shown by Dr. Wollaston to be to each other, as the numbers two, three, and four, at least so nearly, that, in a body so volatile, it is scarcely possible to detect an error in this estimate, by the reflective goniometer. Its fracture is lamellated, and it is soft and friable to the touch. Its taste is very acrid, though it is very sparingly soluble in water. It is a deadly poison.

Mr. Orfila swallowed six grains of it. The consequence was a most horrible taste, salivation, epigastralgia, colic, nausea, and violent sickness. In ten minutes he had copious bilious vomitings, and slight colic pains. His pulse rose from seventy to about ninety beats in the minute. By swallowing large quantities of mucilage, and emollient clysters, he recovered, and felt nothing next day but slight fatigue. When given to dogs, in the quantity of seventy-two grains or more, it generally produces speedy vomiting, by which means it is thrown out of the system, and the animal saved. But if vomiting does not take place, or if it be prevented by tying the œsophagus, death ensues in the course of three or four days. Iodine, in open vessels, readily evaporates, even at the usual atmospheric heats. When it is spread on a plate of glass, if the eye be placed in the same plane, the violet vapor becomes very obvious at the temperature of 100° Fahrenheit. If left in the open air it will speedily fume away, even at 50° or 60°. When kept in a phial, stopped with a common cork, the iodine also disappears, while the cork becomes friable in its texture, and of a brownish-yellow color. It gives a deep brown stain to the skin, which, however, soon vanishes. In odor, and power of destroying vegetable colors, it somewhat resembles very dilute aqueous chlorine. The specific gravity of iodine at 62° 30′ is 4·948. It dissolves in 7000 parts of water. The solution is of an orange-yellow color, and in small quantity tinges raw starch of a purple hue. It melts, according to M. Gay Lussac, at 227° Fahrenheit, and is volatilised under the common pressure of the atmosphere, at the temperature of 350°. Boiling water aids its sublimation.

The specific gravity of its violet vapor is 8 678. It is a non-conductor of electricity, and is incombustible, but with azote it forms a curious detonating compound; and, in combining with several bodies, the intensity of mutual action is such as to produce combustion. See CHEMISTRY.

With a view of determining whether it was a simple or compound form of matter, Sir H. Davy exposed it to the action of the highly

inflammable metals. When its vapor is passed over potassium, heated in a glass tube, inflammation takes place, and the potassium burns slowly with a pale blue light. There was no gas disengaged when the experiment was repeated in a mercurial apparatus. The iodide of potassium is white, fusible at a red heat, and soluble in water. It has a peculiar acrid taste. When acted on by sulphuric acid it effervesces, and iodine appears. It is evident that, in this experiment, there had been no decomposition; the result depending merely on the combination of iodine with potassium.

If iodine be put into a glass tube closed at one end, and a piece of phosphorus be dropped in, a violent action immediately takes place, accompanied with the evolution of heat. The phosphorus melts, and an iodide of phosphorus is formed.

The color of this substance is grayish-black, its texture is crystalline, and it easily melts when heated. The combination takes place whatever proportion of phosphorus and iodine be employed. But in one particular proportion there is no redundancy of either of the constituents. This, according to Gay Lussac, takes place when we mix one part by weight of phosphorus with eight parts of iodine. The iodide thus formed is soluble in water. The solution is colorless. When the iodide is dropped into water a kind of effervescence takes place, and a strong odor is exhaled similar to that of muriatic acid. Both the iodine and the phosphorus are converted into acids. The water is decomposed, its oxygen uniting to the phosphorus constitutes phosphorus acid, while the hydrogen, uniting to the iodine, constitutes hydriodic acid. Thenard asserts, that, in the union of iodine and phosphorus, not only caloric, but light is extricated. But Sir H. Davy states that no light is evolved in this process. Repeated experiments have convinced me, says Dr. Traill, of the accuracy of the observation of the British chemist; but it is only justice to M. Thenard to state, that, in the action between these substances, the evolution of light, as well as of caloric, may be shown, according to the mode of making the experiment. If a small piece of dry phosphorus be dropt into a test-tube, and a quantity of iodine, in its usual scaly form, sufficient to cover the phosphorus, be quickly added, an immediate action ensues; the tube becomes hot; fumes of iodine are disengaged; and a deep violet-brown liquid is formed, without the evolution of light, even when the experiment is made in a darkened room. But if the proportion of the phosphorus to the iodine be large, and the latter insufficient to cover the former, the action is accompanied by a momentary flash, which I attribute to the combustion of the uncovered portion of the phosphorus in the scanty portion of atmospheric air in the tube. By varying the proportions of the two substances, I can produce the union with or without the extrication of light at pleasure.

Iodine and sulphur do not unite by simple contact; but if they be mixed in a glass tube, and gently heated, the combination takes place very readily. The color of this compound is grayish-black, and its texture is radiated like that of sulphuret of antimony. This iodide appears to be composed of one part sulphur and 7·8 iodine. It does not appear to be immediately decomposed by water. But, according to Gay Lussac, the iodine is separated, if this iodide be distilled with water. This iodide is of a more permanent nature than the chloride of sulphur, which is decomposed, and the sulphur deposited the instant it comes in contact with water. According to Van Mons, if we dissolve iodine in muriatic acid, and pour ammonia over the solution, so that the two liquids do not mix, the iodine will, in a short time, crystallise between the two liquids, in fine pyramids, having their bases turned towards the surface of the liquid. 'Hydrogen, whether dry or moist, did not seem,' says M. Gay 'Lussac, to have any action on iodine at the ordinary temperature; but if, as was done by M. Clement in an experiment at which I was present, we expose a mixture of hydrogen and iodine to a red heat in the tube, they unite together, and hydriodic acid is produced, which gives a reddish-brown color to water.'

There are various ways of obtaining this acid. The first method practised was to pour water over the iodide of phosphorus, and expose the mixture to heat. The gaseous acid was expelled, and received in proper vessels. Gay Lussac pointed out a still easier method of obtaining this acid in a state of purity. Put a quantity of iodine and water into a glass vessel, and cause a current of sulphureted hydrogen gas to pass through it. The iodine speedily dissolves. When that has taken place stop the process, and expose the liquid to heat to drive off the excess of sulphureted hydrogen. The residual liquid is a solution of pure hydriodic acid in water. During this process the sulphureted hydrogen is decomposed. Its hydrogen unites to the iodine while its sulphur is precipitated, and is separated from the liquid by filtration. Hydriodic acid thus prepared is a colorless liquid, having an odor very similar to that of muriatic acid, and a sharp acid taste, leaving behind it a sensation of astringency. By heat it may be driven off in the gaseous form and collected in proper vessels.

Hydriodic acid gas is colorless, and possesses the peculiar taste and smell of the liquid acid. Its specific gravity, according to the experiments of Gay Lussac, is 4·443, that of common air being 1. So that it is by far the heaviest gaseous body at present known. When it comes in contact of mercury, it is immediately decomposed by the action of that metal. The mercury unites with the iodine, and forms an iodide; while the hydrogen gas, the other constituent, is left in the gaseous state. It occupies exactly one-half of the volume of the hydriodic acid. Hence it follows, that hydriodic acid gas is composed of one volume of iodine in the state of vapor, and one volume of hydrogen gas, constituting together two volumes. Liquid hydriodic acid, when as much concentrated as possible, is of the specific gravity 1·7. It smokes like muriatic acid, though not so perceptibly. But if a vessel containing it be placed beside another containing chlorine (supposing both open) a purple-colored atmosphere is formed between them, showing very

evidently the volatility of the hydriodic acid. This acid boils at 262½°. When hydriodic acid gas is passed through a red hot tube, it is decomposed at least partially. The decomposition is complete if the hydriodic acid gas be mixed with oxygen gas. In that case water is formed and iodine set at liberty. From this experiment it seems to follow that iodine is incapable of decomposing water. Accordingly, if the vapors of iodine and water be passed together through a red hot tube, no oxygen gas is disengaged; yet if water holding iodine in solution is exposed to the solar light, or if it be heated, its peculiar color disappears, and the iodine is converted partly into hydriodic and partly into iodic acid. Now this last acid is a compound of iodine and oxygen; so that in this case water must be decomposed, and one of its constituents must go to the formation of hydriodic, and the other to that of iodic acid. Liquid hydriodic acid very readily dissolves iodine, and acquires a brown color. Even exposing the liquid acid to the atmosphere gives it this color; because the oxygen of the atmosphere decomposes a portion of the hydriodic acid uniting with its hydrogen, and setting the iodine at liberty, which is immediately dissolved by the undecomposed portion of the acid. All the hydriodates have the property of dissolving iodine, and of acquiring a deep reddish-brown color; but the iodine is easily separated again, either by boiling the liquid or by exposing it to the air. See HYDRIODIC ACID and CHEMISTRY.

When iodine is sublimed in chlorine gas it absorbs a considerable quantity of that elastic fluid, and forms a compound of a bright yellow color. When fused it becomes of a deep orange; and in the state of vapor from the action of heat, it has likewise a deep orange color. Sir Humphry Davy, to whom we are indebted for our knowledge of this compound, has given it the name of chlorionic acid. In one experiment he found that eight grains of iodine absorbed five cubic inches and a quarter of chlorine gas. In another experiment twenty grains of iodine absorbed 9·6 cubic inches of chlorine gas. These two experiments do not agree with each other; but in the first a little water was admitted into the retort, in order to dissolve the chlorionic acid formed; while no water was admitted in the second experiment. This liquid doubtless facilitated the absorption of the chlorine gas. See CHLORIODIC ACID and CHEMISTRY.

Iodine readily combines with most of the metals. If silver foil is heated nearly to redness, and the vapor of iodine passed over it, an iodide is formed which has a red color, and melts when exposed to a low red heat. When this substance is heated with hydrate of potassa it is decomposed, and hydriodic acid and oxide of silver are formed. This iodide is composed of one part by weight of silver and 1·13 of iodine.

The iodide of zinc is white, melts readily, and is sublimed in the state of fine acicular four-sided prisms. It rapidly deliquesces in the air, and dissolves in water, without the evolution of any gas. The solution is slightly acid, and does not crystallise. The alkalies precipitate from it white oxide of zinc; while concentrated sulphuric acid disengages hydriodic acid and iodine, because sulphurous acid is produced. The solution is a hydriodate of oxide of zinc. When iodine and zinc are made to act on each other under water, in vessels hermetically sealed, on the application of a slight heat, the water assumes a deep reddish-brown color, because, as soon as hydriodic acid is produced, it dissolves iodine in abundance. But by degrees the zinc supposed to be in excess, combines with the whole iodine, and the solution becomes colorless like water.

Iron is acted on by iodine in the same way as zinc; and a brown iodide results, which is fusible at a red heat. It dissolves in water, forming a light green solution, like that of muriate of iron When the dry iodide was heated, by Sir. H. Davy, in a small retort containing pure ammoniacal gas, it combined with the ammonia, and formed a compound which volatilised without leaving any oxide.

The iodide of tin is very fusible. When in powder, its color is a dirty orange-yellow, not unlike that of glass of antimony. When put into a considerable quantity of water, it is completely decomposed. Hydriodic acid is formed, which remains in solution in the water, and the oxide of tin precipitates in white flocculi. If the quantity of water be small, the acid, being more concentrated, retains a portion of oxide of tin, and forms a silky orange-colored salt, which may be almost entirely decomposed by water. Iodine and tin act very well on each other, in water of the temperature of 212°.

There are two iodides of mercury; the one yellow, the other red: both are fusible and volatile. The yellow, or protiodide, contains one half less iodine than the deutiodide. The latter, when crystallised, is a bright crimson. All the iodides are decomposed by concentrated sulphuric and nitric acids. The metal is converted into an oxide, and iodine is disengaged. They are likewise decomposed by oxygen at a red heat, if we except the iodides of potassium, sodium, lead, and bismuth. Chlorine likewise separates iodine from all the iodides; but iodine, on the other hand, decomposes most of the sulphurets and phosphurets.

When iodine and oxides act upon each other in contact with water, very different results take place from those above described. The water is decomposed; its hydrogen unites with iodine to form hydriodic acid; while its oxygen, on the other hand, produces, with iodine, iodic acid. All the oxides, however, do not give the same results. We obtain them only with potassa, soda, barytes, strontian, lime, and magnesia. The oxide of zinc, precipitated by ammonia from its solution in sulphuric acid, and well washed, gives no trace of iodate and hydriodate.

The iodides of lead, copper, bismuth, silver, and mercury, are insoluble in water, while the iodides of the very oxidisable metals are soluble in that liquid. If we mix a hydriodate with the metallic solutions, all the metals which do not decompose water will give precipitates, while those which decompose that liquid will give none. This is at least the case with the above mentioned metals.

From all the above recited facts, we are warranting in concluding iodine to be an undecom

pounded body. In its specific gravity, lustre, and magnitude of its prime equivalent, it resembles the metals: but in all its chemical agencies it is analogous to oxygen and chlorine. It is a non-conductor of electricity, and possesses, like these two bodies, the negative electrical energy with regard to metals, inflammable and alkaline substances; and hence, when combined with these substances in aqueous solution, and electrised in the voltaic circuit, it separates at the positive surface. But it has a positive energy with respect to chlorine; for when united to chlorine, in the chloriodic acid, it separates at the negative surface. This likewise corresponds with their relative attractive energy, since chlorine expels iodine from all its combinations.

It now only remains to mention the different methods that have been contrived to detect the presence of iodine when present in small quantity in saline solutions. It has the property of corroding metals, and especially of blackening silver more powerfully than any other body at present known. It was this property that led to its orignal discovery in kelp. Sir Humphry Davy employed its property of blackening silver as a method of detecting it in the solutions of the ashes of different sea-weeds.

When sulphuric acid is poured upon a dry salt containing iodine, a reddish brown liquid is obtained. This is a good method of detecting the presence of iodine in salts.

But the most delicate re-agent for iodine, according to Stromeyer, is starch. When this substance is put into a liquid containing iodine in a state of liberty, it detects the presence of so small a quantity as $\frac{1}{450000}$ part, by the blue color which it forms.

Dr. Coindet of Geneva has recommended the use of iodine in the form of tincture, and also hydriodate of potassa or soda, as an efficacious remedy for the cure of glandular swellings, of the goitrous and scrofulous kind. An ointment composed of one ounce of hog's lard, and one drachm of iodide of zinc, has been found to be a powerful external application in such cases. About a drachm of this ointment should be used in friction on the swelling once or twice a day.

For additional remarks on this important subject, see our articles CHEMISTRY, CHLORIODIC ACID, HYDRIODIC ACID, IODIC ACID, and MEDICINE.

IODIC ACID, in chemistry, or oxiodic acid, is thus obtained. When barytes water is made to act on iodine, a soluble hydriodate, and an insoluble iodate of barytes are formed. On the latter, well washed, pour sulphuric acid equivalent to the barytes present, diluted with twice its weight of water, and heat the mixture. The iodic acid quickly abandons a portion of its base, and combines with the water; but, though even less than the equivalent proportion of sulphuric acid has been used, a little of it will be found mixed with the liquid acid. If we endeavour to separate this portion, by adding barytes water, the two acids precipitate together.

Iodic acid has a strong acido-astringent taste, but no smell. Its density is considerably greater than that of sulphuric acid, in which it rapidly sinks. It melts, and is decomposed in o iodine and oxygen, at a temperature of about 620°. A grain of iodic acid gives out 176·1 grain measure of oxygen gas. It would appear from this, that iodic acid consists of 15·5° iodine, to 5 oxygen.

Iodic acid deliquesces in the air, and is of course very soluble in water. It first reddens and then destroys the blues of vegetable infusions. It blanches other vegetable colors. When a mixture of it, with charcoal, sulphur, resin, sugar, or the combustible metals, in a finely divided state, is heated, detonations are produced; and its solution rapidly corrodes all the metals to which Sir H. Davy exposed it, both gold and platinum, but much more intensely the first of these metals.

It appears to form combinations with all the fluid or solid acids which it does not decompose. See CHEMISTRY, Index.

JOEL, the son of Pethuel, the second of the twelve minor prophets. In his prophecy he upbraids the Israelites for their idolatry, and foretels the calamities they should suffer as the punishment of that sin; but endeavours to support them with the comfort that their miseries should have an end upon their reformation and repentance. Most writers, inferring the order of time in which the minor prophets lived from the order in which they are placed in the Hebrew copies, conclude that Joel prophesied before Amos, who was contemporary with Uzziah, king of Judah. Archbishop Usher infers this from Joel's foretelling that drought, ch. i., which Amos mentions as having happened, ch. iv. 7, 8, 9.

Archbishop Newcome is inclined to favor the conjecture of Drusius: viz. that Joel prophesied under the long reign of Manasseh, and before his conversion, that is, some time from B. C. 697 to (suppose) 660.

JOFFRID, an abbot of Croyland, in Lincolnshire, in the twelfth century. According to Peter of Blois, this ecclesiastic was the founder of the university of Cambridge. He sent, he says, a deputation of three learned Norman monks, named Odo, Terrick, and William, to his manor of Cottenham, near Cambridge, to teach the people in that neighbourhood grammar, logic, and rhetoric. This produced journeys of these monks to Cambridge, where they at first hired a barn, and taught those sciences to a great number of scholars from the surrounding country.

JOG, *v. a.*, *v. n.* & *n. s.*
JOG'GER, *n. s.*
JOG'GLE, *v. n.*
} Dut. *schocken*. To push; to give a sudden push; to move with small shocks, like those of a low trot; to travel idly and heavily: a push or slight shake; an irregular motion: jogger, one who moves heavily along: joggle, to shake.

> *Jog* on, *jog* on the foot-path way
> And merrily heat the stile-a,
> A merry heart goes all the day,
> Your sad tires in a mile-a.
> *Shakspeare. Winter's Tale.*

> Now leaps he upright, *jogs* me and cries, Do you see
> Yonder well-favoured youth? *Donne.*

> This said, he *jogged* his good steed nigher,
> And steered him gently toward the squire.
> *Hudibras.*

Thus they *jog* on, still tricking, never thriving,
And murd'ring plays, which they miscal reviving.
Dryden.

As a leopard was valuing himself upon his party-coloured skin, a fox gave him a *jog*, and whispered, that the beauty of the mind was above that of a painted outside. *L'Estrange.*

Sudden I *jogged* Ulysses, who was laid
Fast by my side. *Pope's Odyssey.*

JOGHIS, a sect of heathen religious, in the East Indies, who never marry, nor hold any thing in private property; but live on alms, and practise strange severities on themselves. They are subject to a general, who sends them from one country to another to preach. They are, properly, a kind of penitent pilgrims; and are supposed to be a branch of the ancient Gymnosophists. They frequent principally such places as are consecrated by the devotion of the people, and pretend to live several days together without eating or drinking. After having gone through a course of discipline for a certain time, they look on themselves as impeccable, and privileged to do any thing; upon which they give a loose to their passions, and run into all kinds of debauchery.

JOGUES, or YOOGS. See YOOGS.

JOHAN, or ST. JOHAN, the name of six towns in Germany, viz.

JOHAN (St.), in the circle of Bavaria, and archbishopric of Salzburg, eleven miles W. N. W. of Radstadt, and thirty S. S. E. of Salzburg.

JOHAN (St.), in the ci-devant principality of Nassau Saarbruck, now included in the French republic, and department of Mont Tonnere; seated on the Saar, opposite Saarbruck, with which it is connected by a bridge.

JOHAN (St.), in the late county of Sponheim, now included in the French empire, and department of the Rhine and Moselle; nine miles east of Creutznach, and fourteen south-west of Mentz.

JOHAN (St.), three towns in the duchy of Stiria: viz. 1. eight miles E. S. E. of Landsperg: 2. seven miles W. N. W. of Pettaw: and, 3. five miles N. N. W. of Windisch Gratz.

JOHAN-GEORGEN-STADT, a town of Upper Saxony, in Erzgeburg, founded in 1654, by the Protestant miners, who were driven out of Bohemia, and named after the elector John-George I. The mines afford silver, copper, tin, emery, and other minerals. It lies seven miles south of Schwartzenberg.

JOHANNESBERG, or Bischofsberg, a town of Germany, lately in the electorate of Mentz, now annexed to France, and by the division of 1797 included in the department of the Rhine and Nahe; but now, by the last division in 1801, in that of Mont Tonnere. It lies sixteen miles west of Mentz.

JOHN, Heb. [illegible], i. e. God's grace, the name of many kings, emperors, saints, popes, and other sovereign princes; and the most nniversal name among subjects in modern Europe.

JOHN, king of Bohemia, a brave but unfortunate monarch, the son of the emperor Henry VII. He was elected king in 1309, when he was only fourteen; and, after defeating the Lithuanians, he assumed the title of king of Poland. He was wounded in the eye in that expedition, and, upon consulting the physicians to restore the sight of it, a Jewish doctor blinded him entirely. Still, however, his military ardor remained undaunted; he accompanied Philip VI. of France, guided by two knights, to the battle of Cressy, where he fell in 1346. See CRESSY.

JOHN, king of England. See ENGLAND.

JOHN, king of France. See FRANCE.

JOHN SOBIESKI, one of the greatest warriors in the seventeenth century. In 1665 he was made grand marshal of the crown; and, in 1667 grand general of the kingdom. His victories over the Tartars and the Turks procured him the crown, to which he was elected in 1674. He was an encourager of the arts and sciences, and the protector of learned men. He died in 1696, aged seventy-two.

JOHN XXII. a native of Cahors, before called James d'Euse, was skilled in the civil and canon law; and was elected pope after the death of Clement V. on the 7th of August 1316. He published the constitutions called Clementines, which were made by his predecessor; and drew up the other constitutions called Extravagantes. Lewis of Bavaria being elected emperor, John opposed him, which made much noise, and was attended with fatal consequences. That prince, in 1329, caused the antipope Peter de Corbero, a cordelier, to be elected, who took the name of Nicholas V. and was supported by Michael de Cesenne, general of his order; but that antipope was the following year taken and carried to Avignon, where he begged pardon of the pope with a rope about his neck, and died in prison two or three years after. Under this pope arose the famous question among the cordeliers, called the bread of the cordeliers; which was, Whether those monks had the property of the things given them, at the time they were making use of them? for example, Whether the bread belonged to them when they were eating it, or to the pope, or to the Roman church? This frivolous question gave great employment to the pope; as well as those which turned upon the color, form, and stuff, of their habits, whether they ought to be white, gray, or black? Whether the cowl ought to be pointed or round, large or small? Whether their robes ought to be full, short, or long; of cloth, or of serge, &c.? The disputes on all these minute trifles were carried so far between the minor brothers, that some of them were burnt. John died at Avignon in 1334, aged ninety.

JOHN MARK, the nephew of St. Barnabas. See BARNABAS and MARK.

JOHN (St.), of Beverley.

JOHN OF GAUNT, duke of Lancaster, a renowned general, father of Henry IV. king of England, died in 1438.

JOHN OF SALISBURY, bishop of Chartres in France, was born at Salisbury in Wiltshire, in the beginning of the twelfth century. In 1136 he was sent to Paris, where he studied under several eminent professors, and acquired considerable fame for his proficiency in rhetoric, poetry, divinity, and the learned languages. Thence he travelled to Italy; and, during his residence at Rome, was in favor with pope

Eugene III. and Adrian IV. After his return to England, he became the intimate friend and companion of the famous Becket, archbishop of Canterbury, whom he attended in his exile, and he is said to have been present when he was murdered in his cathedral. In 1176 he was promoted by Henry II. to the bishopric of Chartres, where he died in 1182. He was one of the first restorers of the Greek and Latin languages in Europe, and an elegant Latin poet. He wrote several books; the principal of which are, his Life of St. Thomas of Canterbury, a collection of letters, and Polycraticon.

JOHN (St.), THE BAPTIST, the fore-runner of Jesus Christ, was the son of Zacharias and Elizabeth. He retired into a desert, where he lived on locusts and wild honey; and about the year A.D. 29 began to preach repentance, and to declare the coming of the Messiah. He baptised his disciples, and the following year Christ himself was baptised by him in the Jordan. Some time after, having reproved Herod Antipas for his adultery and incest, he was cast into prison, where he was beheaded. See HEROD. His head was brought to Herodias, who, according to St. Jerome, pierced his tongue with a bodkin in revenge for his reproof.

JOHN (St.), THE EVANGELIST, and apostle, was the son of Zebedee, and brother of St. James the Great. He quitted the business of fishing to follow Jesus, and was his beloved disciple. He was witness to the actions and miracles of his master; was present at his transfiguration, and was with him in the garden of Olives. He was the only apostle who followed him to the cross; and to him Jesus left the care of his mother. He was also the first apostle who knew him again after his resurrection. He preached the faith in Asia; and principally resided at Ephesus, where he maintained the mother of our Lord. He is said to have founded the churches of Smyrna, Pergamus, Thyatira, Sardis, Philadelphia, and Laodicea. He is also said to have preached the gospel among the Parthians, and to have addressed his first epistle to that people. It is related, that, when at Rome, the emperor Domitian caused him to be thrown into a cauldron of boiling oil, when he came out unhurt; on which he was banished to the isle of Patmos, where he wrote his Apocalypse. After the death of Domitian, he returned to Ephesus, where he composed his Gospel, about the year 96; and died there, in the reign of Trajan, about the year 100, aged ninety-four.

JOHN (St.), THE GOSPEL OF, a canonical book of the New Testament, contains a recital of the life, actions, doctrine, and death, of our Saviour Jesus Christ, written by St. John the apostle, at Ephesus, after his return from Patmos, at the desire of the Christians of Asia. St. Jerome says, he would not undertake it, but on condition that they should appoint a public fast to implore the assistance of God; and that, the fast being ended, St. John, filled with the Holy Ghost, broke out into these words, 'In the beginning was the Word,' &c. The ancients assign two reasons for the undertaking; the first was, because, in the other three Gospels, there was wanting the history of the beginning of Jesus Christ's preaching, till the imprisonment of John the Baptist, which, he applied himself particularly to relate. The second was to remove the errors of the Cerinthians, Ebionites, and other sects.

JOHN O'GROAT'S HOUSE, an ancient house, in Caithness-shire, seated on Dungis-bay, or Duncan's Bay Head, and remarkable for being the most northerly point in Great Britain; on which account it has been often visited by travellers. But, if it has acquired fame from its peculiar local situation, it merits no less celebrity on account of its origin. In the reign of James IV. Malcolm, Gavin, and John de Groat, supposed to have been brothers, and originally from Holland, arrived in Caithness, from the south of Scotland, bringing with them a letter written in Latin by that prince, recommending them to the countenance and protection of his loving subjects in the county of Caithness. They purchased or got possession of the lands of Warse and Dungisbay, in the parish of Canisbay, on the Pentland Frith, and each of them obtained an equal share of the property they acquired. In process of time their families increased, and there came to be eight different proprietors of the name of Groat. These eight families, having lived comfortably in their possessions for many years, established an annual meeting to celebrate the anniversary of the arrival of their ancestors on that coast. In the course of their festivity on one of these occasions, a question arose respecting the right of taking the door and sitting at the head of the table, and such like points of precedency, each contending for the seniority and chieftainship of the clan; which increased to such a height as would probably have proved fatal to some, if not to all of them, had not John de Groat, who was proprietor of the ferry, interposed. He, having procured silence, expatiated on the happiness they had hitherto enjoyed, owing to the harmony which had subsisted among them. He assured them, that, as soon as they appeared to quarrel among themselves, their neighbours would fall upon them, take their property, and expel them from the county. He therefore conjured them, by the ties of blood, and their mutual safety, to return quietly that night to their homes; and pledged himself that he would satisfy them all with respect to precedency, and prevent the possibility of such disputes among them at their future anniversary meetings. They all acquiesced, and departed in peace. In due time John de Groat built a room, distinct by itself, of an octogon shape, with eight doors and windows in it; and, having placed in the middle a table of oak, of the same shape, when the next anniversary took place, he desired each of them to enter at his own door, and sit at the head of the table, he himself taking the seat that was left unoccupied. By this ingenious contrivance, any dispute, in regard to rank, was prevented, as they all found themselves on a footing of equality, and their former harmony and good humor were restored. That building was then named John O'Groat's House; and, though the house is totally gone, the place where it stood still retains the name, and the oak table remained in the possession of John Sutherland of Wester in the year 1720.

JOHN'S (St.), an important island in the gulf of St. Lawrence, near the northern coast of Nova Scotia, to which it is politically annexed. It is 117 miles in length from north-east to south-west. The medium breadth is twenty miles; between Richmond Bay, however, on the north, and Halifax Bay on the south, it is not above three miles broad. The coasts both north and south are every where indented with bays; and it has several fine rivers, and a rich soil. The rivers abound with trout, salmon, and eels; and the surrounding sea affords plenty of sturgeon, plaice, and shell-fish. The capital is Charlotte Town. Upon the reduction of Cape Breton, in 1745, the inhabitants submitted to the British. When taken, it had 10,000 head of black cattle upon it, and the farmers raised 12,000 bushels of corn annually. The island is divided into three counties, viz. King's, Queen's, and Prince's; which are subdivided into fourteen parishes, consisting of twenty-seven townships, which in all make 1,363,400 acres, the contents of the island. Besides the capital, the chief towns are George Town, and Prince's Town: besides which are Hillsborough Town, Pownal Town, Maryborough Town, &c. It lies between 45° 46′ and 47° 10′ N. lat., and between 44° 22′ and 46° 32′ W. long.

JOHN'S (St.), one of the Virgin Islands, about twelve leagues east of Porto Rico.

JOHN'S LAKE (St.), a large lake of Canada, which receives rivers in every direction, and sends its waters through the Saguenay into the St. Lawrence. It is about twenty-five miles every way, and its nearest part is thirty-six leagues N.N.W. of Quebec. Long. 72° 25′ W., lat. 48° 25′ N.

JOHN'APPLE, *n. s.*

A *johnapple* is a good relished sharp apple the Spring following, when most other fruit is spent: they are fit for the cyder plantations. *Mortimer.*

JOHNSON (Martin), an eminent landscape painter, who flourished in the reign of James II. His views in England are very scarce and valuable, being only to be found in the collections of connoisseurs.

JOHNSON (Thomas), a celebrated classical scholar, of Oxfordshire, was educated at Magdalen College, Cambridge, of which he was a fellow, and where he took the degree of M.A. in 1692, after which he left the university and was a school assistant at Eton and Ipswich; he himself kept a school at Brentford and other places; but neither the time of his birth nor of his death is known. His character is said to have been loose; but he was a very superior scholar. He is known as the editor of Sophocles, Oxford and London, 1705 and 1746, 3 vols.; Gratius de Venatione, cum notis; Cebetis Tabula; Græcorum Epigrammatum delectus; Quæstiones Philosophicæ; An Essay on Moral Obligations. He was also an editor of Stephens's Thesaurus Linguæ Latinæ.

JOHNSON (Maurice), an English antiquary, born at Spalding in Lincolnshire, and bred to the law. He established a literary society at Spalding, and was one of the founders of the Antiquarian Society, to which he sent numerous contributions. He died in 1755.

JOHNSON (Samuel), an English divine, remarkable for his learning, and steadiness in suffering for the principles of the Revolution in 1688. He was born in 1649, and, entering into orders, obtained, in 1670, the rectory of Corringham in Essex, worth £80 a year. The air of this place not agreeing with him, he was obliged to place a curate on the spot, at the expense of half his income, while he settled in London. The times were turbulent; the duke of York declared himself a papist; his succession to the crown began to be warmly opposed; and Mr. Johnson, being made chaplain to lord William Russel, engaged Dr. Hicks, the ecclesiastical champion for passive obedience, in a treatise entitled Julian the Apostate, &c., published in 1683. He was answered by Dr. Hicks, in a piece entitled Jovian, &c. To which he drew up, and printed, a reply, under the title of Julian's Arts to Undermine and Extirpate Christianity, &c.; but by the advice of his friends suppressed the publication. For this unpublished work he was committed to prison; but, not being able to procure a copy, the court prosecuted him for writing the first tract, condemned him to pay a fine of 500 merks, and to lie in prison till it was paid. By the assistance of Mr. Hampden, who was his fellow-prisoner, he was enabled, on the encampment of the army on Hounslow-heath, in 1686, to print and disperse, A Humble and Hearty Address to all the Protestants in the present Army; for this he was sentenced to pay a second fine of 500 merks, to be degraded from the priesthood, to stand twice in the pillory, and to be whipped from Newgate to Tyburn. It happened, that, in the degradation, they omitted to strip him of his cassock; which rendered his degradation imperfect, and preserved his living. Intercession was made to get the whipping omitted: but James replied, 'That, since Mr. Johnson had the spirit of martyrdom, it was fit he should suffer:' and he bore it with firmness, and even alacrity. On the Revolution, the parliament resolved the proceedings against him to be null and illegal; and recommended him to the king, who offered him the rich deanery of Durham: but this he refused as inadequate to his services and sufferings, which he thought merited a bishopric. Through Dr. Tillotson he obtained a pension of £300 a year, with some other gratifications; notwithstanding which, he wrote against a standing army, and the great favor shown to the Dutch. He died in 1703, and his works were afterwards collected in one vol. folio.

JOHNSON (Samuel), LL.D. the celebrated lexicographer, and one of the brightest ornaments of the eighteenth century, was born at Litchfield in Staffordshire, on the 18th of September, new style 1709. His father Michael Johnson was a bookseller, and more than once bore the office of chief magistrate; though he was zealously attached to the exiled family, and instilled the same principles into his son. But political prejudices were not the only evils which Dr. Johnson inherited from his father: he derived from him also a morbid melancholy, which, though it neither depressed his imagination, nor clouded his perspicacity, filled him with dreadful appre

hensions of insanity, and rendered him wretched through life. From his nurse he is said to have contracted the king's evil, which disfigured a face naturally well formed, and deprived him of the sight of one of his eyes. When arrived at a proper age for grammatical instruction, he was placed in the free school of Litchfield, of which one Hunter was then master: a man whom his illustrious pupil thought wrong-headedly severe. At the age of fifteen, Johnson was sent to the school of Stourbridge in Worcestershire, at which he remained little more than a year, and then returned home; in his nineteenth year, he was entered a commoner of Pembroke College, Oxford, and his mind was stored with such a variety of knowledge as is seldom acquired in universities. He had given very early proofs of his poetical genius both in his school exercises and in other occasional compositions; but what is more remarkable, as it shows that he must have thought much on a subject, on which other boys at that age seldom think at all, he had before he was fourteen entertained doubts of the truth of revelation. From the melancholy of his temper, these naturally preyed upon his spirits, and gave him great uneasiness; but they were happily removed by a proper course of reading; for his studies, being honest, ended in conviction. He found that religion is true: and what he had learned, he ever afterwards endeavoured to teach. This account Mr. Boswell affects to ridicule, as if it were impossible, that a boy should have any religious scruples. But Boswell is mistaken. Sir J. Hawkins and Mr. Boswell differ in their accounts of Johnson's studies at the university. According to the former, the time of his continuance at Oxford is divisible into two periods: Mr. Boswell represents it as only one period, with the usual interval of a long vacation. Sir John says, that he was supported at college by Mr. Andrew Corbet, in quality of assistant in the studies of his son: Mr. Boswell assures us, that though he was promised pecuniary aid by Mr. Corbet, that promise was not in any degree fulfilled; and adds, that Johnson, though his father was unable to support him, continued three years at college, and was then driven from it by extreme poverty. For some transgression or absence, his tutor imposed upon him as a Christmas exercise the task of translating into Latin verse Pope's Messiah; which, being shown to Mr. Pope, was returned with this encomium, 'The writer of this poem will leave it a question for posterity, whether his or mine be the original.' At this period he read much, but his mode of study was never regular, and at all times he thought more than he read. He informed Mr. Boswell, that what he read solidly at Oxford was Greek, and that the study of which he was most fond was metaphysics. In 1731 Johnson left the university without a degree; and as his father, who died in December that year, had suffered great misfortunes in trade, he was excluded from the regular modes of profit and prosperity. Having therefore not only a profession, but the means of subsistence to seek, he accepted, in March 1732, an invitation to the office of under master of a free school at Market-Bosworth in Leicestershire: but, being disgusted at the treatment which he received from the patron of the school, he relinquished in a few months a situation which he ever afterwards recollected with horror. Being thus again without any fixed employment, and with very little money, he translated Lobo's Voyage to Abyssinia, for the sum of five guineas, for a bookseller in Birmingham. This was the first attempt which he made to procure pecuniary assistance by means of his pen. In 1735, being then in his twenty-sixth year, he married Mrs. Porter, the widow of a mercer in Birmingham; whose age was almost double his; whose external form, according to Garrick and others, had never been captivating; but whose fortune amounted to £800. That she had a superiority of understanding and talents is extremely probable, both because she inspired him with a more than ordinary passion, and because she was herself so delighted with his conversation as to overlook his external disadvantages. He now commenced a private academy; for which purpose he hired a large house near his native city; but the undertaking did not succeed. The only pupils who are known to have been placed under his care, were the celebrated David Garrick, his brother George Garrick, and a young gentleman of fortune, whose name was Offely. He kept his academy only a year and a half; and during that time he wrote a great part of his tragedy of Irene. The respectable character of his parents and his own merit, however, had secured him a kind reception in the best families at Litchfield; and he was particularly distinguished by Mr. Walmsley, register of the ecclesiastical court. That gentleman, upon hearing part of Irene read, thought so highly of Johnson's abilities, that he advised him by all means to finish the tragedy and produce it on the stage. Flattered with this suggestion, he set out some time in 1737 with his pupil David Garrick for London, leaving Mrs. Johnson to take care of the house and the wreck of her fortune. The two adventurers carried with them from Walmsley an earnest recommendation to the Rev. Mr. Colson, then master of an academy, and afterwards Lucasian professor of mathematics in the university of Cambridge; but from that gentleman it does not appear that Johnson found either protection or encouragement. His tragedy was refused by the managers, and for some years the Gentleman's Magazine seems to have been his principal resource for employment and support. To enumerate his various communications to that far-famed miscellany, would extend this article beyond all due limits. Suffice it to say, that his connexion with Cave the proprietor became very close; that he wrote prefaces, essays, reviews of books, and poems; and occasionally corrected the papers written by other correspondents. When the complaints of the nation against the administration of Sir Robert Walpole became loud, and a motion was made on the 13th of February, 1740-1, to remove him from his majesty's counsels for ever, Johnson was selected by Cave to write what was in the magazine entitled Debates in the Senate of Lilliput, but was known to be the speeches of the most eminent members in both houses of parliament. These orations

which induced Voltaire to compare British with ancient eloquence, were hastily sketched by Johnson while he was not thirty-two years old, while he was little acquainted with life, and while he was struggling not for distinction but for existence. Perhaps in none of his writings has he given a more conspicuous proof of a mind prompt and vigorous almost beyond conception: for they were composed from scanty notes taken by illiterate persons employed to attend in both houses; and sometimes he had nothing communicated to him but the names of the several speakers, and the part which they took in the debate. His separate publications which at this time attracted the greatest notice, were, London, a Poem in imitation of Juvenal's third Satire; Marmor Norfolciense, or an Essay on an ancient Prophetical Inscription in Monkish Rhyme, lately discovered near Lynne in Norfolk; and a complete Vindication of the Licensers of the Stage, from the malicious and scandalous aspersions of Mr. Brook, author of Gustavus Vasa. The poem, published in 1738 by Dodsley, is universally known and admired, as the most spirited instance in the English language of ancient sentiments adapted to modern topics. Pope, who then filled the poetical throne without a rival, being informed that the author's name was Johnson, and that he was an obscure person, replied, 'he will soon be deterré;' i. e. dug out of the ground. The other two pamphlets, which were published in 1739, are filled with keen satire on the government: and though Sir John Hawkins asserts, that they display neither learning nor wit, Pope was of a different opinion: for in a note of his, preserved by Mr. Boswell, he says, that the whole of the Norfolk prophecy is very humorous.

Mrs. Johnson, who went to London soon after her husband, now lived sometimes in one place and sometimes in another, sometimes in the city and sometimes at Greenwich: but Johnson himself was oftener to be found at St. John's Gate, where the Gentleman's Magazine was published, than in his own lodgings. There he became acquainted with Savage, with whom he was induced, probably by the similarity of their circumstances, to contract a very close friendship; and such were their extreme necessities, that they have often wandered whole nights in the street for want of money. In 1744 he published the life of his unfortunate companion; a work which, had he never written any thing else, would have placed him very high in the rank of authors. His narrative is remarkably smooth and well disposed, his observations just, and his reflections disclose the inmost recesses of the human heart.

In 1749, when Drury Lane theatre was opened under the management of Garrick, Johnson wrote a prologue for the occasion; which, for just dramatic criticism on the English stage, as well as for poetical excellence, is confessedly unrivalled. This year is also distinguished as the epoch when his arduous and important work, the Dictionary of the English Language, was announced to the world, by the publication of its plan or prospectus, addressed to the earl of Chesterfield. From that nobleman Johnson was certainly led to expect patronage and encouragement; and it seems to be equally certain that, without affording either, his lordship expected, when the book should be published, to be honoured with the dedication. The expectations of both were disappointed. Lord Chesterfield, after seeing the lexicographer once or twice, suffered him to be repulsed from his door; but afterwards, thinking to conciliate him when the work was upon the eve of publication, he wrote two papers in The World, warmly recommending it to the public. This artifice was seen through; and Johnson, in very polite language, rejected his lordship's advances, letting him know that he was unwilling the public should consider him as owing to a patron, that which Providence had enabled him to do for himself. This great and laborious work its author expected to complete in three years; but he was employed upon it seven; for, it was begun in 1747, and the last sheet was sent to the press in the end of 1754. The 'sorrow' to which he alludes, in his celebrated preface, is probably that which he felt for the loss of his wife, who died on the 17th of March, O. S., 1752, and whom he continued to lament as long as he lived. The Dictionary did not occupy his whole time: for, while he was pushing it forward, he fitted his tragedy for the stage; wrote the lives of several eminent men for the Gentleman's Magazine; published an Imitation of the tenth Satire of Juvenal, entitled The Vanity of Human Wishes; and began and finished The Rambler. This last work was published twice a-week, from the 20th of March 1750, to the 14th of March 1752, inclusive. Notwithstanding the severity of his other labors, all the assistance which he received in this work did not amount to five papers; and many of the most masterly of his unequalled essays were written on the spur of the occasion, and never seen entire by the author till they returned to him from the press. Soon after the Rambler was concluded, Dr. Hawkesworth projected The Adventurer upon a similar plan; and, by the assistance of friends, he was enabled to carry it on with almost equal merit. For a short time, indeed, it was the most popular work of the two; and the papers with the signature T, which are confessedly the most splendid in the whole collection, are now known to have been communicated by Johnson, who received for each the sum of two guineas.

This was double the price for which he sold sermons, to such clergymen as either would not or could not compose their own discourses. Though he had exhausted, during the time that he was employed on the Dictionary, more than the sum for which the booksellers had bargained for the copy; yet, by means of the Rambler, Adventurer, sermons, and other productions of his pen, he now found himself in affluence; and as the powers of his mind, distended by long and severe exercise, required relaxation, he appears to have done little or nothing from the closing of the Adventurer till 1756, when he accepted the office of reviewer in the Literary Magazine. Of his reviews, by far the most valuable is that of Soame Jenyns's Free Enquiry into the Nature and Origin of Evil. But the furnishing of

magazines, reviews, and newspapers, with literary intelligence, and authors of books with dedications and prefaces, was considered as an employment unworthy of Johnson. It was therefore proposed by the booksellers, that he should give a new edition of the dramas of Shakspeare; a work which he had projected many years before, and of which he had published a specimen, which was commended by Warburton. When one of his friends expressed a hope that this employment would furnish him with amusement, and add to his fame, he replied, 'I look upon it as I did upon the Dictionary; it is all work; and my inducement to it is not love or desire of fame, but the want of money, which is the only motive to writing that I know of.' He issued proposals, however, of considerable length; in which he showed, that he knew perfectly what a variety of research such an undertaking required: but his indolence prevented him from pursuing it with diligence, and it was not published till many years afterwards.

On the 15th of April, 1758, he began a new periodical paper, entitled the Idler, which came out every Saturday in a weekly newspaper, called the Universal Chronicle, or Weekly Gazette, published by Newberry. Of these essays, which were continued till the 5th of April 1760, many were written as hastily as an ordinary letter; and one in particular, composed at Oxford, was begun only half an hour before the departure of the post which carried it to London. About this time he had the offer of a living, of which he might have rendered himself capable by entering into orders. It was a rectory in a pleasant country, of such yearly value as would have been an object to one in much better circumstances; but, sensible of the asperity of his temper, he declined it, saying, 'I have not the requisites for the office, and I cannot in my conscience shear the flock which I am unable to feed.'

In January, 1759, his mother died at the great age of ninety; an event which deeply affected him, and gave birth to the forty-first Idler, in which he laments, that 'the life which made his own life pleasant was at an end, and that the gate of death was shut upon his prospects.' Soon afterwards he wrote his Rasselas Prince of Abyssinia; that with the profits he might defray the expense of his mother's funeral, and pay some debts which she had left. He told a friend, that he received for the copy £100, and £25 more when it came to a second edition; that he wrote it in the evenings of one week, sent it to the press in portions as it was written, and had never since read it over. Having been early in 1762 represented to the king as a learned and excellent man without any certain provision, his majesty was pleased to grant him a pension, which lord Bute, then first minister, assured him 'was not given for any thing which he was to do, but for what he had already done.' A fixed annuity of £300 a year, if it diminished his distress, increased his indolence; for, as he constantly avowed that he had no other motive for writing than to gain money, as he had now what was abundantly sufficient for all his purposes, as he delighted in conversation, and was visited and admired by the witty, the elegant, and the learned, very little of his time was passed in study. Solitude was indeed his aversion; and, that he might avoid it as much as possible, Sir Joshua Reynolds and he, in 1764, instituted a club, afterwards known by the title of the Literary Club. It consisted of some of the most enlightened men of the age, who met weekly at the Turk's Head in Gerard Street, Soho, at seven, and till a late hour enjoyed

'The feast of reason and the flow of soul.'

In February, 1765, Johnson had the honor of a conversation with the king in the library of Buckingham House; and this year, when he was more than usually oppressed with melancholy, he was fortunately introduced into the family of Mr. Thrale, one of the most eminent brewers in England, and M. P. for Southwark. In October, 1765, he published his edition of Shakspeare, which is chiefly valuable for the preface, where the excellencies and defects of that immortal bard are impartially displayed. In 1769, upon the establishment of the royal academy of painting, sculpture, &c., he was nominated professor of ancient literature; an office merely honorary, and conferred on him at the recommendation of his friend the president. In the variety of subjects on which he had hitherto exercised his pen, he had forborne, since the administration of Sir Robert Walpole, to meddle with the disputes of contending factions; but having seen with indignation the methods which, in the business of Mr. Wilkes, were taken to work upon the populace, he published in 1770 a pamphlet entitled The False Alarm; in which he asserts, and labors to prove, by a variety of arguments, that the expulsion of a member of the house of commons is equivalent to exclusion, and that no such calamity as the subversion of the constitution was to be feared from an act warranted by usage. Whatever may be thought of the principles maintained in this publication, it unquestionably contains much wit and argument, expressed in the author's best style of composition; and is known to have been written between eight o'clock on Wednesday night and twelve on Thursday night, when it was read to Mr. Thrale upon his coming from the house of commons. In 1771 he published another political pamphlet, entitled Thoughts on the late Transactions respecting Falkland's Islands; in which he attacked Junius.

In 1773 he visited with Mr. Boswell some of the most considerable of the Hebrides, and published an account of his journey in a volume which abounds in extensive philosophical views of society, ingenious sentiments, and lively description; but which offended many persons, by the violent attack which it made on the authenticity of the poems attributed to Ossian. In 1774, parliament being dissolved, he addressed to the electors of Great Britain a pamphlet, entitled The Patriot; of which the design was to guard them from imposition, and teach them to distinguish true from false patriotism. In 1775 he published Taxation no Tyranny; in answer to the Resolutions and Address of the American Congress. These essays drew upon him nume-

rous attacks, all of which he despised; for though it has been supposed that A Letter addressed to Dr. Samuel Johnson, occasioned by his political publications, gave him great uneasiness, the contrary is manifest, from his having, after the appearance of that letter, collected them into a volume, with the title of Political Tracts by the author of the Rambler. In 1765 Trinity College, Dublin, had created him LL.D. by diploma, and he now received the same honor from the University of Oxford; with which he was highly gratified. In 1777 he was induced, by an extraordinary case, to exercise that humanity which in him was obedient to every call. Dr. Dodd, then under sentence of death for forgery, procured from him two of the most energetic compositions of the kind ever seen; the one a petition from himself to the king, the other a like address from his wife to the queen. These petitions, however, failed of success. The principal booksellers in London having determined to publish a body of English poetry, Johnson was now prevailed upon to write the lives of the poets, and give a character of the works of each. This his last task he undertook with alacrity, and executed it in a manner worthy his fame. The work was first published in ten small volumes, of which the first four came forth in 1778, and the others in 1781. At last, at the age of seventy-two, and when laboring under a complication of diseases, death deprived him of Mr. Thrale, in whose house he had enjoyed the most comfortable hours of his life; but it abated not in Johnson that care for the interests of those whom his friend had left behind him. On this account his visits to Streatham, Mr. Thrale's villa, were for some time after his death regularly made on Monday and protracted till Saturday, as they had been during his life; but they soon became less and less frequent, upon the prospect of Mrs. Thrale's marriage with Mr. Piozzi, when he studiously avoided the mention of the place or the family. In June 1783 his constitution sustained a shock by a stroke of the palsy, so sudden and violent that it awoke him out of a sound sleep, and rendered him for some time speechless. As usual, his recourse was to piety. He tried to repeat the Lord's Prayer, first in English, then in Latin, and afterwards in Greek; but succeeded only in the last. From this alarming attack he soon recovered, but it left presages of an hydropic affection; and he was not long afterwards seized with a spasmodic asthma, so violent that it confined him to the house in great pain, while his dropsy increased. He had, however, such an interval of ease as enabled him in the summer of 1784 to visit his friends at Oxford, Litchfield, and Ashbourne. His constant dread of death was so great, that it astonished all who had access to know the piety of his mind. This, however, was the case only while it was at some distance. From the time that he was certain that it was near, his fears were calmed; and he died on the 13th of December, 1784, full of resignation, faith, and hope. Bishop Gleig sums up the character of this great man in the following words:—' Without claiming for him the highest place among his contemporaries, in any single department of literature, we may use one of his own expressions, ' that he brought more mind to every subject, and had a greater variety of knowledge ready for all occasions, than almost any other man.' Though religious to superstition, he was in every other respect so remarkably incredulous, that Hogarth said, while Johnson firmly believed the Bible, he seemed determined to believe nothing else. The same energy which was displayed in his literary productions was exhibited also in his conversation, which was various, striking, and instructive: like the sage in Rasselas, he spoke, and attention watched his lips; he reasoned, and conviction closed his periods: when he pleased, he could be the greatest sophist that ever contended in the lists of declamation; and perhaps no man ever equalled him in nervous and pointed repartees. But he had a roughness in his manner which subdued the saucy, and terrified the meek; it was only however in his manner; for no man was more loved than Johnson was by those who knew him; and his works will be read with veneration for their author, as long as the language in which they are written shall be understood.'

Johnson, in geography, a county of North Carolina, in Newbern district; bounded by those of Franklin, Wayne, Glasgow, and Samson.

JOHNSONIA, or callicarpa, in botany, a genus of the monogynia order, and tetrandria class of plants. Its characters are these: the flower has an empalement of one leaf, cut at the brim into four short segments: it has one tubulous petal divided into four parts at the brim, and four slender stamina, which are longer than the petal. In the centre is a roundish germen, which afterwards becomes a smooth globular berry, enclosing four hard oblong seeds. Linnæus mentions two species, but Miller reckons only one, a native of South Carolina; the leaves of which were used by Dr. Dale in dropsical cases with advantage.

John's River, Little (St.), a river of West Florida, which falls into Apalache Bay, ten miles east of the Apalache. It is 200 yards broad, and is said to contain the clearest and purest water of any river in America.

John's River (St.), a river of North America, which rises in the heart of East Florida, and runs a north course, in a broad navigable stream, which, in different places, spreads into broad lakes, of which Lake George is the chief. The bar at the mouth, which is thirty-one miles and a half north of St. Augustine, is liable to shift.

John's River (St.), a river of North America, which forms the boundary between Canada and Labrador, and runs into the St. Lawrence, in long. 64° 10′ W., lat. 50° 20′ N.

JOHNSTON (Dr. Arthur), was born at Caskieben, near Aberdeen. He studied physic, and travelled to improve himself in that science. He was twice at Rome; but he chiefly resided at Padua, in which University the degree of M. D. was conferred on him in 1610. After leaving Padua, he travelled through the rest of Italy, and over Germany, Denmark, England, and Holland, and at length settled in France, where he met with great applause as a Latin poet. He lived there upwards of twenty years, and did

not return to Scotland till 1632. In 1633 he began his Psalmorum Davidis Paraphrasis Poetica; a specimen of which, printed at London, was dedicated to bishop Laud. To perfect the whole, took him four years; and the two first editions complete were published at Aberdeen and London in 1637. In 1641 Dr. Johnston, being at Oxford, was seized with a violent diarrhœa, of which he died in a few days, in the fifty-fourth year of his age. Dr. Johnston was made physician to the king about 1633, when he translated Solomon's Song into Latin elegiac verse, and dedicated it to his majesty. His Psalms were reprinted at Middleburgh, 1642; London, 1657; Cambridge, ——; Amsterdam, 1706; Edinburgh, by William Lauder, 1739; and lastly, on the plan of the Delphini classics in London, 1741, 8vo., at the expense of auditor Benson, who dedicated them to king George II. His translations of the Te Deum, Creed, Decalogue, &c., were subjoined to the Psalms. His other poetical works are his Epigrams; his Parerga; and his Musæ Anglicæ, or commendatory Verses upon persons of rank in church and state at that time.

Johnston (John), a learned divine, born in 1662. He was zealous for the Revolution, and preached a noted sermon at Feversham on the occasion, in 1689, from the words, 'Remember Lot's wife;', wherein he set forth the great danger of looking back, and vindicated the liturgy against Baxter and others. He published The Clergyman's Vade Mecum, and A Collection of Ecclesiastical Laws, as a continuation of it; but, catching the infection spread by Dr. Sacheverel, he, on the accession of George I., to the amazement of all his old friends, entertained unfavorable thoughts of the Protestant succession, and refused to read the usual prayers for the king. Being prosecuted, however, he submitted; and died vicar of Cranbrook in Kent, in 1725. He published also a work on the Holy Eucharist, called the Unbloody Sacrifice; and 2 vols. of Discourses on various subjects were printed after his death.

Johnston's Straits, a channel of the Pacific Ocean, branching off from the northern part of the gulf of Georgia, from Point Chatham to the west, between the island of Quadra and Vancouver, and the west coast of North America. It is about sixty miles in length, the breadth being from two to four. Long. 233° to 234° 46′ E., lat. 50° 20′ to 50° 35′ N.

JOHNSTONE or Johnson (Charles), an ingenious writer of Ireland, descended from the Johnstons of Annandale, was born in the early part of the last century, and called to the bar. He came over to England, but, being deaf, could only practice as a chamber counsel. His first literary attempt was the celebrated Chrysal, or the Adventures of a Guinea, 2 vols. 12mo., a work which attracted so much attention, that the author was induced to add two other volumes to his work. The secret springs of some intrigues on the continent were said to be unfolded in this publication. His exposure of the orgies of a club of fashionable profligates, held at the seat of a nobleman in Buckinghamshire, produced no small sensation. He wrote also The Reverie, or a Flight to the Paradise of Fools, 1762, 2 vols. 12mo.; Arsaces, Prince of Betlis, 1774, 2 vols.; The Pilgrim, or a Picture of Life, 1775, 2 vols.; and the History of John Juniper, esq.; alias Juniper Jack, 1781, 3 vols. In 1782 he went to India, where he first employed himself in writing essays for the Bengal newspapers, and finally obtained a good property. He died at Calcutta about 1800.

JOHNSTOWN, a township and village of New York, in Montgomery county. The village is situated on a handsome plain, four miles north of the Mohawk River. It consists of 120 houses, the county buildings, an academy, an Episcopal and Presbyterian church. Population of the township, in 1810, 6225. Forty-two miles north-west of Albany.

JOHORE, a town of Malacca, near the southern extremity of that peninsula. It was founded in 1511 by the inhabitants of Malacca, who fled thither from the Portuguese. In 1603 Johore was also taken by the Portuguese, and rebuilt higher up the river. The country produces tin, gold, pepper, sago, and elephants' teeth.

JOIGNY, a town of Champagne, in France, in the department of the Yonne, and near that river. It is situated on the slope of a rocky elevation. The river is bordered by a handsome quay; but the town is irregular and ill built. It is surrounded by a thick wall, and has a castle and barracks for cavalry. Also some manufactures of woollen and leather, and a trade in wood; but the culture of the vine is the principal object. Population 5400. Thirty-four miles south-west of Troyes.

JOIN', *v. a.* Fr. *joindre.*

To add one to another in contiguity. The leading idea is union, whether applied to persons or things.

Woe unto them that *join* house to house, that lay field to field. *Isaiah* lviii.

To couple; to combine.

In this faculty, repeating and *joining* together its ideas, the mind has great power. *Locke.*

To unite in league or marriage.

One only daughter heirs my crown and state,
Whom not our oracles, nor heaven, nor fate,
Nor frequent prodigies permit to *join*
With any native of the Ausonian line.
Dryden's Æneid.

To dash together; to collide; to encounter: this sense is to be found in the phrase to join battle, in which, battle seems not to signify fight, but troops in array, committere exercitus, though it may likewise mean fight, as, committere prælium.

When they *joined* battle, Israel was smitten.
1 *Sam.* iv. 2.

They should with resolute minds endure, until they might *join* battle with their enemies. *Knolles.*

To associate.

Go near, and *join* thyself to this chariot. *Acts.*

To unite in one act.

Our best notes are treason to his fame,
Joined with the loud applause of publick voice.
Dryden.

Thy tuneful voice with numbers *join*,
Thy words will more prevail than mine *Id.*

[illegible] all that he surveys,
[illegible], must *join* him in their
[illegible]. *Cowper. Hope.*

[illegible] concord.

[illegible] together in the same mind.
1 *Cor.*

[illegible] concert with.

[illegible] your own interest, Sir, where'er you lead,
[illegible] to *join* no other head.
Dryden's Aurengzebe.

[illegible]

[illegible] to; to adhere; to be contiguous.

[illegible] house *joined* hard to the synagogue. *Acts.*

The grete tour that was so thikke
Which of the castel was the chef dongeon,
(Wher as these knightes weren in prison,
Of which I tolde, and tellen shal)
Was even *joignant* to the gardin wall.
Chaucer. The Knightes Tale.

To close; to clash.

Look you, all you that kiss my lady peace at home, that our armies *join* not in a hot day.
Shakspeare. Henry IV.

To unite with in marriage, or any other league.

Should we again break thy commandments, and *join* in affinity with the people? *Ezra.*

To become confederate.

Ere yet they brought their journey to an end,
A stranger *joined* them, courteous as a friend,
And asked them with a kind engaging air,
What their affliction was, and begged a share.
Cowper. Conversation.

Any other may *join* with him that is injured, and assist him in recovering satisfaction. *Locke.*

Yet the avenger stops,
And doubt and discord step 'twixt thine and thee,
And *join* their strength to that which with thee copes.
Byron. Prophecy of Dante.

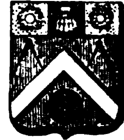
JOIN'DER, *n. s.* From join. Conjunction; joining. Not used.

A contract of eternal bond of love,
Confirmed by mutual *joinder* of your hands.
Shakspeare.

JOIN'ER, *n. s.* From join. One whose trade is to make utensils of wood compacted.

The people wherewith you plant ought to be smiths, carpenters, and *joiners*. *Bacon's Essays.*

It is counted good workmanship in a *joiner*, to bear his hand curiously even.
Moxon's Mechanical Exercises.



JOINERS' COMPANY, in heraldry, was incorporated in London in 1572. Their arms are gules, a chevron argent, between two pair of compasses above and a sphere in base or; on a chief of the third, two roses of the first, and between them a pale sable, charged with an escallop shell of the second.

JOINERY.

JOIN'ERY, *n. s.* From joiner.

Joinery is an art whereby several pieces of wood are so fitted and joined together by straight lines, squares, mitres, or any bevel, that they shall seem one entire piece. *Moxon.*

JOINERY, as an art, comprises the various species of ornamental work which are usually resorted to in the completion of the labors of the carpenter. Carpentry and joinery may, therefore, very properly be considered separately, though they are frequently combined in the same artisan. The first has already been pretty fully examined under its proper head, and we may now proceed to enumerate the various branches of the second art.

All kinds of surfaces are first formed in the rough, and finally brought to exact forms by means of tools adapted for the purpose.

Grooving consists in taking away a part of a rectangular section from a piece of wood, so as to form a channel of equal breadth throughout, with three surfaces, one being parallel, and the other two perpendicular to the surface of the wood, from which the channel is recessed: the channel thus formed is called a *groove*.

Rebating consists in taking away a part from a piece of wood of a rectangular section, so as to leave only two sides, each of a parallel breadth, the one side being perpendicular to the surface of the wood, and the other parallel to it: the cavity thus formed is called a *rebate*. From this definition it is manifest, that a rebate can only be formed by reducing the piece of wood to be rebated at the angle itself, and may therefore be looked upon as a half groove.

A *mortise* is a cavity recessed within the surface of a piece of wood, with four sides perpendicular to that surface, and likewise to each other; the act of making a mortise is called *mortising*.

A *tenon* is a projection formed on the end of a piece of wood with four plane sides, at right angles to each other, and to a plane, from which it projects; and this plane is called the shoulder of the tenon.

In the following observations, all pieces of wood whatever are supposed to be rectangular prisms, and the length in the direction of the fibres; two of the sides of every mortise to be perpendicular, and the other two sides parallel to the fibres; the four sides of every tenon in the direction of the fibres, unless otherwise stated: likewise, if two of the surfaces of a piece of wood be of greater breadth than the other two, these are called the edges, and those the sides; and each line of concourse, formed by two adjacent sides, is called an *arris*.

Moulding consists in forming the surface of a piece by curved or plane surfaces, or by both, in such a manner, that all parallel sections will be similar figures, that is, their boundaries will be made all to coincide.

The first thing to be done in joinery is, to select the stuff or boards, which ought for every purpose to be well seasoned, and then line it out; and if the stuff is not already at the size, as

is most frequently the case, it must be ripped out with the ripping-saw, or cross-cut with the hand-saw, or both, as may be required. The next thing is the planing of the stuff, first upon the sides, then the edge squared, and then gauged to a breadth and thickness, should either or both be found necessary.

Two or more pieces of stuff may be fastened together in various ways by pins of wood or by nails, but, in work prepared by the joiner for the use of building, pieces are more frequently joined together by making their surfaces coincide, and then covering them over with a hot tenacious liquid called glue, and afterwards rubbing the surfaces until the glue has been almost rubbed out, and the one piece brought to its situation with respect to the other. The best work is always joined by this method.

When boards are required of greater breadth than common, several boards must be fastened together edge to edge, either by nailing them to pieces extending across the breadth, or glueing them edge to edge, or by joining pieces transversely together with small boards, tongued and grooved into the interstices.

Two pieces of stuff are joined together at right or oblique angles by a mortise and tenon adapted to each other, and fastened together with glue. When a frame consisting of several pieces is required, the mortises and tenons are fitted together, and the joints glued all at one time, then entered to their places, and forced together by means of an instrument called a cramp.

To join any number of planks together, so as to form a board of a determinate breadth, the fibres of each running longitudinal to those of any other, shoot the two edges that are to be joined; turn the sides of the boards towards each other, so that the edges that are shot may be both uppermost; spread these edges over with strong glue of a proper consistence, made very hot; one of the boards being fixed, turn the other upon it, so that the two edges may coincide, and that the faces may be both in the same plane; let these dry for a few hours; then proceed to make another joint; continue to join as many boards or planks in the same manner, till the whole intended breadth be made out. If the boards or planks of which the board is to be composed are very long, the edges that are to be united would require to be warmed before a fire; and, for rubbing and keeping the joints fair to each other, three men would be found necessary, one at each extremity, and one at the middle. Boards glued together with this kind of cement, will stand as long as the substance of the deals or planks composing them, if not exposed to rain or intense heat, provided that the wood has been well-seasoned before hand, and that the grain be free and straight, uninterrupted with few or no knots. When a board which is to be exposed to the weather is to be made of several boards or planks, the cement to be used for uniting them should not be of skin glue, but of white lead ground up with linseed oil, so thin that the color may be sensibly changed into a whitish cast: this kind of glue will require a much greater time to dry than skin-glue. Boards to be exposed to the weather, when their thickness will admit, are frequently tongued together; that is, the edges of both boards are grooved to an equal distance from the faces, and to an equal depth; and a slip of wood is made to fit the cavity made in both: this slip should be made to fill the grooves, but ought not to be so tight as to prevent the joint from being rubbed with proper cement.

The first tools used by joiners are *bench-planes*, which generally consist of a jack-plane, for taking away the rough of the saw, and the superfluous wood, only leaving so much as is sufficient to smooth the surface; the trying-plane to smooth or reduce the ridges left by the jack-plane, and to straighten or regulate the surface, whether it be plane or convex; the long plane, when the surface is required to be very straight; and the smoothing-plane in smoothing, as its name implies, and giving the last finish to the work. Besides the bench-planes there are others for forming any kind of prismatic surfaces whatever, as rebating-planes, grooving-planes, and moulding-planes.

The tools employed in boring cylindric holes are, a stock, with bits of various descriptions and sizes; gimblets; and brad-awls of several diameters.

The tools used in paring the wood obliquely, or across the fibres, and for cutting rectangular prismatic cavities, are in general denominated *chisels*: those for paring the wood across the fibres are called firmers, or paring-chisels, and those for cutting rectangular prismatic cavities are called mortise-chisels, the rectangular cavities themselves being called mortises when made to receive a projection of the same form and size, and by this means to fasten two pieces of wood together at any angle. The sides of all chisels, in a direction of their length, are straight, and the side of a chisel which contains the cutting edge at the end is steel. The best paring-chisels are made entirely of cast steel. Chisels for paring concave surfaces are denominated gouges.

Dividing wood, by cutting away a very thin portion of the material of equal thickness throughout, to any required extent, by means of a thin plate of steel, with a toothed edge, is called *sawing*: the instruments used are of several kinds, as the ripping-saw, for dividing boards into separate pieces in a direction of the fibres; the hand-saw, for cross-cutting and sawing thin pieces in a direction of the grain; the pannel-saw, either for cross-cutting or cutting very thin boards longitudinally; the tenon-saw, with a thick iron back, for making an incision of any depth below the surface of the wood, and for cutting pieces entirely through, not exceeding the breadth of that part of the plate without the iron back; likewise a sash-saw, and a dovetail-saw, used much in the same way as the tenon-saw. From the thinness of the plates of these three last saws, it is necessary to stiffen them by a strong piece of metal called the back, which is grooved to receive the upper edge of the plate that is fixed to the back, and which is thereby secured and prevented from buckling. When it is required to divide boards into curved pieces, a very narrow saw without a back, called a

compass-saw, is used, and in cutting a very small hole a saw of a similar description, called a key-hole saw, is employed. All these saws have their plates longer and thinner, and their teeth finer, as they succeed each other in the order here mentioned, excepting the two last, which have thicker plates and coarser teeth than either the sash or dove-tail-saw. The external and internal angles of the teeth of all saws are generally formed at an angle of 60°, and the front edge teeth slope backward in a small degree, but incline to or recline from the straight line drawn from the interior angle perpendicular to the edge in the plane of the plate, as the saw may be employed in ripping or in cross-cutting, or cutting perpendicular to the fibres. The teeth of all saws, except turning and key-hole saws, are bent on contrary sides of the plate, each two teeth succeeding each other, being alike bent on the different sides of the plate; viz. the one as much to the one side as the other is to the other side, and consequently all the teeth on the same side alike bent throughout the length of the plate, for the purpose of clearing the sides of the cut which it makes in the wood.

Of all cutting tools whatever, the saw is most useful to the joiner, as the timber or wood which he employs can be divided into slips or bars of any size, with no more waste of stuff than a slice, the breadth of which is equal to the depth of the piece to be cut through, and the thickness equal to the distance of the teeth between their extreme points on the alternate sides of the saw measured on a line perpendicular to the said sides; whereas, without the use of the saw, cylindrical trees could only be reduced to the intended size by means of the axe; in the use of which there would not only be an immense consumption of stuff, but also much greater labor would be required to straighten it.

Joiners use a small axe, called a *hatchet*, for cutting off the superfluous wood from the edge of a piece of a board, when the waste is not of sufficient consequence to be sawn.

The above are what are commonly denominated edge tools, but there are others required to regulate the forms. All angles whatever are formed by other reversed angles of the same number of degrees as an exterior angle by an interior one, and the contrary. The instrument for trying right angles is called a *square*, and those for trying oblique angles are called *bevels*. The two sides which form the edge of a square are always stationary, but those of bevels are generally moveable one leg upon the other round a joint. In some cases, where a great number of pieces are required to be worked to the same angle, a stationary bevel, called a joint hook, is used.

When it is required to reduce a piece of stuff to a parallel breadth, an instrument called a gauge is used for the purpose. The gauge consists generally of a square piece with a square mortise, through which a bar at right angles thereto is fitted and made to slide. The bar, which is called the stem, has a sharp point, cutter, or tooth, at one extremity, projecting a little from the surface, so that when the side of the gauge, next to the end which has the point, is applied upon the vertical surface of the wood, with the flat side of the stem which has the tooth upon the horizontal surface, and pushed and drawn alternately by the workman from and towards him, the cutter will make an incision from the surface into the wood, at a parallel distance from the upper edge of the vertical side on the right hand. This line, so drawn, will mark out with precision, and show the superfluous stuff to be taken away.

When a mortise is required to be cut in a piece of wood, a gauge with two teeth is used. The construction of this instrument is the same as the common gauge; but in addition to this instrument, the stem has a longitudinal slider with a tooth projecting from the end of the slider, so that the two teeth may be brought nearer, or to any remote distance from each other, at pleasure; and also to any distance from the face of the head or guide within the reach of the stem.

When wood has been planed, and required to be sawn across the fibres, and as it is necessary to be kept stationary while sawing, in order to prevent the sides or the edges from being bruised, joiners use a flat piece of wood with two projecting knobs on the opposite sides, one at each end, called a side hook. The vertical side of the interior angle of one of the knobs is placed close to the vertical side, and the under side upon the top of the bench; then the wood is pressed against the knob which projects from the upper surface while it is cutting with the saw; but the use of two side hooks is better, as they keep the piece of wood to be sawn more steady.

When it is required to cut a piece of wood to a mitre with one side; that is, to half a right angle, joiners use a trunk of wood with three sides, like a box without ends, or a top, the sides and bottom being parallel pieces, and the sides of equal heights: through each of the opposite sides is cut a kerf in a plane, perpendicular to the bottom, at oblique angles of 45° and 135°, with the planes of the sides; and another kerf is made in the same manner, so as to have its plane at right angles to the former. The trunk thus constructed is called a mitre-box. When the wood is to be cut, the mitre-box is fixed steadily against two side hooks, and the piece, which is always less than the interior breadth of the mitre-box, is laid within, and pressed against the farther interior angle of the mitre-box with the side downwards, to which the saw-kerf is intended to be perpendicular, and in this position it is to be cut. The two kerfs in the sides of the mitre-box are requisite, in order to form the acute angle on the right or left hand side of the piece, as may be required.

When it is required to make a piece of wood straight in one direction, joiners use a slip of wood straightened on one edge, from which the slip of wood itself is called a straight-edge. Its use is obvious; by its application it will be seen whether there is a coincidence between the straight-edge and surface.

When it is required to know whether the surface of a piece of wood is in the same plane joiners use two slips of wood straightened each on one edge with the opposite edge parallel, and both pieces of the same breadth between the parallel edges: each piece has therefore two

JOINERY.

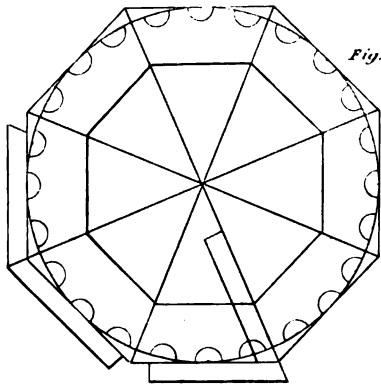
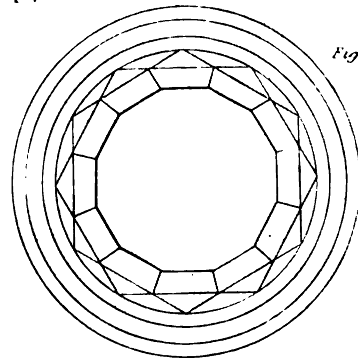


Fig. 4.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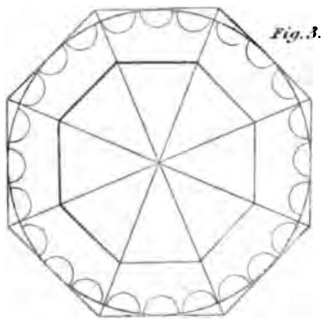
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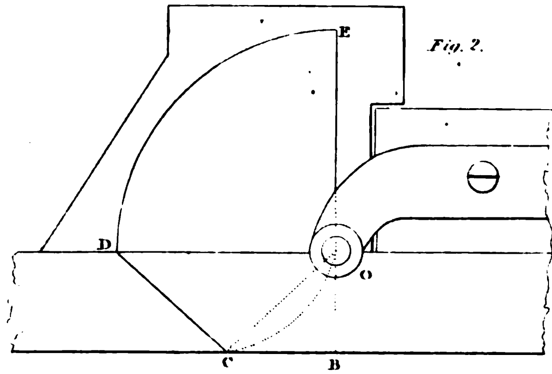
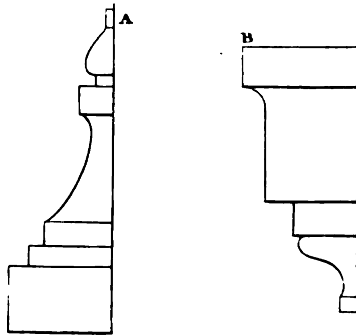


Fig. 2.



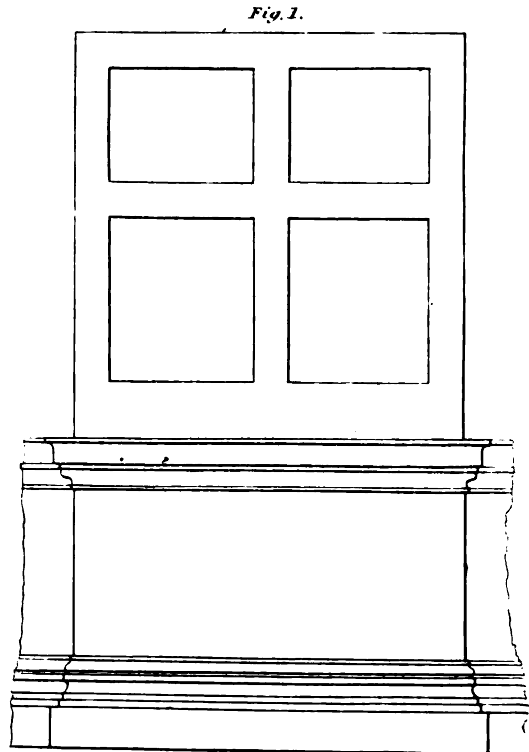


Fig. 1.

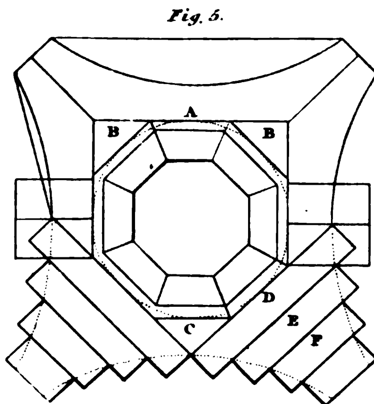


Fig. 5.

L. Aikin Sculpt.

straight edges. Suppose it were required to know whether a board is twisted or its surface in a plane, the workman lays one of the slips across the one end, and the other across the other end of the board, with one of the straight edges of each upon the surface; then he looks in the longitudinal direction of the board, over the upper edges of the two slips, until his eye and the two upper edges of the slips are in one plane; or otherwise the intersection of the plane, passing through the eye and the upper edge of the nearest slip, intersect the upper edge of the farther slip. If it happen as in the former case, the ends of the wood under the slips are in the same plane; but should it happen as in the latter, they are not. In this last case the surface is said to wind; and when the surface is so reduced that every two lines are in one plane, it is said to be out of winding, which implies its being an entire plane: from the use of these slips they are denominated winding sticks.

We may now direct the attention of our readers to the formation of doors, columns, and stair-cases.

In forming the apertures of *doors*, whether arched or quadrangular, the height should, in general, be about their breadth, or a little more. It was necessity, most probably, that gave birth to this proportion, which habit has confirmed and rendered absolute. The disposition of doors and windows, and assigning to them their proper dimensions, according to the purposes for which they are intended, are not the business of the joiner, but of the architect; for which reason we shall here advert only to the common method of decorating doors and windows, the former of which have an architrave around the sides and top of the aperture, with a regular frieze and cornice upon it. In some cases, the cornice is supported by a console on each side of the door, and sometimes, besides an architrave, the aperture is adorned with columns, pilasters, &c., which support a regular entablature, with a pediment, or with some other termination, either in architecture or sculpture. Front doors, intended to be ornamented with any of the orders, should not be less than three feet six inches wide; the height should be twice the width and one-sixth part more, which might also be the height of the column; the abacus may be then taken out of that dimension, in order to separate the door from the fan light. The windows of the principal floor are generally most enriched. The simplest method of adorning them is with an architrave surrounding the aperture, and crowned with a frieze or cornice. The windows of the ground floor are sometimes left entirely destitute of any ornament; at other times are surrounded with rustics, or a regular architrave having a frieze or cornice. The windows of the second floor have generally an architrave carried entirely round the aperture; and the same method is adopted in adorning attic and mezzanine windows: but the two latter seldom possess either frieze or cornice; while the windows of the second floor are sometimes crowned with both.

With regard to the *hanging* of doors, shutters, or flaps with hinges, care should always be taken to place the centre of the hinge in the middle of the joint; but, as in many cases there is a necessity for throwing back a flap to some distance from the joint, the distance between the joint and the intended point must be divided into two equal parts, which point of division will denote the situation of the centre of the hinge. Sometimes doors are required to be hung in such a manner, that, when folded back, they shall be at a certain distance from each other, as is frequently desirable in churches and chapels; this may be easily effected by hinges, with knees projecting to half that distance.

In all elegant rooms, it is necessary to contrive that the doors, when opened, should pass clear over the carpet; now, it is evident, that this cannot be the case, if the jamb on which the door hangs is truly perpendicular, and the bottom of the door is close to the floor, as the bottom of doors commonly are. An inconsiderate observer might recommend a part of the bottom of the door to be cut off, in order to permit its free passage over the carpet, but still, when the door is shut, an open space will intervene between it and the floor, unless, as in some cases, the carpet is continued through the opening to an adjoining passage or room. When this is not the case, the room will be rendered cold and uncomfortable; and the necessity of contriving some method to remedy the defect becomes immediately obvious. This remedy may always be found by hanging the door with rising hinges, constructed for the purpose, with a spiral groove, which, winding round the knuckle as the door opens, gives it a free passage over the carpet. Hinges, however, thus constructed, require that the door should be bevelled at the top next to the ledge or door catch, in proportion to their rise at one quarter of their revolution.

This is an effectual mode of enabling a door to clear the carpet; but a combination of the following modes recommended by Nicholson are less objectionable. Raise the floor under the door, as much as the thickness of the carpet might require. Make the knuckle of the bottom hinge project an eighth of an inch beyond the perpendicular direction of the top hinge,—fix the jamb to which the door might be hung about the eighth of an inch out of the perpendicular; and place a common butt hinge at the top, and one with a projecting knee at the bottom.

The introduction of rising hinges requires a notch to be cut out of the door where the hinged edge and the top edge meet, and, since this cannot be concealed on both sides of the door, this method is considered as defective; besides the hinges are liable to get out of order.

A *gib door* is one which is intended to be concealed in the side of a room, and therefore partakes of the same surface and finish as the wall in which it is inserted. Therefore, the face of a gib door, and the face of the wall from which the aperture is made to receive the gib door, are in the same surface.

Fig. 1, plate I, JOINERY, exhibits the elevation of a gib door, having the same moulding as the base and surbase of the room. A is a section of the base moulding to a large scale, and B that of the surbase to the same scale. A portion of

the plan of the door and of the surbase, as also a part of the jamb, is shown at fig. 2.

In order to make the most perfect work, the door should be hung with centres, and not with hinges, and the centres should be inserted within the solid of the jamb lining. Let O be the centre of the hinge O D, a portion of the inner edge of the surbase in contact with the door, and C B a portion of the outer edge; let C be some point on the outside of the perpendicular O B opposite the jamb. Join O C, and draw C D perpendicular to O C; then C D will be the plan of the joint, in order that it may be a vertical plane. Though there is no absolute necessity, it is usual to make the distance B C equal to B O. The object of this is, to make the distance O D the least possible, so that the strength of the jamb may not be impaired by cutting away more wood than is necessary to effect the purpose.

Palladio, after observing that 'great care ought to be taken in the placing of *stair-cases*,' so 'that they may not obstruct other places, nor be obstructed by them,' says that 'three openings are required in stair-cases; the first is the door through which one goes up to the stair-case, which, the less it is hid to those that enter into the house, so much the more it is to be commended. And it would please one much if it was in a place where, before that one comes to it, the most beautiful part of the house was seen; because it makes the house (although it should be little) seem very large; but, however, let it be manifest, and easily found.

'The second opening is the windows that are necessary to give light to the steps; they ought to be in the middle, and high, that the light may be spread equally, every where alike.

'The third is the opening through which one enters into the floor above; this ought to lead us into ample, beautiful, and adorned places.'

Stair-cases ought to be proportioned in width and commodiousness to the dimensions and use of the building in which they may be placed. The height of a step ought not to exceed seven inches, nor in any case should be less than four; but six inches is a general height. The breadth of the steps should not be less than twelve inches, if it can possibly be avoided; nor should they ever be more than eighteen; and, to render the ascent free from the interruption of persons descending, their length should not exceed twelve, nor be less than four, except in common and small buildings, whose area will not admit of a stair-case of more than three feet. That the ascent may be both safe and agreeable, it is requisite also to introduce some convenient aperture for light, which ought to be as nearly opposite to the first entrance to the stairs as the nature of the building will permit. An equal distribution of light to each flight of stairs ought to be particularly regarded; for which reason the apertures or windows are commonly placed at the landings or half spaces; though sometimes the whole is lighted from a dome. Stair-cases are of various kinds; some wind round a newel in the middle, while the risers of the steps are straight, and sometimes curved; others are of a circular plan, but form a well in the centre. The same may be observed of those whose plans are elliptical; the most common, however, are those whose plans form a square or parellelogram.

The ancients entertained a singular notion, that the number of steps ought to be uneven, in order that, when the right foot was placed on the first stair in ascending, the ascent might terminate with the same foot. This was considered as a favorable omen on most occasions, and they imagined that, when they entered a temple in this way, it produced greater and more sincere devotion.

Palladio, apparently actuated by this superstitious motive, allows the stair-case of a dwelling-house eleven or thirteen steps to each flight. When a stair-case winds round a newel or column, whether its plan be circular or elliptical, the diameter is divided into three parts, two of which are set apart for the steps and one for the column. But in circular or elliptical stair-cases which are open, or form a well in the middle, the diameter is divided into four equal parts; two of which are assigned for the steps, and two for the well or void space in the centre. Modern stair-cases, however, have often a kind of well of a mixed form; straight on each side, and circular at the returns of each flight. The openings of these wells vary in the point of width, but seldom exceed eighteen or twenty inches.

To most stair-cases it is absolutely necessary, both for convenience and ornament, to affix hand-rails; these generally begin from the ground by a twisted scroll, which produces a very good effect.

Balustrades are sometimes of real use in buildings, and at other times they are only ornamental. Such as are intended for use, as when they are employed in stair-cases, before windows, or to enclose terraces, &c., must always be nearly of the same height; never exceeding three feet and a half, nor ever less than three. But those that are principally designed for ornament, as when they finish a building, should be proportioned to the architecture they accompany: and their height ought never to exceed four-fifths of the height of the entablature on which they are placed; nor should it ever be less than two-thirds thereof, without counting the zocholo, or plinth, the height of which must be sufficient to leave the whole balustrade exposed to view.

The best proportion for balustrades is to divide the whole given height into thirteen equal parts; eight of these for the height of the baluster, three for the base, and two for the cornice or rail; or into fourteen (if it be required to make the baluster less), giving eight parts to the baluster, four to the base, and two to the rail. One of these parts may be called a module; and, being divided into nine minutes, may serve to determine the dimensions of the particular members.

In balustrades, the distance between two balusters should not exceed half the diameter of the baluster measured in its thickest part, nor be less than one-third of it.

The breadth of the pedestals, when they are placed on columns or pilasters, is regulated by them; the dye never being made broader than the top of the shaft, nor much narrower; and, when there are neither columns nor pilasters on the front, the dye should not be much lower than

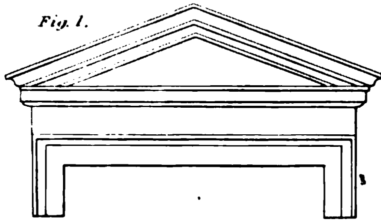


Fig. 1.

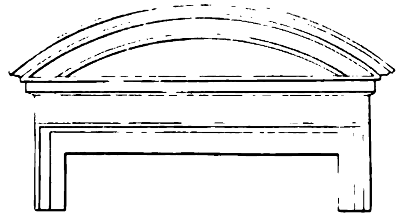


Fig. 2.

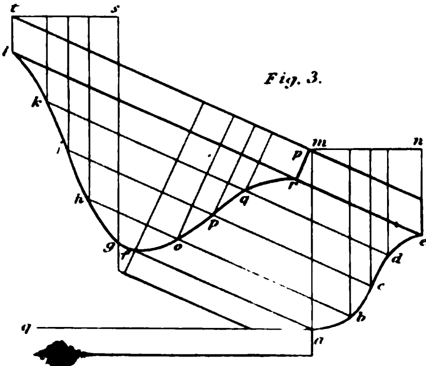
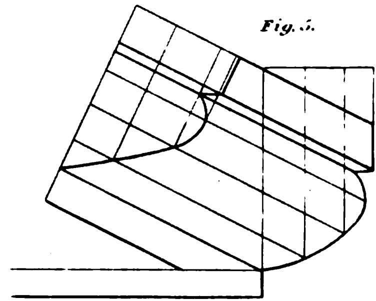


Fig. 3.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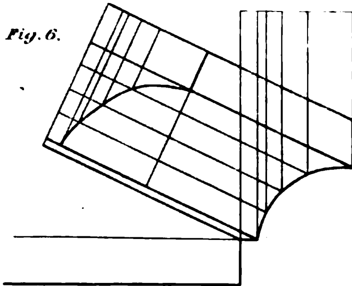


Fig. 6.

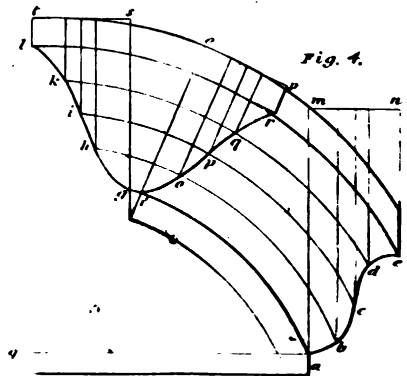


Fig. 4.

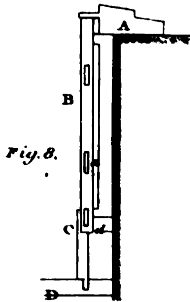


Fig. 8.

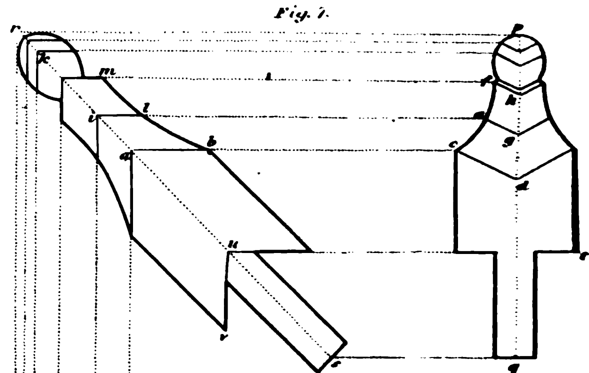


Fig. 7.

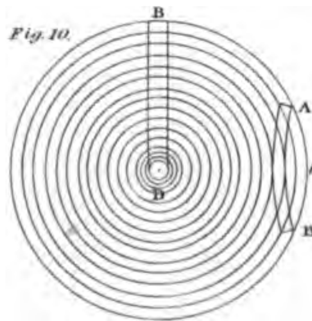


Fig. 10.

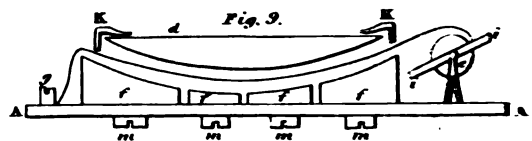


Fig. 9.

a square, and seldom higher. On stairs, or any other inclined planes, the same proportions are to be observed as on horizontal ones.

A *column* will next occupy our attention.

To each order of architecture belongs a particular kind of base, and the first operation required is that of glueing up the base.

The shaft of a column should be glued up in eight or more staves, according to its intended dimensions; but care should be always taken to have the joint in the middle of a fillet, and not in a flute, which would impair its strength very much.

Figs. 3 and 4 show a plan of the upper and lower ends, or the horizontal section at top and bottom. If eight pieces are sufficient to form the column, let an octagon be described round the ends, and let lines be drawn from each angle of the octagon to the centre; when the bevel of the edges of the staves will be given for the joints, which must be quite straight from top to bottom, though the staves be narrower at the top, as shown in fig. 3. These staves must be of sufficient thickness, because their outsides have to assume a curvature proportioned to the swell of the column by means of a diminishing rule; next glue the pieces together one after the other as the glue dries; block them well at the corners in the inside, which will greatly strengthen the joints; and proceed in this manner to the last stave; but all the blocks must be glued on and dried, before the last stave can be fastened. Pieces, however, may be glued quite across for the last stave, and fixed to the inside of the two adjoining staves, or they may be fixed by screws to each stave, in which case the under side of the last stave must be planed so as to rub well on the cross pieces.

When the stave is put in, and glued upon the cross pieces, it may be driven tight home, like a wedge, and the whole will be firm and substantial throughout, great care, nevertheless, ought to be taken as to preparing the staves and blocks out of wood thoroughly dry, because, after the lapse of some time, if the wood be moist, the column will be in danger of falling to pieces at the joints. It will be necessary also to make each piece according to the plan, for a trifling error in any one piece will make a very material difference in the column after glueing. When the glue used in combining the column is dry, the angles must be regularly worked off all round: and the column will then have double the number of sides, or cants, bearing a proportionable regularity to each other. Proceed in a similar manner to work off the angles as before, so as to make the sides, or cant of the column, quite regular. Lastly, let a plane be formed, in order to fit the curve of the column at the bottom, or render it rather flatter; then round off all the angles, until the surface of the column is perfectly smooth. One thing to be observed, with respect to the moulds employed in jointing the staves together, is, that they cannot be considered as exactly true when applied in a direction perpendicular to the joint. The most correct mode is that made use of in finding the backing of a hip rafter; but this exactness, nevertheless, is not always attended to, in consequence of the difficulty of discerning the deviation in some instances. When the column is quite finished, it should be well painted, by way of protection from the effects of the weather.

Sometimes columns are glued up in two halves, in which cases those two halves are glued together, and the blockings are introduced a considerable way by hand; but, if the column be too long, a rod of sufficient length may be used. Both these methods have some inconveniences, which cannot be avoided; by the former method, the last joints cannot be rubbed together from the obstacle presented by the tapering of the stave, but if this be glued quickly it will be pretty sound; by the latter method there will be an uncertainty of the blockings being sound. In all cases, however, care should be taken to place the grain of the blocking piece in the same direction as the grain of the column, so as that they may both expand and shrink alike, when affected by the weather.

Fig. 5 represents the mode practised in gluing up a capital. The parts denoted by B B, &c., are triangular blocks of wood, glued upon the front, in order to complete the angular square: upon them the pieces A, A, A, &c. are glued, and this is considered the best method of gluing up the capital. Another method is, to glue the triangular blocks C C, at the angle of the abacus; then the four sides of the abacus as D, E, F, may be made of one entire length, and mitred at the horns, or they may have a joint in the middle of the abacus, where the rose is placed, as the workman shall think fit: this method will do either for a column or a pilaster.

Fig. 6 exhibits the method of glueing up the base of a column.

The mode of mitring the bottom course together, which must be effected on a perfectly flat board, and by fitting all the joints as close as possible. When the course has been well glued together, and secured on the inside with blocks at the several angles, the top of the course must be planed quite smooth and out of winding; after this, the next course must be glued on, and the joint must be broken in the middle of the under course (as shown by the dotted lines in the plate), by which means as many courses can be glued down as may be required. When the whole is thoroughly dry, the operations of the turner may commence.

A *pediment* is a triangular cornice, of which one of the sides is horizontal, and the other two inclined, and of equal length, such as fig. 1 plate II., or a pediment is a segment of a circle fig. 2, with a circular and straight cornice.

As no pediment can be conveniently executed without two kinds of cornices, to give each of the cymas such a shape or curve as shall agree in their mitre, we must first describe the level cornice $abcde$, figs. 3 and 4, and through the points a, b, c, d, e, draw lines ag, bh, ci, dk, el, agreeable to the rake or angle which one of the inclined sides makes with the horizon, or from a centre agreeable to the arc required to form the segment.

Draw fo' perpendicular to ag, and draw $o'p$ perpendicular to fo'. From the points a, b, c, d, e, draw lines perpendicular to aq, to meet the line

$m n$, and from o', in $o'p$, set off distances equal to the distances from m, in the line $m n$, where perpendiculars meet it, and draw perpendiculars from the points in $o'p$, and let these perpendiculars intersect the lines $a g$, $b h$, $c i$, &c., in the points f, o, p, q, r; then the curve $f o p q r$ is the section of the inclined moulding. In like manner draw $g s$, perpendicular to $a q$: from s, in the line $s t$, set off the several distances from m, in the line $m n$, and draw lines from the points of division parallel to $s q$, to meet the lines parallel to $a g$, in the points g, h, i, k, l; then $g h i k l$ is the section of a moulding, returning parallel to the moulding of which $a b c d e$ is the section.

Figs. 5 and 6 are described in a similar manner as is evident.

Fig. 7 shows the manner of drawing angle bars for shop fronts, supposing the angle bars to be the same thickness as the intermediate vertical and horizontal bars. These bars being duly placed according to the plan of the windows, $t u v$, through c draw $c a$, meeting $r s$ in a, and the side of the angle bar in b: from c, with the distance $b a$, describe an arc intersecting $p q$ in d. Draw $e i$, $f k$, parallel to $u t$, meeting $r s$ in i, k, and draw $e g$, $f h$, parallel to $c d$, meeting $p q$ in g and h. Make $i l$, $k m$, &c., equal to $e g$, $f h$, &c., finding a sufficient number of points; in the same manner draw the curves and complete the angle bar as required.

We have hitherto confined our remarks to that part of joinery which is performed at the bench; but by far the most important part remains to be considered. For, however well a piece of work may have been prepared, if it be not properly *fixed*, it cannot fulfil its intended purpose. As in the preceding part, we shall state the general principles that ought to be made the basis of practice, and illustrate those principles by particular examples.

If the part to be fixed consist of boards joined together, but not framed, it should be fixed so that it may shrink, or swell, without splitting. The nature of the work will generally determine how this may be effected. Let us suppose that a plane back of a window is to be fixed. Fig. 8 is a section showing B the back of the window, A the window sill, D the floor, and C the skirting. Now let the back be firmly nailed to the window sill A, and let a narrow piece d, with a groove and cross tongue in its upper edge, be fixed to the bond timbers or plugs in the wall; the tongue being inserted also into a corresponding groove in the lower edge of the back B. It is obvious that, the tongue being loose, the back B may contract or expand, as a pannel in a frame. The dado of a room should be fixed in the same manner. In the principal rooms of a house the skirting C is usually grooved into the floor D, and fixed only to the narrow piece d, which is called a ground. By fixing, in this manner, the skirting covers the joint, which would, otherwise, soon be open by the shrinking of the back; and from the skirting being grooved into the floor, but not fastened to it, there cannot be an open joint between the skirting and floor. When it is considered that an open joint in such a situation must become a receptacle for dust, and a harbour for insects, the importance of adopting this method of fixing skirting will be apparent.

In fixing any board above five or six inches wide, similar precautions are necessary; otherwise it is certain to split when the house becomes inhabited. We may, in general, either fix one edge, and groove the other, so as to leave it at liberty, or fix it in the middle, and leave both edges at liberty.

Sometimes a wide board, or a piece consisting of several boards, may be fixed by means of buttons screwed to the back, which turn into grooves in the framing, bearers, or joists, to which it is to be fixed. If any shrinking takes place, the buttons slide in the grooves. In this manner the landings of stairs are fixed, and it is much the best mode of fixing the top of a table to its frame.

We must not omit to notice an ingenious machine for bending sash bars, &c. A A, plate 2, fig. 9, represents the bed of the machine, which may be a plank suitable on the articles to be bent; f, f, f, f, represents bearers screwed to the bed, and likewise screwed down to a work bench, as shown at the section to the right hand: M M represents the heads of the screws; B shows a templet (commonly called a cylinder by workmen), the centre of which is at d, d, and is supposed to be employed bending a sash style and bead at the same time, as shown in the section.

Suppose the style intended to be bent to be worked to its proper rabbet and mouldings, and the templet rabbeted to receive it and the bead also; then suppose the style to be fastened to the straight part of the templet by means of small cramps, as represented at K K. n, n, n, n, represents a piece of iron hoop which is pressed close to the templet by means of the wheel $i\ i$, and the screw $g\ g$; the cylinder is supposed to be in the act of being moved round by means of the lever $c\ c$, and, when brought far enough round, may be confined by cramps as on the other side.

We may now notice, though it must be but briefly, the best mode of selecting and *seasoning* the materials employed by the joiner. It is well known that wood contracts less in proportion, in diameter than it does in circumference; hence a whole tree always splits in drying. Mr. Knight has shown that, in consequence of this irregular contraction, a board may be cut from a tree, that can scarcely be made, by any means, to retain the same form and position when subjected to various degrees of heat and moisture. From the ash and the beech he cut some thin boards, in different directions relatively to their transverse septa, so that the septa crossed the middle of some of the boards at right angles, and lay nearly parallel with the surfaces of others. Both kinds were placed in a warm room, under perfectly similar circumstances. Those which had been formed by cutting across the transverse septa, as at A, fig. 10, plate 2, soon changed their form very considerably, the one side becoming hollow, and the other round; and in drying they contracted nearly fourteen per cent. in width.

The other kind in which the septa were nearly parallel to the surfaces of the boards, as at B, re-

tained, with very little variation, their primary form, and did not contract in drying more than three and a half per cent. in width.

As Mr. Knight had not tried resinous woods, two specimens were cut from a piece of Memel timber, and, to fully explain the matter, we may conceive the figure to represent the section of a tree, the annual rings being shown by circles. B D represents the manner in which one of the pieces was cut, and A C the other. The board A C contracted 3·75 per cent. in width, and became hollow on the side marked *b*. The board B D retained its original straightness, and contracted only 0·7 per cent. The difference in the quantity of construction is still greater than in hard woods.

From these experiments the advantages to be obtained, merely by a proper attention in cutting out boards for pannels, &c., will be obvious; and it will also be found that pannels, cut so that the septa are nearly parallel to their faces, will appear of a finer and more even grain, and require less labor to make their surfaces even and smooth.

The results of these experiments are not less interesting to cabinet-makers, particularly in the construction of billiard-tables, card-tables, and indeed every kind of table in use. For such purposes the plank should be cut so as to cross the rings as nearly in the direction B D as possible. We have no doubt that it is the knowledge of this property of wood, that renders the billiard-tables of some makers so far superior to those of others.

In wood that has the larger transverse septa, as the oak, for example, boards cut as B D will be figured, while those cut as A C will be plain.

There is another kind of contraction in wood whilst drying, which causes it to become curved in the direction of its length. In the long stiles of framing we have often observed it; indeed on this account it is difficult to prevent the stile of a door, hung with centres, from curving, so as to rub against the jamb. A very satisfactory reason has been given by Mr. Knight, which also points out the manner of cutting out wood, so as to be less subject to this defect, which it is most desirable to avoid. The interior layers of wood, being older, are more compact and solid than the exterior layers of the same tree; consequently, in drying, the latter contract more in length than the former. This irregularity of contraction causes the wood to curve, in the direction of its length, and it may be avoided by cutting the wood so that the parts of each piece shall be as nearly of the same age as possible.

Besides the contraction which takes place in drying, wood undergoes a considerable change in bulk with the variations of the atmosphere. In straight-grained woods the change in length is nearly insensible, hence they are sometimes employed for pendulum rods; but the lateral dimensions vary so much that a wide piece of wood will serve as a rude hygrometer. The extent of variation decreases in a few seasons, but it is of some importance to the joiner to be aware, that, even in very old wood, when the surface is removed, the extent of variation is nearly the same as in new wood.

It appears, from Rondelet's experiments, that, in wood of a mean degree of dryness, the extent of contraction and expansion, produced by the usual changes in the state of the atmosphere, was, in fir wood, from $\frac{1}{300}$ to $\frac{1}{75}$ part of its width; and in oak, from $\frac{1}{415}$ to $\frac{1}{34}$ part of its width. Consequently the mean extent of variation in fir is $\frac{1}{150}$, and in oak $\frac{1}{130}$; and at this mean rate, in a fir board about twelve inches and a half wide, the difference in width would be $\frac{1}{12}$ of an inch. This will show the importance of attending to the maxims of construction; for, if a board of that width should be fixed at both edges, it must unavoidably split from one end to the other.

JOINT, *n. s.* Lat. *junctura;* French *jointure.* Articulation of limbs; juncture of moveable bones in animal bodies.

Dropsies and asthmas, and *joint* racking rheums. *Milton.*

I felt the same pain in the same *joint.* *Temple.*

Hinge; junctures which admit motion of the parts.

The coach, the cover whereof was made with such joints that as they might, to avoid the weather, pull it up close when they listed; so when they would, they might remain as discovered and open-sighted as on horseback. *Sidney.*

In joinery; Fr. *jointe.*

Straight line, sin joiners' language, is called a *joint;* that is, two pieces of wood are shot, that is, plained. *Moxon.*

A knot or commissure in a plant.

One of the limbs of an animal cut up by the butcher.

In bringing a *joint* of meat, it falls out of your hand. *Swift.*

Out of joint. Luxated; slipped from the socket, or correspondent part where it naturally moves.

My head and whole body was sore hurt, and also one of my arms and legs put *out of joint.* *Herbert.*

Out of joint. Thrown into confusion and disorder; confused; full of disturbance.

The time is *out of joint,* oh cursed spight!
That ever I was born to set it right. *Shakspeare.*

JOINT, *adj.*

Shared among many.

Entertain no more of it,
Than a *joint* burthen laid upon us all. *Shakspeare.*

United in the same possession: as we say, joi-heirsnt or coheirs, joint-heiresses or coheiresses.

The sun and man did strive,
Joint tenants of the world, who should survive. *Donne.*

Combined; acting together in consort.

On your *joint* vigour now
My hold of this new kingdom all depends. *Milton.*

JOINT, *v. a.* From the noun.

To form in articulations.

The fingers are *jointed* together for motion, and furnished with several muscles. *Ray on the Creation.*

To form many parts into one.

Against the steed he threw
His forceful spear, which, hissing as it flew,
Pierced through the yielding planks of *jointed* wood *Dryden.*

To join together in confederacy. Not used.

The times
Made friends of them, *jointing* their force 'gainst Cæsar. *Shakspeare.*

To divide a joint; to cut or quarter into joints.

He *joints* the neck; and with a stroke so strong
The helm flies off; and bears the head along. *Dryden.*

The JOINTS of the human body are called by anatomists articulations. See ANATOMY. The suppleness to which the joints may be brought by long practice from infancy is very surprising. One of the most wonderful instances was a person of the name of Clark, and famous for it in London, where he was commonly known by the name of Clark the posture-master. This man, by long practice, distorted many of the bones, of which nobody before had ever thought it possible to alter the position. He had such an absolute command of his muscles and joints, that he could almost disjoint his whole body; so that he once imposed on the famous Mullens by his distortions, in such a manner, that he refused to undertake his cure: but, to the amazement of the physician, no sooner had he given over his patient, than he saw him restore himself to the figure and condition of a proper man, with no distortion about him.

JOINT'ED, *adj.* From joint. Full of joints, knots, or commissures.

Three cubits high
The *jointed* herbage shoots. *Phillips.*

JOINT'ER, *n. s.* From joint. A sort of plane.

The *jointer* is somewhat longer than the foreplane, and hath its sole perfectly straight: its office is to follow the fore-plane, and shoot an edge perfectly straight, when a joint is to be shot. *Moxon.*

JOINT'LY, *adv.* From joint.

Together; not separately.

I began a combat first with him particularly, and after his death with the others *jointly.* *Sidney.*

Because all that are of the church cannot *jointly* and equally work; the first thing in polity required is a difference of persons in the church. *Hooker.*

In a state of union or co-operation.

His name a great example stands, to shew
How strangely high endeavours may be blest,
Where piety and valor *jointly* go. *Dryden.*

JOIN'TRESS, *n. s.* From jointure. One who holds any thing in jointure.

Our queen,
The imperial *jointress* of this warlike state,
We've taken now to wife. *Shakspeare. Hamlet.*

JOINTSTOOL', *n. s.* Joint and stool. A stool made not merely by insertion of the feet, but by inserting one part in another.

He rides the wild mare with the boys, and jumps upon *jointstools,* and wears his boot very smooth like unto the sign of the leg. *Shakspeare.*

Could that be eternal which they had seen a rude trunk, and perhaps the other piece of it a *jointstool?* *South.*

JOIN'TURE, *n. s.* Fr. *jointure.* Estate settled on a wife to be enjoyed after her husband's decease

The *jointure* that your king must make,
With her dowry shall be counterpoised. *Shakspeare.*

The old countess of Desmond, who lived in 1589, and many years since, was married in Edward the Fourth's time, and held her *jointure* from all the earls of Desmond since then. *Raleigh's History of the World.*

There's a civil question used of late,
Where lies my *jointure,* where your own estate? *Dryden.*

JOINTURE. See DOWER. To enjoy her jointure, the widow must have been the wife of the party at his decease; not divorced a vinculo matrimonii: nor, if she has eloped from her husband, and lived with an adulterer, shall she be entitled to dower, unless her husband be voluntarily reconciled to her. The widows of traitors are also barred of their dower by 5 and 6 Edw. VI. cap. 11, but not the widows of felons. An alien cannot be endowed, unless she be queen consort. If a woman levies a fine with her husband, or if a common recovery be had with the husband and wife of the husband's lands, she is barred of her dower. A widow, clear of these impediments, is by law entitled to be endowed of all lands and tenements, of which her husband was seised in fee-simple or fee-tail at any time during the coverture; and of which any issue she might have had might by possibility have been heir.

JOINVILLE (John Sire de), an eminent French statesman of the thirteenth century, who was seneschal, or high steward of Champagne, and one of the principal lords of the court of Louis IX. He attended that monarch in all his expeditions; and all matters of justice in the palace were referred to his decision. He wrote the History of St. Louis in French, which is a very curious and interesting piece; and died about 1318. The best edition of this work is that of Du Cange, in folio, with notes.

JOINVILLE, an ancient town of France, in the department of Upper Marne, and late province of Champagne, with a large magnificent castle, situated on the Marne, fifteen miles south-east of St. Dizier, 125 of Paris, and twenty-five south-west of Bar le Duc.

JOINUS, or JAINS as they are sometimes called, a sect or race of Hindoos, found in considerable numbers in the southern peninsula of India. They are dissenters from the established faith of Brahminism, deny the authority of the Vedas, and all the grand objects of Hindoo veneration. They have adopted opinions concerning the origin of the world, which seem to partake of the character of atheism. The material world, as well as the minds of all men and animals, are by them held to be eternal, and they refuse to acknowledge any thing which is not, or has not been, the object of the senses. Upon this principle they deny the existence of any beings superior to man, and have no objects of worship except men who have raised themselves to the rank of divinities. They, however, set no bounds to the perfection which the human soul may arrive at.

They have three ranks of ascetics, or Yatis. The first, called Anuvrata, is attained by him who forsakes his family, entirely cuts off his

hair, holds always in his hand a bundle of peacock's feathers, and an earthen pot, and wears clothes of a tawny color. The second rank, Maharrata, requires that all dress should be abandoned, except a mere rag to cover nakedness, and that the hair should be pulled out by the roots. He who aspires to attain the third degree, or Nirvana, throws aside even rags, remains entirely naked, and eats nothing but rice once in two days. He is held in nearly equal veneration with the priests and rajas, whose images are worshipped in the temples.

At Billicull, or Belligola, is the residence of their high priest, and a gigantic image of Gomat Iswara Swami, one of their chiefs, the foot of which is nine feet in length, so that the height of the entire statue cannot be less than fifty-four feet: there is a similar one at Kurcul, near Mangalore. Samana and Gaudma, the main objects of Boodh veneration, are also enumerated by the Jains among the earliest of their priests. On the other hand they differ from the Boodhists in being divided into four castes. The Jains observe similar penances with other Hindoos, only carrying them to a greater extreme. They are also scrupulous to a still greater degree as to causing the death of any living thing. To guard against this the strict Jains do not eat after sunset; they have always a small broom to sweep the ground before them, and never drink water unless strained through a cloth. Like the other Hindoos, they consider it unlawful for the widow to marry again; but discourage the practice of sacrificing her on the body of the husband. They have a system of their own with regard to history, chronology, and physics, still more absurd than that of the Vedas.

JOIST, *n. s.* From Fr. *joindre*. The secondary beam of a floor.

Some wood is not good to use for beams or *joists*, because of the brittleness. *Mortimer's Husbandry.*

The kettle to the top was hoist,
And there stood fastened to a *joist*. *Swift.*

JOIST, *v. a.* From the noun. To fit in the smaller beams of a flooring.

JOKE, *n. s.* & *v. n.* } Lat. *jocus*. A jest;
JO'KER, *n. s.* } something not serious: jest or be merry: a jester; a merry fellow.

Thou madest thy first appearance in the world like a dry *joker*, buffoon, or jack pudding. *Dennis.*

Link towns to towns with avenues of oak
Inclose whole downs in walls, 'tis all a *joke!*
Inexorable death shall level all. *Pope.*

Why should publick mockery in print, or a merry jest upon a stage, be a better test of truth than publick persecutions? *Watts.*

There's little talking, and no wit;
It is no time to *joke*. *Cowper. Yearly Distress.*

JOKTAN, the son of Heber, brother of Peleg, and father of thirteen sons (Gen. x. 25; 1 Chron. i. 19), the progenitors of thirteen nations or tribes of Arabs; who inhabited Arabia Felix, from Mount Sephar, in the south-east of Arabia, to Meshna, or Mecca, on the east of the Red Sea. See PELEG.

IOLAIA, a festival at Thebes, called also Heracleia. It was instituted in honor of Hercules and his friend Iolas, who assisted him in conquering the hydra. It continued during several days, on the first of which were offered solemn sacrifices. The next day horse races and athletic exercises were exhibited. The following day was set apart for wrestling, the victors were crowned with garlands of myrtle, generally used at funeral solemnities. They were sometimes rewarded with tripods of brass. The place where the exercises were exhibited was called Iolaion; where there were to be seen the monument of Amphitryon, and the cenotaph of Iolas, who was buried in Sardinia. These monuments were strewed with garlands and flowers on the day of the festival.

IOLAS, or IOLAUS, in fabulous history, a son of Iphiclus, king of Thessaly, who assisted Hercules in conquering the hydra, and burnt with a hot iron the wound where the heads had been cut off, to prevent the growth of others. He was restored to his youth and vigor by Hebe, at the request of his friend Hercules. Some time afterwards Iolas assisted the Heraclidæ against Eurystheus, and killed the tyrant with his own hand. Plutarch says, Iolas had a monument in Bœotia and Phocis, where lovers used to bind themselves by solemn oaths of fidelity, considering the place as sacred to love and friendship. According to Diodorus and Pausanias, Iolas died, and was buried in Sardinia, whither he went to make a settlement at the head of the sons of Hercules by the fifty daughters of Thespius.

JOLE, *n. s.* } Fr. *gueule*, *joli*; Lat.
JOLL, *v. a.* } *jovialis*. Jole, the face or
JOL'LILY, *adv.* } cheek. Joll, to beat the
JOL'LIMENT, *n. s.* } head against any thing.
JOL'LINESS, *n. s.* } Jolly, gay; merry; plump
JOL'LITY, *n. s.* } as in high health: noisy
JOL'LY, *adj.* } mirth and merriment is called jollity or jolliment. The definition of these words is somewhat doubtful.

This Phebus, which that thought upon no guile,
Disceived was for all his *jolitee*.
Chaucer. The Manciples Tale.

Most like Alcyon seeming at a glance;
Alcyon he, the *iollie* shepheard swaine,
That wont full merrilie to pipe and daunce,
And fill with pleasance every wood and plaine.
Spenser. Daphnaida.

Upon our way to which we weren bent
We chaunst to come foreby a covert glade
Within a wood, whereas a ladie gent
Sate with a knight in joyous *iolliment*.
Id. Faerie Queene.

With joyance bring her, and with *jollity*.
Spenser.

There shall these pairs of faithful lovers be
Wedded, with Theseus, all in *jollity*.
Shakspeare.

Follow! nay, I'll go with thee cheek by *jole*. *Id.*

Howsoe'er their hearts are severed in religion, their heads are both one: they may *joll* horns together. *Id.*

Like a *jolly* troop of huntsmen, come
Our lusty English. *Id. King John.*

All my griefs to this are *jolly*,
Nought so sad as Melancholy. *Burton.*

The brazen throat of war had ceased to roar;
All now was turned to *jollity* and game,
To luxury and riot, feast and dance. *Milton.*

O nightingale!
Thou with fresh hope the lover's heart dost fill,
While the *jolly* hours lead on propitious May.
Id.

He with a proud *jollity* commanded him to leave that quarrel only for him, who was only worthy to enter into it. *Sidney.*

Your wan complexion, and your thin *joles*, father. *Dryden.*

This gentle knight, inspired by *jolly* May,
Forsook his easy couch at early day. *Id.*
The goodly empress, *jollily* inclined,
Is to the welcome bearer wondrous kind.
Id. Perseus.

The tortoises envied the easiness of the frogs, 'till they saw them *jolled* to pieces and devoured for want of a buckler. *L'Estrange.*

He catches at an apple of Sodom, which though it may entertain his eye with a florid, *jolly* white and red, yet, upon the touch, it shall fill his hand only with stench and foulness. *South.*

Good men are never so surprised as in the midst of their *jollities*, nor so fatally overtaken and caught as when the table is made the snare. *Id.*

Crown we the goblet then, and call on Bacchus,
Bacchus! the *jolly* god of laughing pleasures.
Rowe's Ulysses.

My heart was filled with melancholy to see several dropping in the midst of mirth and *jollity*.
Addison's Spectator.

A shepherd now along the plain he roves,
And with his *jolly* pipe delights the groves.
Prior.

Red-speckled trouts, the salmon's silver *jole*,
The jointed lobster, and unscaly soale.
Gay's Trivia.

A salmon's belly, Helluo, was thy fate:
The doctor called, declares all help too late:
Mercy! cries Helluo, mercy on my soul!
Is there no hope? alas! then bring the *jowl*.
Pope.

JOLI, or Joly (Claudius), was born at Paris in 1607. He applied first to the law, but afterwards entered into orders, and in 1631 obtained a canonry in the cathedral of Notre Dame at Paris. His diplomatic talents attracting the attention of the duke of Longueville, the French plenipotentiary for negociating a general peace, he took him with him to Munster, where he proved a good assistant. On his return, in 1671, he was made precentor and official of Paris. He wrote many works, particularly Maxims for the Education of a Prince; which, giving offence to the despotic court of France, was burnt by the hangman in 1665. He died in 1700, aged ninety-three.

Joli (Guy), king's counsellor to the Chatelet, and syndic of the revenues of the Hotel de Ville at Paris, attached himself for a long time to cardinal de Retz, in the capacity of secretary. Besides other tracts, he wrote Memoirs from 1648 to 1665, including those of Cardinal de Retz; a translation of which into English was published in 1755.

JOLT, *v. a., v. n. & n. s.* } Fr. *joute*, or pos-
Jolt'head, } sibly from *jostle*, a frequentative of joust. To shake as a carriage: jolt, any shock or violent agitation: jolthead, a great head; a dolt; a blockhead.

Fie on thee, *jolthead*, thou can'st not read!
Shakspeare.

Every little unevenness of the ground will cause such a *jolting* of the chariot as to hinder the motion of its sails. *Wilkins.*

Had man been a dwarf, he had scarce been a reasonable creature; for he must then have either had a *jolthead*, and so there would not have been body and blood enough to supply his brain with spirits; or he must have had a small head, and so there would not have been brain enough for his business. *Grew.*

The symptoms are, bloody water upon a sudden *jolt* or violent motion. *Arbuthnot on Diet.*

The first *jolt* had like to have shaken me out; but afterwards the motion was easy. *Swift.*

ION, in fabulous history, a son of Xuthus and Creusa, daughter of Erechtheus, who married Helice, the daughter of Selinus, king of Ægiale. He succeeded to the throne of his father-in-law; and built a city, which he called Helice after his wife. His subjects from him received the name of Ionians, and the country that of Ionia. See Ionia.

Ion, a tragic poet of Chios, who flourished about the eighty-second Olympiad. His tragedies were represented at Athens, where they met with universal applause. He is greatly commended by Aristophanes and Athenæus, &c.

IONA, Jona, or Icolmkill, one of the Hebrides. See Icolmkill. The east side of Iona is mostly flat; the middle rises into small hills; and the west side is very rude and rocky; the whole forming a singular mixture of rocky and fertile ground. There is in the island only one town or village, consisting of about sixty houses. Near it is the Bay of Martyrs, so named from those slain by the Danes. Beyond the town are ruins of the nunnery of Austin canonesses, dedicated to St. Oran, and said to have been founded by St. Columba: the church was fifty-eight feet by twenty, and the east roof is entire. On the floor is the tomb of the last prioress, with her figure praying to the Virgin Mary, and this inscription on the ledge:—Hic jacet domina Anna Donaldi Terleti filia, quondam priorissa de Jona, quæ obiit an'o M.D.XI.^mo ejus animam Altissimo commendamus. A broad paved way leads hence to the cathedral; and on this way is a large handsome cross called Macleane's, the only one that remains of 360, which were demolished at the Reformation. Reilig Ouran, or the burying place of Oran, is the large enclosure where the kings of Scotland, Ireland, and of the isles, and their descendants, were buried in three several chapels. The dean of the isles, who travelled over them in 1549, says, that in his time, on one of these chapels (or 'tombes of stain, formit like little chapels with ane braid gray marble or quhin stain on the gavil of ilk ane of the tombes'), containing the remains of forty-eight Scotch monarchs, from Fergus II. to Macbeth, was inscribed, Tumulus regum Scotiæ; the next was inscribed, Tumulus regum Hiberniæ, and contained four Irish monarchs; and the third, Tumulus regum Norwegiæ, contained eight Norwegian viceroys of the Hebrides, while they were subject to the crown of Norway. Boece says, that Fergus founded this abbey for the burial place of his successors. Here also stands the chapel of St. Oran, the first building begun by Columba, and Oran's red grave-stone is near the door. In this chapel are tombs of several chiefs, &c. A little north of this enclosure stands the cathedral, built in form

of a cross, 115 feet long by twenty-three, the transept seventy feet: the pillars of the choir have their capitals charged with sculpture and other histories. This church is ascribed to Maldwin in the seventh century; but the present structure is far too magnificent for that age. Most of the walls are built of red granite from the Nun's Island in the Sound. Two parallel walls of a covered way about twelve feet high, and ten wide, reach from the south-east corner to the sea. In the church-yard is a fine cross of a single piece of red granite, fourteen feet high, twenty-two broad, and ten inches thick. The monastery is behind the chapel; of which only a piece of the cloister remains, and some sacred black stones in a corner, on which contracts and alliances were made, and oaths sworn. In former times, this island was the place where the archives of Scotland and many valuable old MSS. were kept. Most of these are supposed to have been destroyed at the Reformation; but many, it is said, were carried to the Scotch college at Douay in France. This once illustrious seat of learning and piety has now no school for education, no temple for worship, no instructor in religion, except when visited once a quarter by the parish minister of Kilfinichen.

JONAH, Heb. יהנה, i.e. a dove, the son of Amittai, one of the twelve minor prophets, and author of the canonical book of the Old Testament bearing his name; in which are recorded, his mission to the Ninevites, his foolish attempt to fly from the presence of the Almighty, his punishment, and miraculous deliverance from the belly of the fish, with his prophecy, discontent, and final reproof afterwards. Some of the rabbies suppose Jonah to have been the son of the widow of Sarepta, restored to life by Elijah; others the son of the Shunammite, restored by Elisha; but the chronology renders at least the first of these opinions improbable, as he prophesied under Joash king of Israel, about A. A. C. 771; and perhaps lived to see his prophecy of relief to the Israelites (2 Kings xiv. 25) fulfilled by Jeroboam II. Alstedius says he prophesied about A. M. 3124; about the time of Sardanapalus, the last king of Assyria, who perished with his capital Nineveh, about forty years, or forty prophetic days, after Jonah had foretold its destruction, and which the prophet himself supposed to mean forty natural days.

JONAS Arngrimus, a learned Icelander, who acquired great reputation by his skill in the sciences, and particularly in astronomy. He was coadjutor to Gundebran de Thorlac, bishop of Hola in Iceland. He refused that bishopric after the death of Gundebran; and died in 1649. He wrote several works, the principal of which are, Idea veræ Magistratus, and the History and Description of Iceland.

JONATHAN Maccabæus, brother of Judas, a renowned general of the Jews. He forced Bacchides, the Syrian general, who made war with the Jews, to accept a peace; conquered Demetrius Soter, and afterwards Apollonius, that prince's general; but being ensnared by Tryphon, was put to death 144 B.C. See Jews.

JONES (Inigo), a celebrated English architect, the son of a cloth-worker of London, born in 1572. He was at first put apprentice to a joiner; but early distinguished himself by his inclination to drawing and landscape painting. This recommended him to the favor of William, earl of Pembroke, who sent him abroad with a handsome allowance to perfect himself in that art. He was, however, no sooner at Rome, than he found himself in his proper sphere; he felt that nature had not formed him to decorate cabinets, but to design palaces. He laid aside the pencil, and devoted himself entirely to the study of architecture. He soon acquired fame, and, from his reputation at Venice, Christian IV. invited him to Denmark, and appointed him his architect. James I. met him at Copenhagen, and his queen took him, as her architect, to Scotland. He served prince Henry in the same capacity, and the place of surveyor-general of the works was granted to him in reversion. On the death of that prince Jones travelled once more into Italy, in order to perfect his taste. The surveyor's place became vacant, and he returned to England, but with great disinterestedness gave up the profits of his office, which he found extremely in debt; and prevailed upon the comptroller and paymaster to imitate his example, till the whole arrears were cleared off. In 1620 he was appointed one of the commissioners for repairing St. Paul's; but this was not commenced till 1633, when Laud, then bishop of London, laid the first stone, and Inigo the fourth. The Banqueting House, according to Nicholas Stone, was begun in 1619, and finished in two years—a small part of the pile designed for the palace of our kings; but so complete in itself, that it stands a model of the most pure and beautiful taste. Several plates of the intended palace at Whitehall have been given; but Mr. Walpole thinks from no finished design. In 1623 he was employed at Somerset House, where a chapel was fitted up for the infanta, the intended bride of the prince. On the accession of Charles I. Jones was continued in his post. His fee as surveyor was 8*s.* 4*d.* a day, with an allowance of £46 a year for house-rent, besides a clerk and incidental expenses. During the prosperous state of the king's affairs the pleasures of the court were carried on with much taste and magnificence. Lord Burlington had a folio of the designs for these solemnities, by Inigo's own hand, consisting of habits, masks, scenes, &c. The works of Inigo Jones are not scarce; Surgeon's Hall is one of his best works. One of the most beautiful of his works is the queen's house at Greenwich. Inigo early shared the misfortunes of his royal master. He was not only a favorite but a Roman Catholic: in 1646 he paid £544 for his delinquency and sequestration. Grief, misfortunes, and age, put an end to Jones's life at Somerset-house, July 21st, 1651. Several of his designs have been published. He left in MS. some curious notes on Palladio's architecture, which are inserted in an edition published in 1714.

Jones (Richards), a Welsh author of the seventeenth century, who wrote in his native language a curious work, entitled Gemma Cambricum, containing all the books and chapters of

the Bible. He was matriculated at Jesus College, Oxford, in 1621, and died in Ireland.

JONES (William), F. R. S., an eminent mathematician, born in Anglesea in 1675. He taught mathematics in London, and was intimate with Newton. He wrote A Compendium of Navigation, 8vo. 1702; Synopsis Matheseos, 8vo. 1706; Analysis per Quantitatem Series, &c. He died rich in 1749.

JONES (Rev. William), a modern divine of the church of England, was born at Lowick in Northamptonshire, July 30th, 1726, and educated at the Charter House. Hence he removed to University College, Oxford, where he contracted a friendship with Mr. Horne, afterwards bishop of Norwich. He became, on leaving the university, curate of Finedon, then of Wadenhoe, Northamptonshire, where he wrote his Catholic doctrine of the Trinity. In 1762 he published An Essay on the First Principles of Natural Philosophy, which much pleased lord Bute; and, in 1764, the archbishop of Canterbury gave him the vicarage of Bethersden, in Kent, to which was afterwards added the rectory of Pluckley. He next obtained the perpetual curacy of Nayland, in Suffolk; soon after which he exchanged Pluckley for Paston, in Northamptonshire. On the breaking out of the French revolution, Mr. Jones printed A Letter from Thomas Bull to his brother John, which had considerable effect. He was also concerned in establishing the British Critic; and published The Scholar armed against the Errors of the Times. On the death of his friend, bishop Horne, he paid an affectionate tribute to his memory in an account of his life. In 1798 archbishop Cornwallis presented him to the sinecure rectory of Hollingbourne, Kent, which he did not long enjoy; for the loss of his wife was followed by a paralytic stroke, of which he died February 6th, 1800. His works have been published in 12 vols. 8vo.

JONES (Paul), a naval officer in the service of the United States of America, during the war of independence. He was born in 1736 at Selkirk, in Scotland, and in 1775 obtained a commission from the congress, on which he sailed in a squadron commanded by commodore Hopkins, destined against New York. Here he obtained the rank of captain, and was appointed to the command of a frigate of thirty-six guns. In 1777 he made a descent at Whitehaven, where he destroyed the shipping in the harbour; and afterwards, landing in Scotland, attacked the mansion of lord Selkirk, and carried off the plate and furniture. It is said, however, that he afterwards restored the property to his lordship, whose person was the object of this attack. After taking the Drake sloop of war, off Carrickfergus, he sailed for Brest, and, obtaining a reinforcement of three ships, scoured the English seas. Near Flamborough Head he fell in with the Baltic fleet, convoyed by the Serapis frigate and the Countess of Scarborough, when a severe action took place, in which he was victorious, and captured the Serapis. Arriving at L'Orient in February 1780, he was invited to Paris, and presented, by Louis XVI. with a valuable sword. He returned to America in 1781, when the congress voted him a medal of gold, and appointed him to the command of a seventy-four. He afterwards served under d'Estaing against Jamaica, and in 1792 offered his services to the French government, but they were declined. He died at Paris in July 1792.

JONES (Griffith), a miscellaneous writer, was born in 1726, and was a coadjutor with Dr. Johnson for some years in the Literary Magazine; and with Smollett and Goldsmith in the British. He also translated and published anonymous works from the French, and was the author of several publications for the use of children, published by Mr. Newbury. He died in 1786.

JONES (Sir William), the son of Wm. Jones, F. R. S., was born September 28th, 1746, and educated at Harrow, under the celebrated Dr. Sumner, who early observed his superior abilities. He was thence removed to University College, Oxford, where the rapidity of his literary acquisitions excited general admiration; while his generous disposition and irreproachable morals procured him universal esteem. In 1769 he made a tour through France, and resided some time at Nice, where he employed himself in investigating the influence of the various forms of government on mankind. His first publication was a translation into French of a Persian MS., entitled The history of Nadir Shah, known by the name of Thamas Kouli Khan, Emperor of Persia. In 1771 he met with an additional disappointment by the death of his friend and preceptor, Dr. Sumner, upon whom he wrote an elegant Latin elegy. This year he published Dissertation sur la Literature Orientale, 8vo. A Grammar of the Persian Language, in 4to., and Lettre à M. A du P——, dans laquelle est compris l'Examen de sa Traduction des Livres attribués à Zoroastre, 8vo.; containing a spirited vindication of the University of Oxford, from the scurrilous reproaches of the translator of Zoroaster's supposed works. In 1772 he published Poems, chiefly translated from the Asiatic languages; with Two Essays subjoined on the Eastern Poetry, and on the Imitative Arts. In 1773 he took the degree of M. A., and published an English translation of his first work, the History of Nadir Shah, with an introduction, containing A Description of Asia, according to the Oriental Geographers. A Short History of Persia, from the Earliest Times to the present; and an Appendix containing an Essay on Asiatic Poetry, and the History of the Persian Language, &c., 8vo. In 1774 he published Poeseos Asiaticæ Commentariorum, Libri Sex, cum Appendice, &c., 8vo. From 1773 he pursued the study of the law, and, being called to the bar about 1779, was appointed a commissioner of bankrupts by lord Bathurst. In 1779 he published the Speeches of Isæus in causes concerning the Law of Succession to Property at Athens; with a preparatory discourse, notes, and a commentary; dedicated to lord Bathurst, 4to. The disgraceful riots this year in London led him to publish An Enquiry concerning the Legal Mode of Suppressing Riots, with a Constitutional Plan of Future Defence, 8vo.; and in 1781 An Essay on the Law of Bailments; a masterly treatise. About this time Mr. Jones became a zealous member of the Constitutional Society, as he did

not approve of the measures then carrying on by the ministry. In 1782 he published The Mahommedan Law of Succession to the Property of Intestates, in Arabic, with a Verbal Translation and Explanatory Notes, 4to. On the 4th March 1783 he was appointed judge of the Supreme Court of Bengal, and was knighted on the 20th. On the 8th of April he married Miss Shipley, eldest daughter of the bishop of St. Asaph, and soon after embarked for India; but previously published the Moallakat, or Seven Arabian Poems, which were suspended on the temple at Mecca, with a translation and arguments, 4to. He left with his brother-in-law, the dean of St. Asaph, a small tract in MS., entitled The Principles of Government, in a Dialogue between a Scholar and a Peasant; which being afterwards published by the dean, and widely circulated by the society for constitutional information, the dean was prosecuted for a libel, and found guilty. Sir William, during his voyage, formed the plan of the Asiatic Society, afterwards established at Calcutta, of which he became the active president, and of whose transactions several volumes have since been published, replete with much useful information. His conduct as a judge was most exemplary, and, while his literary researches continued indefatigable, his integrity remained unimpeachable. After residing fifteen years in India, he was preparing to return to his native country, when he died April 27th 1794, in the forty-eighth year of his age. 'It is to the shame of scepticism,' says one of his biographers, 'to the encouragement of hope, and to the honor of genius, that this great man was a sincere believer in the doctrines of Christianity, and that he was found dead in his closet, in the attitude of addressing his prayer to God.' Sir John Shore, bart., now lord Teignmouth, delivered an elegant funeral oration at a meeting of the Asiatic Society on Sir William. 'His capapacity for the acquisition of languages,' said he, 'has never been excelled. In Greek and Roman literature his early proficiency was the subject of admiration.—The French, the Spanish, and Italian, he spoke and wrote with fluency and precision, and the German and Portuguese were familiar to him. At an early period of life his application to oriental literature commenced. He studied the Hebrew with ease and success; and many of the most learned Asiatics avow, that his knowledge of Arabic and Persian was as accurate and extensive as their own. He was also conversant in the Turkish idiom, and the Chinese had ever attracted his notice so far as to learn the radical characters of that language. It was to be expected after his arrival in India, that he would make himself master of the Sanscrit; and the most enlightened professors of the doctrines of Brahma confessing that his knowledge of that sacred dialect was most critically correct and profound, could not suppress their tears for his loss, nor find terms to express their admiration at the wonderful progress he had made in their sciences. But Sir William was too discerning to consider language in any other light than as the key of science. He was led to study the works of Menu, reputed by the Hindoos the oldest and holiest of legislators; and finding them to comprise a system of laws, so comprehensive and minutely exact, that it might be considered as the Institutes of Hindu Law, he presented a translation of them to the government of Bengal. During the same period he gave the public an English version of the Sirajiyah, or Mahommedan Law of Inheritance, with a commentary. The latter was published at his own expense, and sold for the benefit of insolvent debtors; as well as a former work on the same subject in London.

The following is an Epitaph which he wrote for himself while in Asia:—

Here was deposited
the mortal part of a man
who feared God but not Death,
and maintained independence
but sought not riches;
who thought
none below him but the base and unjust,
none above him but the wise and virtuous;
who loved
his parents, kindred, friends, and country,
with an ardour
which was the chief source of
all his pleasures and all his pains;
and who, having devoted
his life to their service,
and to
the improvement of his mind,
resigned it calmly,
giving glory to his Creator,
wishing peace on earth,
and with
good will to all creatures,
on the [Twenty-seventh] day of [April]
in the year of our blessed Redeemer
One thousand seven hundred [and ninety-four].

Jones (Owen), a respectable tradesman and antiquary of the metropolis. He carried on for many years the trade of a furrier in Thames-street, where he died in 1814, aged seventy-four. He was a native of Denbighshire, and enthusiastically attached to the antiquities of the principality. He published, at his own expense, The Archæology of Wales, 3 vols. 4to.; and the entire works of the celebrated Cambrian bard, Dafydd ab Gwilym. He also procured copies of the unpublished Welsh poetry anterior to the end of the seventeenth century, forming about 60 vols. 4to. Mr. Jones, in 1772, succeeded in forming the Gwyneddigion (or Cambrian) Society, for the purpose of patronising the Welsh bards, and promoting the study of the ancient British language, and music.

Jones, in geography, a county of north Carolina, in Newbern, bounded on the north by Craven, east by Carteret, south by Onslow, and north-west by Lenoire counties: containing 3141 citizens, and 1681 slaves, in 1795. It is watered by the Trent, and the chief town is Trenton.

IONESIA, a genus of plants first discovered at Calcutta, and belonging to the class heptandria, order monogynia. It was so named by the Asiatic Society, in honor of Sir W. Jones. Dr. Roxburgh, a member of the society, thus describes it: 'cal. two-leaved: cor. one petalled, pistal bearing; base of the tube impervious; stamens long, ascending, inserted into the margin

of a glandulous nectarial ring, which crowns the mouth of the tube, the uppermost two of which more distant; style declining: legume turgid: trunk erect, though not straight: bark dark brown, pretty smooth: branches numerous, spreading in every direction, so as to form a most elegant shady head: leaves alternate, abruptly feathered, sessile, more than a foot long, when young, pendulous, and colored: leaflets opposite, from four to six pairs, the lowermost broad lanced, the upper lanced; smooth, shining, firm, a little waved, from four to eight inches long: petiole common, round, and smooth: stipule axillary, solitary, a process from the base of the petiole: umbels terminal and axillary; between the stipule and branchlet, globular, crowded, subsessile, erect: bracts, a small-hearted one under each division of the umbel: peduncle and pedicles, smooth, colored: flowers very numerous, pretty large; when they first expand they are of a beautiful orange color, gradually changing to red, forming a variety of lovely shades; fragrant during night: SEEDS generally from four to eight, smooth, gray, size of a large chestnut.' The Ionesia flowers at the beginning of the hot season, and its seeds ripen during the rains. The plants and seeds were brought to Calcutta from the interior parts of the country, where it is indigenous.

IONIA, a country of Asia Minor, bounded on the north by Æolia, on the west by the Ægean and Icarian seas, on the south by Caria, and on the east by Lydia and part of Caria. It was founded by colonies from Greece, and particularly Attica, by subjects of Ion. Ionia was divided into twelve small states, which formed a celebrated confederacy often mentioned by the ancients. These twelve states were Priene, Miletus, Colophon, Clazomenæ, Ephesus, Lebedos, Teos, Phocæa, Erythræ, Smyrna, and the capitals of Samos and Chios. The inhabitants of Ionia built a temple which they called Pan Ionium, i. e. all Ionia, from the concourse of people that flocked there from every part of Ionia.

The IONIAN ISLANDS are situated in the Ionian Sea, near the coasts of South Albania and the Morea, and consist of Corfu, Cephalonia, Zante, Santa Maura, Ithaca, or Thiaki, Cerigo, and Paxo, and a number of smaller islands. Corfu is the most northerly, and lies opposite to Albania; Paxo, Santa Maura, Ithaca, Cephalonia, and Zante, follow each other in succession to the southward, lying along the coasts of Albania and the ancient Elis: Cerigo is detached, being 150 miles to the south-east of Zante and opposite to the coast of Laconia. The territorial extent of this small state is estimated at about 1500 square miles, and the population, by a return made in 1807, is 206,000. The islands extend from 19° 30′ to 23° 10′ E. long.

Prior to the French revolution these islands were subject to Venice, but were ceded to France by the treaty of Campo Formio (1797). In 1799 they were taken by a Russian and Turkish fleet, and were erected into an independent republic by the name of the Seven Islands (Cerigo being included) and acknowledged as such by the different powers, at the general peace of Amiens. During the succeeding wars these islands were occupied by the different belligerents in succession; and France long succeeded in keeping possession of Corfu with a strong garrison. In the arrangements at the congress of Vienna in 1815, it was agreed that the Ionian republic should be put under the protection, not of Turkey, which was too near a neighbour, nor of Russia, whose hostility to Turkey would have kept alive the flame of war, but of Great Britain, a power which might derive advantage from the naval stations and commercial resources of the islands, without indulging schemes of aggrandisement on the adjacent continent. A constitution for this small state was soon after drawn up and ratified by the British government in July, 1817.

These islands will be each found described in their alphabetical places. We may here observe of them generally, that their coasts are rugged and difficult of access, and their harbours insecure, with the exception of those of Ithaca and Cephalonia. The climate is in general mild, but the transitions from heat to cold are sudden: hot and scorching winds are sometimes destructive to vegetation; and at certain seasons there are violent rains and thunder. They are all subject to slight earthquakes, which are sometimes confined to a single island. The soil in the plains and valleys is fertile in vines, corn, olives, currants, cotton, honey, wax, &c. But of corn the quantity is not adequate to the consumption. Vines and olives are the chief objects of agriculture. Cotton also is raised in large quantities; and advantage is taken of the smallest portions of soil; but the general ruggedness of the surface leaves little scope for agricultural improvement. Pasturage is in general scanty; goats and sheep are reared in considerable number; but horses and cattle are brought from the continent. The wild animals are foxes, hares, and rabbits. Fishing is prosecuted on the coasts. Salt is the only extensive manufacture: next to it is olive oil. Wine, brandy, and various kinds of liquors, are likewise made in quantity. The imports are salt fish (which sells largely for diet during the holydays of the Greek church); next sugar and drugs; also a limited quantity of woollen, linen, and hardware. Thousands of laborers annually cross from Zante to the Morea, to assist in getting in the harvest, and are paid for their service in corn, which they bring back, and keep as a family stock.

The constitution alluded to vests the legislative power of this republic in a senate of twenty-nine representatives, named as follows:—

	Population.	Representatives.
Corfu . . .	60,000	7
Cephalonia . .	60,000	8
Zante . . .	40,000	7
Santa Maura . .	20,000	4
Cerigo . . .	10,000	1
Ithaca . . .	8,000	1
Paxo, (a very small island) . .	8,000	1
	206,000	29

No person can be a member of this body, or hold a public office of any consequence, without belonging to the class of gentry. Many British settlers have of late resorted hither; particularly to Zante.

IONIANS, in ancient history, a celebrated colony of Greeks, who settled in Asia Minor. They were originally descended from the Hellenes, and inhabited at first the upper part of Attica. Upon the death of Codrus the monarchical government was abolished in Athens, and succeeded by the administration of Archons. Neleus and Androclus; the younger sons of Codrus, being dissatisfied with this arrangement, collected a number of friends, and, complaining that Attica was too narrow for the increasing number of its inhabitants, set sail for the Asiatic coast. Here they attacked and drove out the ancient inhabitants, and by degrees spread themselves over the central and most beautiful parts of the coast from the promontory of Posideion to the banks of the Hermus. They afterwards obtained possession of Chios and Samos, and all these countries were united under the common name of Ionia, as the Ionians were the most numerous of the emigrants. Thus they established themselves in a beautiful and fertile country, enjoying the most delicious climate, and peculiarly adapted to a commercial intercourse with the most civilised nations of antiquity. Thus favored, they silently flourished in peace and prosperity, till their growing numbers and wealth excited the avarice and jealousy of the powers of Asia.

In process of time, possessing the delightful country above-mentioned, together with the mouths of great rivers, having before them convenient and capacious harbours, and behind wealthy and populous nations, whose commerce they enjoyed and engrossed, they attained such early and rapid proficiency in the arts of navigation and traffic, as raised the cities of Miletus, Colophon, and Phocæa, to an extraordinary pitch of opulence and grandeur. Having obtained footing in Egypt, about 850 B.C., they acquired, and henceforth preserved, the exclusive commerce of that ancient and powerful kingdom. Their territories, though in their greatest breadth compressed between the sea and the dominions of Lydia to the extent of scarcely forty miles, became not only flourishing in peace, but formidable in war. Thus they remained in the full enjoyment of their liberties from the time of their migration till the reign of Crœsus, king of Lydia, to whom they were compelled to submit after having baffled all the attempts of his predecessors to subdue them for upwards of 500 years. Before Cyrus invaded Lower Asia, he earnestly intreated the Ionians to share the glory of his arms; but, having lived at ease under the mild government of Crœsus, they preferred their allegiance to him to the friendship of an unknown master. Accordingly they opposed him when he first invaded Lydia. But they were finally subdued by his lieutenant, Harpagus. In the reign of Darius Hystaspis they made an attempt to recover their ancient liberty, and maintained a war against the whole power of the Persian monarchy for six years: but they were compelled to submit, and punished with great severity. The Ionians assisted Xerxes in his expedition against Athens with 100 ships; but they were persuaded by Themistocles to abandon the Persians, and their flight contributed not a little to the famous victory gained by the Athenians at Salamis. A similar expedient was recurred to at Mycale, so that few Persians escaped slaughter. On the conclusion of the peace between the Greeks and Persians, which happened in the reign of Artaxerxes, one of the articles sworn to by both parties was, that all the Greek states of Asia should be made free, and allowed to live according to their own laws. The Ionians, thus delivered from the Persian yoke, formed an alliance with the Athenians; but were treated by them rather like subjects than allies. Their fortune was various; at one time subject to the Persians, and at another time revolting from them, till they were at length delivered by Alexander, who restored all the Greeks in Asia to the enjoyment of their ancient rights and privileges. After the death of Alexander, they fell under the power of the king of Syria, till the Romans obliged Antiochus III., surnamed the Great, to grant the same liberty to the Greek colonies in Asia, which they had procured for the Greek states in Europe. On this occasion most of the free cities entered into an alliance with Rome, till they were again brought into subjection by Mithridates, king of Pontus; by whose orders they massacred, without distinction, all the Romans and Italians whom trade, or the salubrity of the climate, had drawn into Asia. Upon Sylla's arrival in Asia they abandoned Mithridates, and declared for the Romans. Sylla, having routed the armies of Mithridates, revenged on the Asiatics the death of the Romans, by depriving them of their liberty, and laying such heavy taxes and fines on their cities as reduced them to beggary. This was a most fatal blow to Asia; nor did the inhabitants ever after recover their ancient splendor, notwithstanding the favor shown them by many of the emperors, under whose protection they enjoyed some show of liberty. See GREECE.

The IONIC SECT was the first of the ancient sects of philosophers; the others were the Italic and Eleatic. The founder of this sect was Thales, who, being a native of Miletus in Ionia, occasioned his followers to assume the appellation of Ionic: Thales was succeeded by Anaximander, and he by Anaximenes, both natives of Miletus; Anaxagoras Clazomenius succeeded them, and removed his school from Asia to Athens, where Socrates was his scholar. It was the distinguishing tenet of this sect, that water was the principle of all natural things.

IONIUM MARE, a part of the Mediterranean Sea, at the bottom of the Adriatic. It lies between Sicily and Greece. That part of the Ægean Sea which lies on the coasts of Ionia in Asia, is called the Sea of Ionia, and not the Ionian Sea. According to some authors, the Ionian Sea receives its name from Io, who swam across it, after her metamorphosis. See Io.

JONK, or JONQUE, in naval affairs, a kind of small ship, very common in the East Indies.

These vessels are about the size of our fly-boats; and differ in form of their building, according to the different methods of naval architecture used by the nations to which they belong. Their sails are frequently made of mats, and their anchors are made of wood.

JONQUILLE', *n. s.* Fr. *jonquille*. A species of daffodil. The flowers of this plant are greatly esteemed for their strong sweet scent.

> Nor gradual bloom is wanting,
> Nor hyacinths of purest virgin white,
> Low bent, and blushing inward; nor *jonquilles*
> Of potent fragrance. *Thomson's Spring.*
>
> Is such a life, so tediously the same,
> So void of all utility or aim,
> That poor *Jonquil*, with almost every breath
> Sighs for his exit, vulgarly called death.
> *Cowper. Hope.*

JONQUILLE. See NARCISSUS.

JONSAC, a town of France, in the department of the Lower Charente, nine miles S. S. E. of Pons, and thirteen miles and one-third N. N. W. of Montlieu.

JONSIUS (John), a learned author of the seventeenth century, born at Holstein, and educated at Frankfort on the Maine, where he died young in 1659. He wrote a work, entitled De Scriptoribus Historiæ Philosophiæ, which is esteemed.

JONSON (Ben), one of the most considerable dramatic poets of the seventeenth century, was born in Westminster in 1574, and educated at the public school under the great Camden. He was descended from a Scottish family; and his father, whose estate was confiscated by the regent Murray, dying before he was born, and his mother marrying a bricklayer, Ben was taken from school to work at his step-father's trade. Not being fond of this employment, he went into the Low Countries, and distinguished himself in a military capacity. On his return to England, he entered at St. John's College, Cambridge; and, having killed a person in a duel, was condemned, and narrowly escaped execution. After this he turned actor; and Shakspeare is said to have first introduced him to the world, by recommending a play of his to the stage, after it had been rejected. His Alchymist gained him such reputation, that in 1619 he was, at the death of Mr. Daniel, made poet laureat to king James I. and M. A. of Oxford. But, being no economist, we find him after this petitioning king Charles I., on his accession, to enlarge his father's allowance of 100 merks into pounds. He died in August 1637, aged sixty-three, and was buried in Westminster Abbey; and on his grave stone is inscribed 'O rare Ben Jonson.' The most complete edition of his works was printed in 1756, in 7 vols. 8vo.

JOPPA, a sea-port town of Palestine, lying south of Cesarea; and anciently the only port to Jerusalem, whence all the materials sent from Tyre towards the building of Solomon's temple were brought hither and landed. 2 Chr. ii. 16. It is said to have been built by Japhet, and from him to have taken its name Japho, afterwards moulded into Joppa; and even the heathen geographers speak of it as built before the flood. It is now called Jaffa, somewhat nearer to its first appellation. See JAFFA

JORDAN (Camille), a modern French statesman, was born at Lyons in 1771; and, becoming a member of the convention, defended his native city when it was denounced as a focus of counter-revolution. This effort of his zeal obliged him to retire to Switzerland, and afterwards to England. Returning to France, he was, in March 1797, elected by the department of the Rhone to the council of Five Hundred: but the change of the 8th of Fructidor rendered him again an exile, when he retired to Weimar. On Buonaparte succeeding to the power of the directory, Jordan returned home, and in 1802 published a tract, entitled Vrai sens du Vote National sur le Consulat à vie. Under the empire of Napoleon he remained a private citizen. But in 1814 he received from the Bourbons letters of nobility, and was decorated with the order of the legion of honor. He died at Paris, May 19th, 1821. Besides many political pieces, he was the author of various biographical eulogies.

JORDAN, ירדן, Heb. i. e. the river of judgment, or, as others translate it, the river of Dan, a river of Judæa, so named from the people where it has its source, which is a lake called Phiala, from its round figure, to the north of its apparent rising from the mountain Panium or Paneum, as was discovered by Philip, tetrarch of Trachonitis; for, on throwing light bodies into the Phiala, he found them emerge again at Paneum. Josephus. From Paneum it runs in a direct course to a lake called Samachonites; as far as which it is called Jordan the Less; and thence to the Lake of Gennesareth, or of Tiberias, where it comes increased by the lake Samachonites and its springs, and is called the Greater Jordan; continuing its direct course southwards, till it falls into the Asphaltites, or Dead Sea. Near Jericho the Jordan is found deep, and rapid, wider than the Tiber at Rome, and nearly equal to the Thames at Windsor. The banks are steep, and about fifteen feet high. The soil around is deeply impregnated with salt, and covered with efflorescenses of that mineral.

JORDANO (Luca), or LUKE GIORDANO, an eminent Italian painter, born at Naples in 1632. He became very early a disciple of Joseph Ribera; but, going afterwards to Rome, he adopted the manner of Pietro de Cortona, whom he assisted in his larger works. Some of his pictures being seen by Charles II., king of Spain, he engaged him in painting the Escurial. The king showed him a picture of Bassani, expressing a concern that he had not a companion for it: Luca painted one so exactly in Bassani's manner, that it was taken for a performance of that master. For this service he was knighted, and rewarded with several honorable employments. The great works he executed in Spain gave him still greater reputation, when he returned to Naples; so that, though he was a very quick workman, he could not supply the eager demands of the citizens. No one ever painted so much as Jordano; and he often presented altar-pieces to churches that were not able to purchase them. He died in 1705, and left a large fortune to his family.

JORDANS (James), one of the most eminent painters of the Flemish school, was born at Antwerp in 1593. He learned the principles of his art from Adam Van Ort, whose daughter he married; which connexion hindered him from visiting Italy. He improved most under Rubens; for whom he worked, and from whom he learned his best principles: his taste directed him to large pieces; and his manner was strong and true. A great number of altar-pieces painted by him are preserved in the churches in the Netherlands, which maintain the reputation of this artist. He died in 1678.

JORDEN, *n. s.* Sax. ȝoꞃ, *stercus*, and ben, *receptaculum*. A pot.

They will allow us ne'er a *jorden*, and then we leak in your chimney; and your chamberlye breeds fleas like a loach. *Shakspeare.*

This China *jorden* let the chief o'ercome
Replenish, not ingloriously at home.
Pope's Dunciad.

The copper pot can boil milk, heat porridge, hold small beer, or, in case of necessity, serve for a *jorden*. *Swift.*

JORTIN (John), D. D., a learned English clergyman, born in the parish of St. Giles, Middlesex, October 23d, 1698. His father Renatus Jortin was a native of Bretagne, and came to England in 1685, upon the revocation of the edict of Nantes. He was gentleman of the bedchamber to king William III. in 1691, and afterwards secretary to admiral Russel, Sir G. Rooke, and Sir Cloudesley Shovel; but was shipwrecked with the latter, October 22d, 1707. Young Jortin completed his education at Cambridge; and assisted Pope in his translation of the Iliad, in his eighteenth year. In 1738 lord Winchester gave him the living of Eastwell in Kent; but, the place not agreeing with his health, he soon resigned it. Archbishop Herring, about 1751, presented him to the rectory of St. Dunstan's in the east; and bishop Osbaldiston in 1762 gave him that of Kensington, with a prebend in St. Paul's cathedral, and made him archdeacon of London. His temper, as well as his aspect, was rather morose and saturnine. His sermons were sensible and argumentative: but he appeared to greater advantage as a writer. His Remarks on Ecclesiastical History, his Six Dissertations, his Life of Erasmus, and his Sermons, were extremely well received by the public, and have undergone several editions. He died in 1770.

JOSEPH, יוסף, Heb. i. e. increase, the eldest son of Jacob by Rachel. The very affecting narrative of his life, of his father's partiality for him, his brethren's envy, his prophetic dreams, his faithful services when sold as a slave, his extraordinary chastity, his unjust imprisonment, his promotion to be prime minister of Egypt, and his preservation of the people, as well as of his father's family, from famine, are recorded in Gen. xxxvii—xlvii.

Joseph II., a modern emperor of Germany, was the son of Francis of Lorraine, and Maria Theresa: he was born at Vienna in March 1741, and brought up by his mother with great religious strictness. At the early age of nineteen he was married to an accomplished princess, Isabella of Parma. Though chosen emperor on the death of his father, in 1765, he possessed but little real power: his mother reigned in her own right, queen of Hungary and Bohemia, and sovereign of Austria and the Low Countries. The young emperor was however distinguished by the simplicity and urbanity of his manners, and his ardent desire of information. In 1769 he made the tour of Italy, and on his return paid a visit to the king of Prussia, the consequence of which appeared in the partition of Poland between Austria, Russia, and Prussia in 1772.

In 1777 he was involved in a war with Saxony and Prussia, in consequence of his claims upon Bavaria; but in these hostilities nothing decisive took place in the field, and they terminated under the mediation of France and Russia. In 1780 he had an interview with the empress Catharine in Lithuania, and accompanied her to St. Petersburgh. In the same year the death of his mother left him at liberty to pursue his ecclesiastical and other reforms with less opposition. Some strong edicts followed, regulating the intercourse with the court of Rome, and one granting full toleration to the Protestants, and the privilege of subjects to the Jews. He also sold the church lands for the benefit of the clergy. In 1781 he travelled into Holland and the Netherlands, and resumed a former project respecting the line of fortresses, called the Dutch barrier. On his return to Vienna he still more decidedly attacked the power of the church. He disclaimed all subordination in secular affairs to the Roman see, suppressed numerous religious houses, and induced Pius VI. to seek by a visit to Vienna to avert for a while various other similar changes. But although the pontiff was treated respectfully, he could produce little alteration in the emperor's plans. In 1784 he claimed of the united provinces the town of Maestricht, and a free navigation of the Scheldt. Sending in October in that year a vessel from Antwerp, with orders to refuse being searched by the Dutch guardships, the interference of France alone prevented a war. The Dutch, however, were obliged to send a deputation to apologise for firing on his vessel. A new code of laws now engaged his attention. It abolished the indiscriminate forfeiture of life, but substituted some punishments which were even more appalling, and upon the whole exhibited little legislative ability. In 1787 he had a violent contest with his subjects in the Low Countries, owing to his determination to introduce the same reforms of an ecclesiastical kind as he had enforced in the rest of his dominions. It resulted in an open revolt. At the close of his life he engaged in a war with Turkey, at the instigation of Catharine, and obtained several considerable successes; but his death-bed was disturbed with the remonstrances of his subjects against his rash innovations. He died in 1790, and was succeeded by his brother Leopold. See Germany.

Joseph's Bay (St.), a bay of West Florida, of the figure of a horse-shoe, being about twelve miles in length, and seven across where broadest. The bar is narrow; and immediately within is from four to six fathoms and a half soft ground.

The best anchorage is within the peninsula, opposite to some ruins that remain of the village of St. Joseph. The peninsula opposite St. Joseph's is very narrow.

JOSEPHINE Rose Tachier, the late wife of Napoleon Buonaparte, and empress of France, was born at Martinique, June 24th, 1763. Her maiden name was Rose Tachier de la Pagené. Being brought to France early in life by her father, and distinguished for her beauty, she was married in that country to M. de Beauharnois, governor of the Antilles. About the year 1787 she returned to Martinique on a visit to her mother, and remained with her three years, when the revolutionary events of that colony induced her to take refuge in France. She was now imprisoned with her husband by Robespierre, to whose tyranny M. Beauharnois fell a victim: M. Tallien procured the liberty of Josephine, a benefit she afterwards acknowledged by allowing him a pension. Barras, afterwards a director, procured her the restoration of her husband's property. Soon after she became acquainted with Buonaparte, to whom she was married in 1796. He was then placed in command of the army of Italy, whither she accompanied him. On his embarking for Egypt, she retired to Malmaison, and employed her leisure in forming a museum, and commencing a collection of plants. When he obtained the station of first consul, she exerted her great influence, it is said, in behalf of many exiles, and was universally regarded as the friend of the distressed. Buonaparte said to her at this period:—'Si je gagne les batailles, c'est vous qui gagnes les cœurs.' When he assumed the imperial title and authority, a divorce was proposed by some of his partizans, on the same plea of their want of issue, which afterwards prevailed with him. But he then rejected this counsel, and Josephine was crowned empress at Paris, and queen of Italy. Her son was subsequently married to the princess of Bavaria; and her daughter Hortensia to Lewis Buonaparte, king of Holland. At length she was destined to descend from her exalted station, to make way for the adulterous marriage of her husband with the princess Maria Louisa of Austria. Malmaison now became her principal residence, and here she amused her leisure with botanical studies, retaining, it is said, a strong affection for Napoleon, and receiving marked attentions from the emperor Alexander and the king of Prussia, when they entered France: but she was at this period laboring under her last illness, and died much respected 29th May, 1814.

Sir Walter Scott speaks of her influence over Napoleon as very important to his interests on various occasions. It is remarkable that among the just awards of Providence, on the later life of this unprincipled adventurer, he was as harshly separated from her who had then become his lawful wife, as he had formerly separated himself from this amiable woman.

JOSEPHUS, the celebrated historian of the Jews, was of noble birth; his father Mattathias being descended from the high priests, and his mother of the blood royal of the Maccabees. He was born A. D. 37, under Caligula, and lived under Domitian. At sixteen years of age he joined the sect of the Essenes, and then the Pharisees; and having been successful in a journey to Rome, upon his return to Judea was made captain-general of the Galileans. Being taken prisoner by Vespasian, he foretold his coming to the empire, and, his own deliverance by his means. He accompanied Titus at the siege of Jerusalem, and wrote his Wars of the Jews, which Titus ordered to be put in the public library. He afterwards lived at Rome, where he enjoyed the privileges of a Roman citizen, and where the emperors loaded him with favors, and granted him large pensions. Besides the above work, he wrote, 1. Twenty books of Jewish Antiquities, which he finished under Domitian. 2. Two books against Appian. 3. A Discourse on the Martyrdom of the Maccabees. 4. His own Life. These works are written in Greek.

JOSHUA, Heb. יהושע, i. e. a Saviour, the renowned general of the Jews, who conducted them through the wilderness, &c., died in 1443, B.C., aged 110.

Joshua, a canonical book of the Old Testament, containing a history of the wars and transactions of the person whose name it bears. This book may be divided into three parts: the first is a history of the conquest of the land of Canaan; the second, which begins at the twelfth chapter, is a description of that country, and the division of it among the tribes; and the third, comprised in the last two chapters, contains the renewal of the covenant he caused the Israelites to make, and the death of their victorious leader and governor. The whole comprehends a term of seventeen, or, according to others, of twenty-seven years.

JOSTLE, *v. a.* Fr. *jouster*. To rush against. See Jolt.

JOT, *n. s.* Gr. *ιωτα*. A point; a tittle; the least quantity assignable.

> As superfluous flesh did rot
> Amendment ready still at hand did wait,
> To pluck it out with pincers fiery hot,
> That soon in him was left no one corrupt *jot*.
> *Faerie Queene.*

> Go, Eros, send his treasure after, do it;
> Detain no *jot*, I charge thee. *Shakspeare.*
> Let me not stay a *jot* from dinner; go, get it ready.
> *Id.*

> This bond doth give thee here no *jot* of blood;
> The words expressly are a pound of flesh. *Id.*
> This nor hurts him nor profits you a *jot*;
> Forbear it therefore; give your cause to Heaven.
> *Id.*

> I argue not
> Against Heaven's hand, or will; nor bate one *jot*
> Of heart or hope; but still bear up and steer
> Right onwards. *Milton.*

You might, with every *jot* as much justice, hang me up because I'm old, as beat me because I'm impotent. *L'Estrange.*

The final event will not be one *jot* less the consequence of our own choice and actions, for God's having from all eternity foreseen and determined what that event shall be. *Rogers.*

JOTAPATA, in ancient geography, a town of the Lower Galilee, distant forty stadia from Ga-

JOSEPHUS.

ADRIAN JUNIUS.

PAUL JOVIUS.

KAUFFMAN.

A. JUSSIEU.

B. JONSON.

JUXON.

JOUVENET.

ISOCRATES.

bara: a very strong place, situated on a rock, walled round, and encompassed on all hands with mountains, so as not to be seen but by those who come very near. It was with great difficulty taken by Vespasian, being defended by Josephus, who commanded in it; when taken it was ordered to be razed.

JOUBERT (Lawrence), counsellor and physician to the king of France, chancellor and judge of the university of Montpelier, was born at Valance in Dauphiny, in 1530. He became the disciple of Rondelet at Montpelier; and at his death succeeded to the regius professorship of that university, where he had given abundant proofs of his merit, and strengthened his reputation by the lectures he read in that capacity, as well as by the works he published. Henry III., who passionately wished to have children, sent for him to Paris, in hopes, by his assistance, to render his marriage fruitful; when much offence was taken at an indelicate piece he published, under the title of Vulgar Errors. He died in 1582; and his son Isaac translated some of his Latin paradoxes into French.

JOUBERT (Bartholomew Catherine), a French revolutionary general, was a native of Pont-de-Vaux, in Bresse, and born in 1769. He was destined for the bar, but at the age of fifteen forsook his studies, and entered a regiment of artillery. His discharge being obtained by his friends, he was sent to Lyons to continue his education, and at the beginning of the Revolution he was a student at Dijon. He enlisted in December, 1791, as a volunteer, and served as a serjeant in the army of the Rhine. In April, 1792, he was made a sub-lieutenant, and displayed great courage and activity in the campaign against the Austrians and Sardinians. In September, 1793, Joubert was taken prisoner by the latter; and, on his return home, distinguished himself by opposing the Jacobins, who were tyrannising in the neighbourhood of his native place. In 1795, at the battle of Loano, under Kellerman, he was made general of brigade on the field of battle. In 1796 he attracted notice at Montenotte, as well as at Millesimo, Cava, Montebaldo, Rivoli, and above all in the Tyrol, where, though opposed by a warlike people, he succeeded in penetrating Inspruck, and was afterwards opposed to the Russian general Suwarrow. Joubert was killed at the battle of Novi, 1799.

JOUDPORE, or MARWAR, a city and principality of Hindostan, in the province of Ajmeer. The territories of Joudpore are intermixed with those of Odeypore and Jyepore, and are said to touch the Indus on the west, and the province of Gujerat on the south. The southern and eastern parts yield sugar, cotton, and all the grains of India. The western portion is chiefly desert or pasture lands. But here is a hardy race of camels, horses, and cattle. The cultivators of the soil are Jauts, and the rest of the inhabitants of the tribe of Rajpoots. The rajahs of Odeypore, Jyepore, and Joudpore, were formerly of great consequence. The capital is situated on a hill, and is chiefly built of stone. It carries on a good trade with Guzerat and the Deccan. The rajah of this province is an ally of the British.

JO'VIAL, *adj.*
JO'VIALLY, *adv.*
JO'VIALNESS, *n. s.*
JOY, *n. s.*, *v. n.* & *v. a.*
JOY'ANCE, *n. s.*
JOY'FUL, *adj.*
JOY'FULLY, *adv.*
JOY'FULNESS, *n. s.*
JOY'LESS, *adj.*
JOY'OUS, *adj.*

Fr. *jovial*, *joye*; Lat. *jovialis*; Italian *giogia*. Under the influence of Jupiter; gay; airy; merry: mirth and pleasantry; happiness; felicity. Joy, to rejoice; to congratulate, gladden, or exhilarate; to enjoy; to have possession. Joyance, gaiety. Joyful, full of joy. Joyless, void of joy; feeling no pleasure; giving no pleasure. Joyous, blithesome; cheerful; light of heart.

Long thus *I ioyed* in my happinesse
And well did hope my *ioy* would have no end.
Spenser. Daphnaida.

Bring home with you the glory of her gain;
With *joyance* bring her, and with jollity. *Spenser.*

My lord Bassanio, and my gentle lady,
I wish you all the *joy* that you can wish.
Shakspeare.

Let us hence,
And let her *joy* her raven-coloured love.
Id. Titus Andronicus.

My lord, sleek o'er your rugged looks,
Be bright and *jovial* among your guests.
Shakspeare.

I cannot *joy*, until I be resolved
Where our right valiant father is become.
Id. Henry VI.

Some men, of an ill and melancholy nature, incline the company, into which they come, to be sad and ill-disposed; and contrariwise, others of a *jovial* nature dispose the company to be merry and cheerful. *Bacon's Natural History.*

No man imparteth his *joys* to his friend, but he *joyeth* the more; and no man imparteth his griefs, but he grieveth the less. *Id. Essays.*

They laugh, we weep; they *joy* while we lament.
Fairfax.

Their cheerful age with honour youth attends,
Joyed that from pleasure's slavery they are free.
Denham.

I might have lived, and *joyed* immortal bliss,
Yet willingly chose rather death with thee.
Milton

I cannot speak, tears so obstruct my words
And choak me with unutterable *joy*. *Otway.*

The' usurper *joyed* not long
His ill-got crown. *Dryden's Spanish Friar.*

Almeyda smiling came,
Attended with a train of all her race,
Whom in the rage of empire I had murdered;
But now, no longer foes, they gave me *joy*.
Of my new conquest. *Id. Don Sebastian.*

The roofs with *joy* resound;
And hymen, iö hymen, rung around. *Dryden.*

Like us they love or hate, like us they know
To *joy* the friend, or grapple with the foe. *Prior.*

Perhaps the jest that charmed the sprightly crowd,
And made the *jovial* table laugh so loud,
To some false notion owed its poor pretence. *Id.*

And *jovial* youth of lightsome vacant heart,
Whose every day was made of melody
Hears not the voice of mirth. *Blair's Grave.*

Hail to the *joyous* day! with purple clouds
The whole horizon glows. *Thomson.*

Think, ye masters iron-hearted,
Lolling at your *jovial* boards;
Think how many backs have smarted
For the sweets your cane affords.
Cowper. Negro's Complaint.

Away with these vain thoughts, I will be *joyous*—
And here comes *Joy's* true herald.
Byron. Sardanapalus.

I have endured as much in giving life
To those who will succeed them, as they can
In leaving it: but mine were *joyful* pangs.
Id. Two Foscari.

There are, to whom (their taste such pleasures cloy),
No light—thy wisdom yields, thy wit no *joy*.
Peace to their heavy heads, and callous hearts,
Peace—such as sloth, as ignorance imparts.
Canning. New Morality.

JOVIAN, the Roman emperor, was elected by the army, after the death of Julian the apostate, in 363. He at first refused, saying he would not command idolatrous soldiers; but, upon an assurance that they would embrace Christianity, he accepted the throne, and immediately shut all the pagan temples, and forbade their sacrifices. But he did not long enjoy the dignity to which his merit had raised him; being suffocated in his bed by the fumes of a fire that had been made to dry the chamber, in the thirty-third year of his age, and the eighth month of his reign.

JOU'ISANCE, *n. s.* Fr. *rejouissance.* Jollity; merriment; festivity. Obsolete.

Colin, my dear, when shall it please thee sing,
As thou wert wont, songs of some *jouisance?*
Thy muse too long slumbereth in sorrowing,
Lulled asleep through love's misgovernance.
Spenser.

JOVIUS (Paul), or Paulo Govio, a celebrated historian, born at Como in Italy, in 1483. As his father died in his infancy, he was educated by his eldest brother, Benedict Jovius, under whom he became well skilled in classical learning; and then went to Rome for the sake of enjoying the benefit of the Vatican library. He there wrote his first piece, De piscibus Romanis, which he dedicated to Cardinal Lewis of Bourbon. He received a pension of 500 crowns for many years from Francis I. king of France, whose favor he secured by his flattery. But, in the following reign, having disgusted the constable Montmorency, his name was struck out of the list of pensioners. But Jovius had obtained a high reputation by his writings; and having always showed great respect to the house of Medicis, on whose praises he had expatiated in his works, he applied to Clement VII. and obtained the bishopric of Nocera. His principal piece is his history, which is that of his own time throughout the world, beginning with 1494, and extending to 1544. This was the chief business of his life; for he formed the plan of it in 1515, and continued upon it till his death, which happened at Florence in 1552. It is printed in 3 vols. folio.

JOUR'NAL, *adj.* & *n. s.*
JOUR'NALIST, *n. s.*
JOUR'NEY, *n. s.* & *v. n.*
JOUR'NEYMAN, *n. s.*
JOUR'NEYWORK, *n. s.*
} Fr. *journal, journée;* Ital. *giornale;* Span. *jornal, jornada.* Daily: an account of daily transactions; any daily paper: journalist, a writer of journals: journey, the travel of a day; travel by land distinguished from a voyage by sea; passage from place to place; to travel: journeyman, a workman hired by the day: journeywork, work done by the day; hired labor.

We are *journeying* unto the place, of which the Lord said, I will give it you. *Numbers*

And was concluded, that the knight
Departen shuld, the same night;
And forthwith there take his voiage,
To *journey* for his marriage;
And returnen with such an host,
That wedded might be lest and most.
Chaucer. Dreame.

Ere twice the sun has made his *journal* greeting
To the under generation, you shall find
Your safety manifested.
Shakspeare. Measure for Measure.

When Duncan is asleep,
Whereto the rather shall this day's hard *journey*
Soundly invite him. *Id. Macbeth.*

Players have so strutted and bellowed, that I have thought some of Nature's *journeymen* had made men, and not made them well. *Id. Hamlet.*

So are the horses of the enemy,
In general *journal* bated and brought low.
Shakspeare.

I have *journeyed* this morning, and it is now the heat of the day; therefore your lordship's discourses had need content my ears very well, to make them intreat my eyes to keep open. *Bacon.*

Edward kept a most judicious *journal* of all the principal passages of the affairs of his estate.
Hayward on Edward VI.

Since such love's natural station is, may still
My love descend, and *journey* down the hill;
Not panting after growing beauties, so
I shall ebb on with them who homeward go.
Donne.

Scarce the sun
Hath finished half his *journey*. *Milton.*

Did no committee sit, where he
Might cut out *journeywork* for thee?
And set thee a task with subornation,
To stitch up sale and sequestration.
Hudibras.

I intend to work for the court myself, and will have *journeymen* under me to furnish the rest of the nation. *Addison.*

Her family she was forced to hire out at *journeywork* to her neighbours. *Arbuthnot's John Bull.*

Having heated his body by *journeying*, he took cold upon the ground. *Wiseman's Surgery.*

He for the promised *journey* bids prepare
The smooth-haired horses and the rapid car.
Pope.

What a strange moment must it be when near
Thy *journey's* end thou hast the gulph in view!
Blair.

In that tale I find
The furrows of long thought, and dried-up tears,
Which, ebbing, leave a sterile track behind,
O'er which all heavily the *journeying* years
Plot the last sands of life, where not a flower appears.
Byron. Childe Harold.

JOURNAL. See DIARY.

JOURNAL, in merchants' accounts. See BOOK-KEEPING.

JOURNAL, in navigation, a sort of diary, or daily register of the ship's course, winds, and weather, together with a general account of whatever is material to be remarked in the period of a sea voyage. In all sea-journals, the day, or what is called the twenty-four hours, terminates at noon, because the errors of the dead reckoning are at that period generally corrected by a solar observation. The daily account usually contains the state of the weather; the variation, increase, or diminution of the wind;

and the suitable shifting, reducing, or enlarging the quantity of sail extended; as also the most material incidents of the voyage, and the condition of the ship and her crew, together with the discovery of other ships or fleets, land, shoals, breakers, soundings, &c.

JOUST, n. s. & v. a. Fr. *joust*. Tilt; tournament; mock fight: to run in the tilt. It is now written, less properly, just.

Come se the yle and hem disport,
Where should be *joustis* and turnaies,
And armes done in other waies. *Chaucer. Dreame.*

Thus praised the quene, and everichone
And for there should ne be no nay,
They stinten *justing*, all, a day,
To pray my lady, and requere,
To be content and out of fere. *Chaucer.*

And every knight turned his horses hede
To his felow, and lightly laid a spere
Into the rest; and so *justes* began,
On every part abouten, here and there.
Some brake his spere; some threw down horse and man
About tne felde, astray, the stedes ran.
* * * * * * *
And the *justing* alle was left off clene
And fro hire horse the nine alight anon.
Chaucer. The Fleure and the Leafe.

Am I that Endymion, who was wont in court to lead my life, and in *justs*, tourneys, and arms, to exercise my youth? Am I that Endymion?
Lyly. Midas and Endymion.

Bases, and tinsel trappings, gorgeous knights
At *joust* and tournament. *Milton's Paradise Lost.*

JOUVENET (John), a celebrated French painter, born at Rouen in 1644; his father, who was also a painter, educated him for his own profession; but his greatest improvement was derived from the instructions of Nicholas Poussin. He acquired a sufficient knowledge of design to qualify him for employment in several grand works in the palaces at Paris and Trianon; in many of the churches and convents; and in the hospital of invalids, where he painted the twelve apostles, each figure being fourteen feet high. He was esteemed to have a ready invention, to be correct in his designs, and grand in his compositions. Being deprived of the use of his right hand, by a paralytic disorder, he continued to paint with his left. He died in 1717.

JOUX, a valley and lake of Switzerland, in the canton of Vaud, in the Jura chain of the Alps. The valley contains several large villages, and about 3000 inhabitants. The lake is about five miles long, and more than one broad; its greatest depth is about 150 feet.

JOWA, a river of the Missouri, United States, which enters the Mississippi on the right bank. It is 150 yards wide at its mouth, and is navigable for boats nearly 300 miles. Thirty-six miles from its mouth it divides into two branches, of which the right is called the Red Cedar River, from the quantity of that wood on its borders.

JOWLER, n. s. Perhaps corrupted from bowler, as making a hideous noise after the game, whom the rest of the pack follow as their leader. The name of a hunting dog or beagle.

See him drag his feeble legs about,
Like hounds ill-coupled: *jowler* lugs him still
Through hedges, ditches, and through all this ill.
Dryden.

JOWTER, n. s. Perhaps corrupted from jolter.

Plenty of fish is vented to the fish drivers, whom we call *jowters*. *Carew.*

JOYCE (Jeremiah), an ingenious writer on general science. He became first known to the public as a member of the corresponding Society, and as being included in a state prosecution with Hardy, Horne Tooke, Thelwall, &c. He had, formerly, been domestic tutor to the sons of earl Stanhope, who gave a splendid entertainment on the return of Mr. Joyce to his seat at Chevening, in Kent. Not long after, he settled in London and devoted himself to writing for the press. One of his first employments was as coadjutor with Dr. George Gregory, in the compilation of the Cyclopædia, which was published under the name of the latter. The success of this undertaking gave rise to another work on a similar plan, which bore in the title-page the name of Mr. William Nicholson. Mr. Joyce is said to have been the principal writer. He subsequently composed Scientific Dialogues; Dialogues on Chemistry; Letters on Natural Philosophy; &c. Mr. Joyce, was a protestant dissenter, and, we believe, occasionally preached. He died at Highgate, near London, in 1816.

IPECACUAN'HA, n. s. An Indian plant.

Ipecacuanha is a small irregularly contorted root, rough, dense, and firm. One sort is of a dusky greyish colour on the surface, and of a paler grey when broken, brought from Peru: the other sort is a smaller root, resembling the former; but it is of a deep dusky brown on the outside, and white when broken, brought from the Brasils. The grey ought to be preferred, because the brown is apt to operate more roughly. *Hill's Materia Medica.*

IPECACUANHA, in the materia medica, a West Indian root, of which there are principally two kinds, distinguished by their color, and brought from different places; but both possessing the same virtue, though in a different degree. The one is ash-colored or gray, and brought from Peru; the other is brown, and is brought from the Brasils; and these are indifferently sent into Europe under the general name of ipecacuanha. The plant they belong to is a species of Psychotria. The ash-colored ipecacuan is a small wrinkled root, bent and contorted into a great variety of figures, brought over in short pieces full of wrinkles and deep circular fissures, quite down to a small white woody fibre that runs in the middle of each piece: the cortical part is compact, brittle, looks smooth and resinous upon breaking; it has very little smell: the taste is bitterish and subacrid, covering the tongue as it were with a kind of mucilage. The brown sort is small, and somewhat more wrinkled than the foregoing; of a brown or blackish color without, and white within. The first sort, the ash-colored or gray ipecacuan, is that usually preferred for medicinal use. The brown has been sometimes observed, even in a small dose, to produce violent effects. A third sort, called the white, from its color, has also been distinguished. It is woody, has no wrinkles, and no perceptible bitterness in taste. This, though taken in a large dose, has scarcely any effect at all. It is supposed to belong to a species of viola. Mr. Geoffroy

calls this sort bastard ipecacuan, and complains that it is an imposition upon the public. Ipecacuan was first brought into Europe about the middle of the seventeenth century, and an account of it published about the same time by Piso ; but it did not come into general use till about 1686, when Helvetius, under the patronage of Louis XIV., introduced it into practice. This root is one of the mildest and safest emetics with which we are acquainted; and has this peculiar advantage, that, if it should not operate by vomit, it passes off by the other emunctories. It was first introduced with the character of an almost infallible remedy of dysenteries, and other inveterate fluxes, as menorrhagia and leucorrhœa, and also in disorders proceeding from obstructions of long standing. In dysenteries, it almost always produces happy effects, and often performs a cure in a very short space of time. In other fluxes of the belly, or where the patient breathes a tainted air, it has been found equally successful: in these cases it is necessary to continue the use of this medicine for several days; and to join with it opiates, diaphoretics, and the like. This root, given in substance, is as effectual, if not more so, than any of the preparations of it; the pure resin acts as a strong irritating emetic, but it is of little service in dysenteries; while an extract prepared with water is almost of equal service in these cases with the root itself, though it has little effect as an emetic. Hence Geoffroy concludes, that the chief virtue of ipecacuan in dysenteries depends upon its gummy substance, which lining the intestines with a soft mucilage, when their own mucus has been abradded, occasions their exulcerations to heal, and defends them from the acrimony of the juices; and that the resinous part, in which the emetic quality resides, is required, where the morbific matter is lodged in the glands of the stomach and intestines. But if the virtues of this root were entirely owing to its mucilaginous or gummy part, pure gums, or mucilages, might be employed to equal advantage. Water, assisted by a boiling heat, takes up from all vegetables a considerable portion of resinous along with the gummy matter: if the ipecacuan remaining after the action of water be digested with pure spirit, it will not yield half so much resin as at first: so that the aqueous extract differs from the crude root only in degree, being proportionably less resinous, and having less effect, both as an emetic and in the cure of dysenteries. The virtues of ipecacuan, in this disorder, depend upon its promoting perspiration, the freedom of which is of the utmost importance, and an increase of which, even in healthful persons, is generally observed to suppress the evacuation by stool. In dysenteries, the skin is for the most part dry and tense, and perspiration obstructed: the common diaphoretics pass off without effect through the intestinal canal; but ipecacuan brings on a plentiful perspiration. After the removal of the dysentery, it is necessary to continue the use of the medicine for some time longer, to prevent a relapse; for this purpose, a few grains divided into several doses, so as not to occasion any sensible evacuation, may be exhibited every day, whereby the cure is effectually established. And indeed small doses given, even from the beginning, have been often found to have better effects in the cure of this disease than large ones. The only officinal preparation of this root is a tinctu made in wine, which accordingly has now tl appellation of vinum ipecacuanhæ, both in the London and Edinburgh pharmacopœias. Ipecacuan, in the state of powder, is now advantageously employed in almost every disease in which vomiting is indicated; and when combined with opium, under the form of the pulvis sudorificus, it furnishes the most useful and active sweating medicine which we possess. It is also given with advantage in very small doses, so as neither to operate by vomiting, purging, nor sweating. The full dose of the powder is a scruple or half a drachm, and double that in form of watery infusion. The full dose is recommended in the paroxysm of spasmodic asthma, and a dose of three or four grains every morning in habitual asthmatic indisposition. A dose of one-third or half grain rubbed with sugar, and given every four hours or oftener, is recommended in uterine hæmorhagy, cough, pleurisy, hæmoptoë, &c., and has often been found highly serviceable. For a chemical account of the basis of this root see Emetic and Chemistry.

IPHICRATES, general of the Athenians, had that command conferred upon him at twenty years of age, and became famous for the exactness of his military discipline. He made war on the Thracians; and restored Senthes, who was an ally of the Athenians; attacked the Lacedemonians; and, on many other occasions, gave signal proofs of his conduct and courage. Many ingenious repartees have been mentioned of this general: a man of good family, with no other merit than his nobility, reproaching him one day for the meanness of his birth, he replied, 'I shall be the first of my race, and thou the last of thine.' He died A. A. C. 380.

IPHIGENIA, daughter of Agamemnon and Clytemnestra. When the Greeks, going to the Trojan war, were detained by contrary winds at Aulis, they were informed by Calchas, that to appease the gods they must sacrifice Iphigenia, Agamemnon's daughter, to Diana. The father, who had provoked the goddess by killing her favorite stag, heard this with the greatest horror and indignation; and, rather than shed the blood of his daughter, he commanded one of his heralds as chief of the Grecian forces, to order all the assembly to depart each to his respective home. Ulyssus and the other generals interfered, and Agamemnon consented to immolate his daughter for the common cause of Greece. As Iphigenia was tenderly loved by her mother, the Greeks sent for her on pretence of giving her in marriage to Achilles. Clytemnestra gladly permitted her departure, and Iphigenia came to Aulis. Here she saw the bloody preparations for the sacrifice. She implored the forgiveness and protection of her father; but tears and intreaties were unavailing. Calchas took the knife in his hand; and, as he was going to strike the fatal blow, Diana relented, caught away Iphigenia, who suddenly disappeared, and a goat of uncommon size and beauty was found in her place for the sacrifice. This supernatural change ani-

mated the Greeks, the wind suddenly became favorable, and the combined fleet set sail from Aulis.

IPOMŒA, quamoclit, or scarlet convolvulus: a genus of the monogynia order, and pentandria class of plants: natural order twenty-ninth, campanaceæ. COR. funnel-shaped: the stigma round-headed: CAPS. trilocular. There are several species; but the only one cultivated in our garden is the

I. coccinea. It has long, slender, twining stalks, rising upon supports six or seven feet high. The leaves are heart-shaped, pointed, and angulated at the base, and from the sides of the stalk and branches arise many slender footstalks; each supporting several large and beautiful funnel-shaped and scarlet flowers. There is a variety with orange-colored flowers. Both are annuals, rising from seed in spring, flowering in July and August, ripening their seeds in September and October, and totally perishing soon after. They are tender, and must be brought up in a hot-bed till the end of May, or beginning of June, when they may be planted out to adorn the borders, or in pots to move occasionally to any particular place; but, in either case, there must be sticks for them to twine upon.

IPSAMBUL, in antiquities, is the name of a celebrated temple excavated out of the solid rock on the banks of the Nile. The side of the river here is formed of sandstone rock in which this temple is cut. The bank runs in a steep ascent, from the river to the desert, until the sand becomes so high as to be on a level with the summit of the rock.

The sand drifting downwards, towards the river, had entered the temple and completely blocked up its entrance to many feet above the architrave, so as to conceal the greater part of the stupendous figures, of which a very considerable portion is now visible. The sand is now barred out by palm trunks and large stones, but, unless some more effectual defence is provided, there is reason to fear that the curious traveller will not long be gratified with the sight of a superb monument, which till discovered by Salt in 1817 had remained concealed and buried probably for many ages. We owe the removal of the sand, the uncovering of the façade, and the entrance to the temple, to the exertions of Messrs. Belzoni and Beechey, employed for this purpose by the British consul Mr. Salt. The following account of this curious monument of antiquity is given by lieutenant-colonel Stratton, who visited it in 1820. The sand which drifts against the entrance, says colonel Stratton, is so fine as to resemble a fluid.—While we were ascending our footsteps occasioned such a current of it as to give us great reason to apprehend that the entrance would soon again be blocked up.

Commencing at the south end of the façade, there is a sloping projection of thirty feet. At four feet seven inches is the arm of the first colossal figure cut out of, and projecting from, the façade, between which and the figure there is a connecting block of three feet thick. These figures cannot be styled alto relievos; they are in fact statues; they measure twenty-five feet five inches across the shoulders, and four of them occupy the façade, which measures 127 feet. The left shoulder of the first touches the right shoulder of the second, and so on. The rock is brownish and soft, and easily cut by the chisel. The part out of which the statues are formed is whitish, which adds to the effect. They are beautifully cut, and the proportions, notwithstanding their magnitude, and consequent want of models, are so perfectly just, that no feature predominates, and every part appears small, symmetrical, and graceful.

The statue to the north, or right hand of the portal, is visible to the elbow: that immediately to the left, or south of the door, is somewhat mutilated: the statue beyond it is visible to below the shoulder; while the second to the north is buried to nearly the forehead. The statues have the high mitred cap, with the serpent or good genius on the forehead. The nose, mouth, and chin, are of the most delicate proportions. The corners of the mouth, almost approaching a smile, give an expression of mildness, while the other features bear a character of firmness. The neck and shoulders are admirably formed, and the muscles of the chest and abdomen are in the happiest repose. The statues are supposed to be naked to the middle, where we perceive a handsome ceinture in zigzag lines, and a dress beneath, striped perpendicularly.

Over the architrave of the portal, is an alto relievo of Osiris Hierax, placed in a niche, and measuring twenty-three feet two inches. He holds in both hands the sacred tor, or crux ansata, and has a crown on his head: under his left hand is a female figure in alto relievo, measuring five feet one inch; and under the right a staff, with a fox's head at the top. The deception, arising from the correctness of the proportions, is such, that these figures do not appear one-half of their real height,

Two heroes in sculpture, having the bird with expanded wings over them, present to Osiris, with one hand, a figure resembling a monkey, and hold up the other hand.

On the entablature are sculptured bulls, geese, hawks, grass-hoppers, anubis's, hieroglyphics, &c. &c. On the summit of the cornice are seated figures of monkeys, or possibly of typhons, indifferently executed. The cornice bears sculptures of serpents, surmounted by globes. From the cornice to the architrave, the space measures sixty-five feet: the height of the façade may be 100 feet.

We enter the temple through a small hole made in the sand, under the architrave, part of which has been chipped off to facilitate the entrance, which is much choked up by the sand. The façade, as well as the entrance and interior of the temple, are all cut out of the rock, and the great colossal figures, though projecting so considerably, form a part of the same rock.

The first chamber has eight square pillars resting on pedestals, which do not appear in the plan, but which are merely square projections extending six inches or so beyond the pillars. Each of these pillars has on its front a large colossal statue of the same block with the pillar. These statues, which are about twenty-two feet high, have their arms crossed, holding the crooks

and flagellum: they wear the mitred cap, and are, in all respects, well formed; the pupil of the eye is painted black; and also the eye-brow, which, beyond the natural arch, is extended artificially by a straight line in black. They are naked to the ceinture, which is fastened by a clasp; below it is a close-fitting dress, reaching nearly to the knee, bearing an ornament or pouch in front, not unlike that of the present Highlanders of Scotland. These statues are covered with stucco, painted in rich and variegated colors: their noses are slightly aquiline; the under lip projects a little; the corners of the mouth express a smile; the chin is finely formed; the eye large and full; the eye-brow well arched; and the face very handsome. The expression is serene and benignant, and they resemble much the Jupiter mansuetus of the Romans. The ceiling is painted in blue and red, having a rich border, with large expanded wings.

The paintings on the wall represent the hero in his car: he is in the act of discharging an arrow from his bow; his aim is sure; his mien determined; he wears a helmeted cap; his face and arms are naked; and he has bracelets, armlets, and collar. His dress reaches below his knee: he has a girdle, and the reins are fastened round his body. On the side of the car, which is painted blue, yellow, and red, is a quiver. The horses in the car have their nostrils open. They are rampant, snorting, and covered with rich trappings, and plumes on their heads. They are stallions, with long tails, and their eyes partly covered with blinkers. They have no bits, but are restrained by a nose band. The hero is followed by three comparatively small chariots, each containing two persons, one of whom drives, while the other carries a bow, arrows, and a shield covered with a leopard's skin.

The hero and his people are in the act of storming a fortress, and the artist has seized the moment of surrender. The fortress consists of two stories, From the first we see some of the enemy tumbling headlong; others transfixed with darts; others at the base on their knees, with their bodies bent in supplication. One has a dart sticking under his eye; another is pulling one from his head; and many have their hands raised in token of surrender.

In a second row are placed the old men, as being unfit for the first ranks: their countenances are impressed with grief and despair, and their hands are raised. In the upper story, two men hold out a censer of burning incense, and behind are two females supplicating mercy with extended hands,—but the unerring darts of the hero have already transfixed them

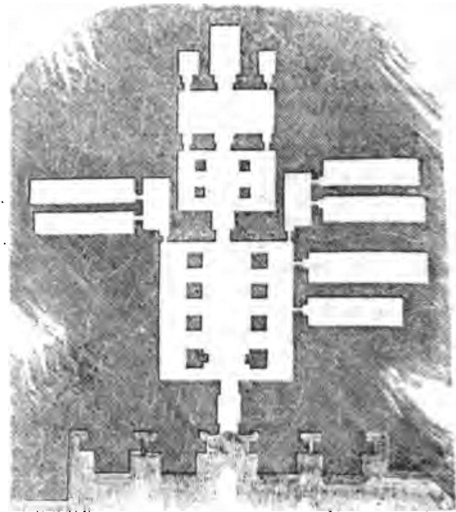
Under the walls is seen a peasant running away, and casting a scared look behind him. He is endeavouring to drive before him five oxen, who, in scampering off, seem, by their tails flying in the air, to participate in the general panic.

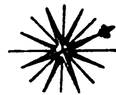
The hero appears transfixing with a spear a prisoner of distinction, trampling others under foot, holding a number by the hair of the head with his left hand, while he prepares to strike off their heads with the right. A mulatto is seen, driving before him a group of prisoners, four of whom are black, four tawny, and four white. The features are characteristic of the different climates, and show that the conquests of the hero had extended over various parts of the globe.

From the different dimensions of the figures, we may infer that the ancient Egyptians expressed strength and power by comparative size. Thus, the hero is immensely colossal, the chief of the enemy is very large, and the person who conducts the prisoners is large, while the prisoners themselves are pygmies.

On another wall, the hero, grateful for his victories, makes offerings to a male deity painted black; and to Isis Lunata he offers incense, in token of his farther gratitude to Osiris Hierax. On the adjoining wall are rejoicings, chariot races, processions, &c. The hero and his people are distinguished from the enemy by the difference of costume, of chariots, of shields, &c. The hero is throughout a portrait, though his dresses are various. Sometimes he has the short warlike dress and helmet, and at other times the long loose robe of ceremony, and high cap.

On another pannel we observed a chariot fight. The horses appear tumbling and confounded with men. Some horses are struck in the chest, others in the head, writhing in pain, —the equi exanimes;—seven chariots on each side, two men and two horses to each. These representations are followed by presentations to Priapus, who is painted black. The hero is ultimately received among the gods, Osiris, Sothis, Isis Lunata, &c., and this apotheosis is represented both in statuary and in painting. Annexed is a ground plan of this noble temple :—





IPSWICH, the capital of the county of Suffolk, in England. Its name comes from the Saxon Gyppewic, being situated where the river Gipping empties itself into the Orwell. It is a

town of considerable antiquity, and was twice plundered by the Danes in 991 and 1000. It had the privilege of a mint in the time of the Saxon heptarchy, and had several charters granted to it, the first by king John, and the last by Charles II. It is celebrated as being the birth place of cardinal Wolsey. It has twelve churches, several meeting houses, a town hall, an excellent market, a hall for county sessions, a free school founded in the time of queen Elizabeth, and several charity schools. It has a market on Wednesdays and Saturdays, and five chartered fairs for cattle, &c. It had formerly a considerable manufactory for baize, which has long since been discontinued. Its chief trade is in corn, which is exported to London, Liverpool, &c., and in foreign timber. It is governed by a high steward, a recorder, two bailiffs, twelve portmen, two coroners, a town clerk, and twenty-four common-council-men; sends two representatives to parliament, and gives the title of viscount to the duke of Grafton.

IQUEIQUY, or IQUIQUE, an island in the Pacific Ocean, near the coast of Peru, about a mile in circumference, situated in a small gulf, which affords shelter for vessels, but no fresh water. It is inhabited by Indians and slaves belonging to the Spaniards, who are employed in collecting a yellow earth, formed by the dung of birds, as manure for vines, and with which eight or ten ships have been loaded annually for a century. S. lat 20° 20′.

IQUISENQUI, one of the islands of Japan, situated near the south-east coast of the island of Ximo. This island is very small. Lat. 32° N., long 132° 40′ E.

IRAK, the most extensive province of Persia, occupying the greater part of the ancient Media, is bounded on the south by Fars and Khuzistan, on the east by Khorassan and the Great Salt desert, on the west by Kurdistan, and on the north by Azerbijan, Ghilan, and Mazanderan. It is chiefly covered with chains of barren mountains, separated from each other by long valleys about ten or twelve miles in breadth. They are generally devoid of any timber, and even the valleys are for the most part uncultivated. The land is, perhaps, in general good, and capable of yielding corn; but want of security of property, and a deficiency of population, have been the causes of the present desolate appearance of these plains. It is divided into five districts, i. e. Ispahan, Tehraun, Naen, Mullager, and Kermanshaw.

IRAS'CIBLE, *adj.*
IRE', *n. s.*
IRE'FUL, *adj.*
IRE'FULLY, *adv.*
I'ROUS, *adj.*

Lat. *ira, irascibilis.* Partaking of the nature of anger: ire, anger itself; rage; passion: ireful, raging; furious: irefully, in a wrathful manner: irous, angry; wrathful. An old word.

I could say of *ire* so mochel sorwe,
My tale shulde lasten til to morwe;
And therfore pray I God both day and night,
An *irous* man God send him litel might.
It is gret harm, and certes gret pitee,
To sette an *irous* man in high degree.
Chaucer. The Sompnoures Tale.

The *ireful* bastard Orleans, that drew blood
From thee, my boy, I soon encountered.
Shakspeare.

By many hands your father was subdued;
But only slaughtered by the *ireful* arm
Of unrelenting Clifford. *Id. Henry VI.*

If I digged up thy forefathers graves,
And hung their rotten coffins up in chains,
I could not slake mine *ire*, nor ease my heart.
Id.

There learned this maid of arms the *ireful* guise.
Fairfax.

The sentence from thy head removed, may light
On me, sole cause to thee of all this woe;
Me! me! only just object of his *ire*. *Milton.*

Or Neptune's *ire*, or Juno's, that so long
Perplexed the Greek and Cytherea's son. *Id.*

Heard you not late, with what loud trumpets' sound,
Her breath awaked her father's sleeping *ire*?
Fletcher. Purple Island.

The *irascible* passions follow the temper of the heart, and the concupiscible distractions on the crasis of the liver. *Browne.*

She liked not his desire;
Fain would be free, but dreaded parents' *ire*.
Sidney.

For this the' avenging power employs his darts,
And empties all his quiver in our hearts:
Thus will persist, relentless in his *ire*,
Till the fair slave be rendered to his sire. *Dryden.*

We are here in the country surrounded with blessings and pleasures, without any occasion of exercising our *irascible* faculties. *Digby to Pope.*

I know more than one instance of *irascible* passions subdued by a vegetable diet. *Arbuthnot on Aliments.*

IRASCIBLE, in the old philosophy, was applied to an appetite of the soul, where anger, and the other passions which animate us against things difficult or odious, were supposed to reside. Of the eleven kinds of passions attributed to the soul, philosophers ascribe five to the irascible appetite, viz. wrath, boldness, fear, hope, and despair; the other six are charged on the concupiscible appetite, viz. pleasure, pain, desire, aversion, love, and hatred. Plato divided the soul into three parts; the reasonable, irascible, and concupiscible parts. The last two, according to that philosopher, are the corporeal and mortal parts of the soul, which give rise to our passions. He fixed the seat of the irascible appetite in the heart, and of the concupiscible in the liver, as the two sources of blood and spirits, which alone affect the mind.

IRBIT, or IRBITSKAIA, a town of Russia, in the government of Perm, on the river Irbit, and the frontiers of Siberia. It contains about 3400 inhabitants, and is noted for a yearly market held in January, the season for travelling on the ice, and frequented not only by Russians and Siberians, but by Tartars, Armenians, and Greeks. This town is consequently an entrepôt for Siberian furs, and other Asiatic merchandise passing into Europe. Near it is a large iron-work, which yields nearly 2000 tons of iron a year. 142 miles north-east of Ekaterinenburg. Long 62° 50′ E., lat. 57° 35′ N.

IRELAND.

IRELAND, the second in magnitude of the British Isles, is situated to the west of Great Britain, in the Atlantic Ocean. It is bounded on the north-west and south by the Atlantic, and on the east by the North Channel, the Irish Sea, and St. George's Channel, which separate it from England. Its greatest length, i. e. from Fair-Head in the north, to Mizen-Head in the south, measures about 300 miles, and its maximum breadth, which is between Carnsore in Wexford, and Emlagh Rash, in Mayo, about 110 miles. The superficial contents are said to amount to 19,436,000 English acres, but this rests solely on the authority of Dr. Beauford, who derived the amount principally from a measurement of the county maps—documents, with few exceptions, lamentably incorrect: of some counties, indeed, no maps whatever have yet been published. Mr. Wakefield's return of the acreable contents of Ireland must be even more inaccurate; for, since he differs from Dr. Beaufford, he must have departed from his mode of forming an estimate, and there was no other except by an actual survey, which it is needless to say he did not execute.

The eastern coast is but little indented with harbours; but the south and west possess many sinuosities, affording numerous basins fit for the reception and safe-accommodation of shipping. The cove of Cork is quite unrivalled as a natural asylum; Bantry Bay, the Killeries, and others on the west, are almost equally safe and sheltered; while Loughs Swilly and Foyle, on the north, though not perfectly free from danger, afford great commercial advantages, and are valuable auxiliaries to extensive inland navigation.

Such are the superficies and general character of the coast of the island, but a more minute detail of the topography and present state of Ireland, will be found at the close of this article, as well as some suggestions for rendering its natural resources available for the amelioration of the present depressed condition of its peasantry.

PART I.

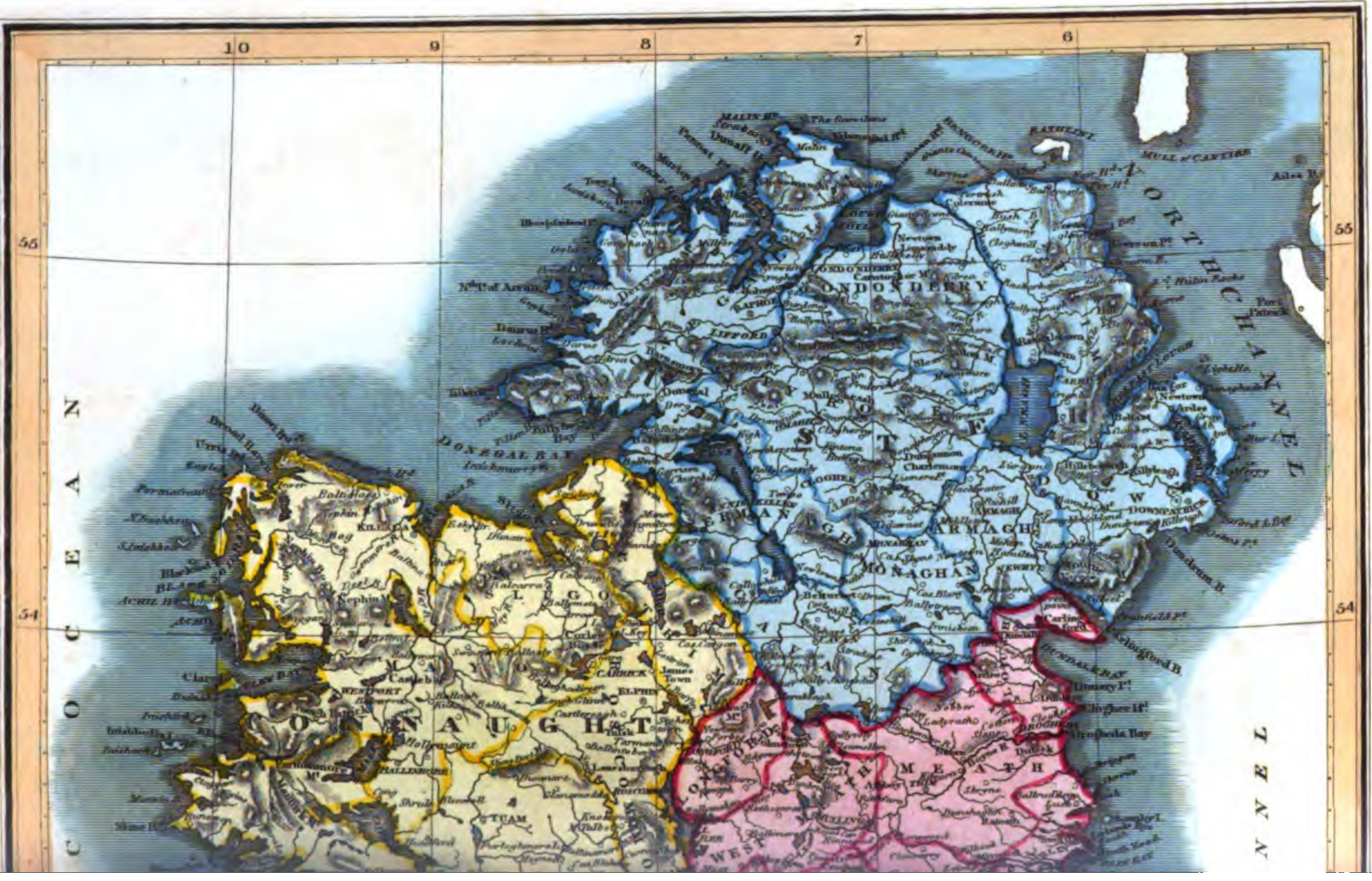
THE HISTORY OF IRELAND.

The history of Ireland may be divided into the four following periods:—the first, or remote part, called the Scythian; the second, or Milesian; the third, or Christian æra; and the fourth, or since the English invasion.

1. *Of the Scythian æra of Irish history.*—The Irish are attached, like other nations, to that dignity which belongs to antiquity: its venerated name for them, appears to possess qualities of a peculiarly attractive character, and it is to this fondness and devotion to the preservation and recovery of their ancient records, that the distrust of foreign historians in Irish chronicles is perhaps attributable. Zeal to restore, and anxiety to obtain belief, have excited a suspicion which the foreigner does not care to take the trouble of removing. The early history of Ireland is not more deeply sunk in uncertainty, or more intimately involved in fable and romance, than other early records. The history of ancient Greece is a tissue of absurdities; the story of ancient Rome consists of a series of agreeable fables—tales suited to the anxiously inquisitive ear o infancy. But these initial fictions do not appear to have cast discredit on the subsequent pages of these histories—the chaff has been separated from the wheat—the dross from the pure metal—by the discernment of the classical writer; and his judgment has been exercised in the appropriation of his belief. This principle is a wise and necessary one—one which must always be admitted when the objects to be described are separated from us, not by centuries of time only but by millenia; when records have become illegible, unintelligible, or obsolete; when they have been carried away by the literary spoliator, or, from the perishable nature of their materials, have yielded to decay. Ireland still boasts the possession of her bardic records, the psalters of her great religious institutions, the traditions of her children, and her perdurable monuments of stone, all which exhibit to the inquiring eye living testimony of her ancient learning, sanctity, and civilisation. These internal evidences are supported and confirmed by the concurrent testimony of accredited historians in all cases where collateral testimony can be expected.

This being admitted, we at least place the ancient Irish history upon as sound and as solid a pedestal, as the historians of other countries have raised for the fabled deities of their early ages; and the following sketch is submitted as an abbreviation of its earlier records.

From Magog, the son of Japhet, the son of Noah (though after an interval of several generations), was sprung Phenius, who became king of one of the Scythias, and was a contemporary of the lawgiver Moses. The sons of Magog are not named by Moses, but Josephus (who acknowledges this fact) calls the Phenicians Magogians, adding, that they styled themselves Scythians. The Spanish authorities place the Irish Scythians between the Caspian and Euxine seas (probably in the ancient Iberia); but, as there were upwards of fifty districts bearing the appellation of Scythia, an attempt at local accuracy, in this instance, would be vain. Sir Walter Raleigh has, satisfactorily enough, pointed out the country of the Magogians, which he places on the northern boundary of the present Phœnicia. So, also, Ezekiel, chap. xxxviii., fully refutes the Spanish antiquarians, as far as relates to the exact position which they have assigned to the Irish Scythians. Josephus, again, seems disposed to establish the Magogians in a country still more northerly, and assures us, that Tyre was actually founded by Tyras, the brother of Magog, in the country since denominated Phœnicia; and that, subsequently, upon the migration, or flight, of the Erythreans, and their reception in this country, it received the name of Phœnicia, which, in the Scythian tongue, is synonymous with Erythrea. Some, however, derive this name from φοινικες, palm trees, with which that province abounded; while others think the origin of the title to have been Phœnix, the brother of



NORTH CHANNEL
OCEAN
CONNAUGHT
LONDONDERRY
MONAGHAN
ARMAGH
DOWN
MEATH
DONEGAL BAY
DUNDALK BAY
Drogheda Bay
MULL of CANTIRE
RATHLIN I.
MALIN Hd
LIFFORD
DOWNPATRICK
NEWRY
ELPHIN
CARRICK
WESTPORT
TUAM
ACHIL Hd
Dundrum B.
Carlingford B.
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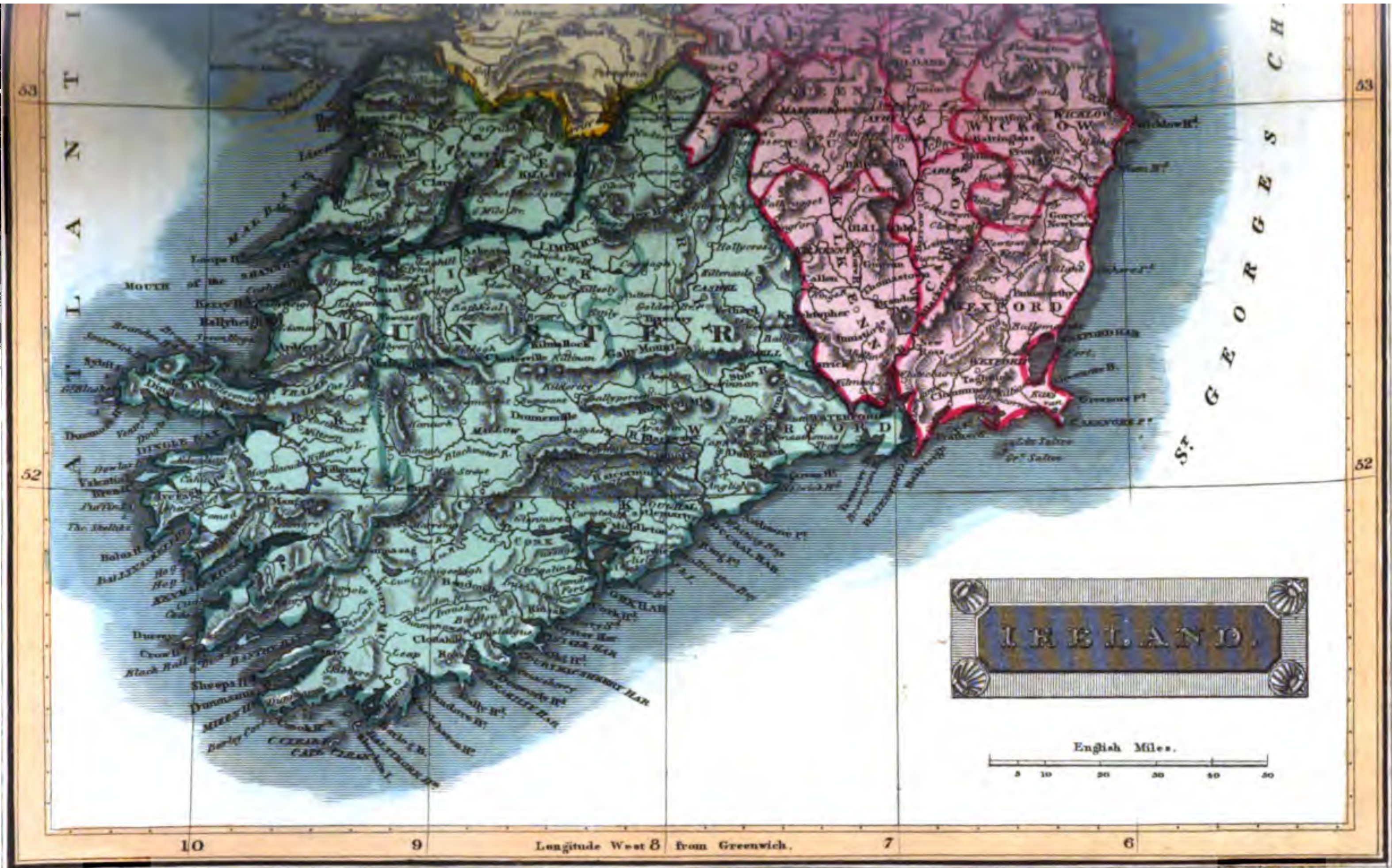
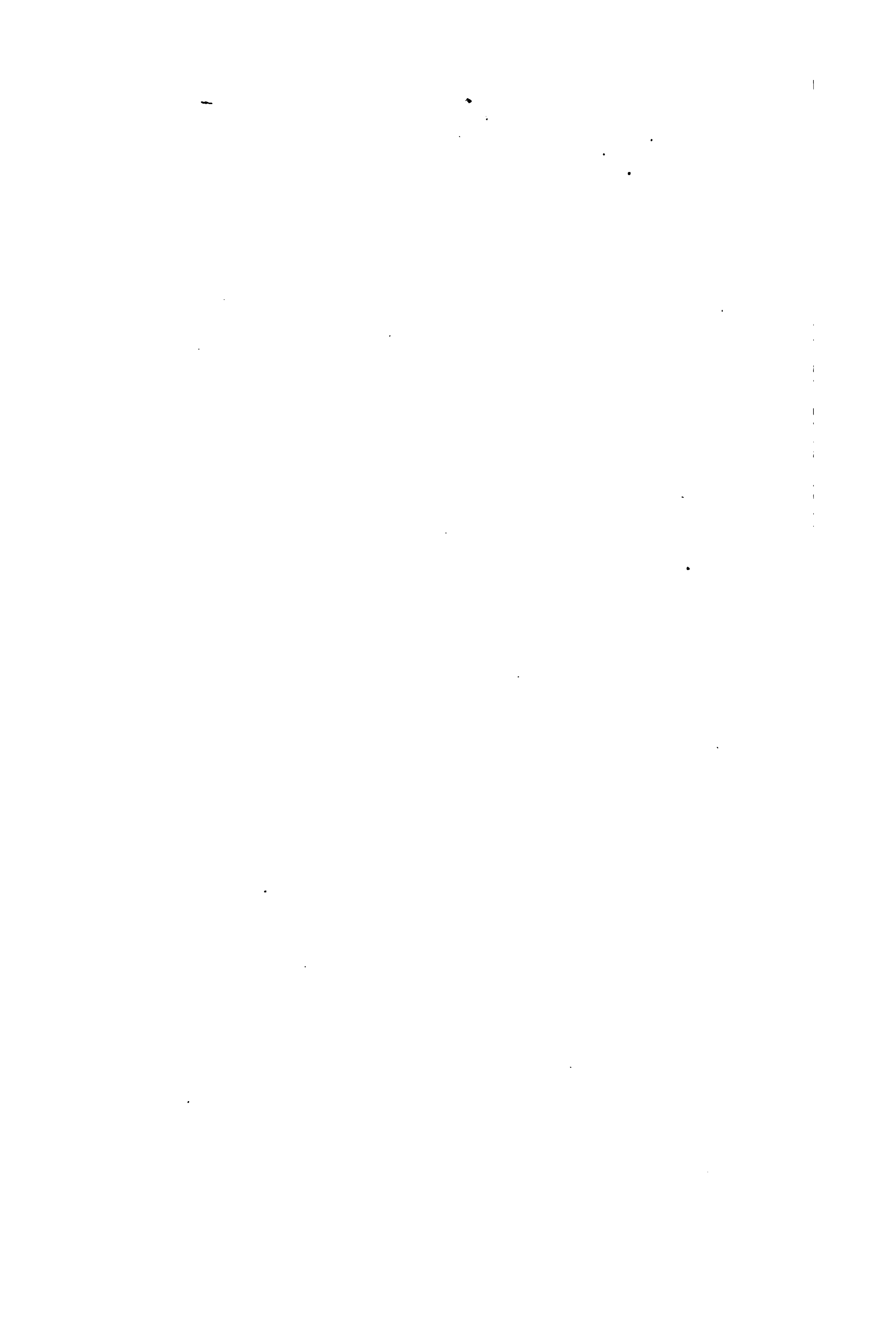


Drawn by J. Aschoton

Engraved on Steel by J. Henry.

London, Published by Thomas Tegg, 73, Cheapside, Sept 1826.



Cadmus, and king of that country. Our theory, which is not contradictory, bestows the honor of the nomination upon Phenius (in all probability identical with Phœnix), the reigning monarch, at the period of the emigration of the ancestors of the ancient Irish. These facts, then, would fix the date of the Phœnician wanderers about two generations antecedent to the age of Moses. Niul is said to have conducted the first colony of emigrants; who, passing over into Egypt, planted his followers on the borders of the Red Sea, where they are known to have dwelt at the time of the crossing of the Israelites. In this statement the Irish records are supported by the concurrent testimony of the rabbi Simon. After no long residence in this position, the Phœnician colonists were expelled by Caperchiroth, the grandson of Pharaoh, upon which they returned to the mother country; but, a spirit of wandering having now possessed them, they resolved upon once more seeking their fortunes, and sailed to Gades, in Spain, where they were permitted to possess themselves of a maritime position. Hence their posterity embarked for Ireland, of which country these emigrants have long enjoyed the merit of being the discoverers.

Now to establish, in some degree, our delineation of this very remote period of history, the following observations may be advanced with tolerable confidence. In the first place there exists the negative argument, viz. that this statement is not contradicted by the authentic or accredited records of other countries: next, the few Phœnician annals, that do exist could hardly be expected to contain matter so remote in time, and so long disconnected with their own history, nothing but a few fragments being preserved, which Josephus, Theophilus, and Sanchoniatho have collected. But, besides this, positive proof exists, that Ireland was not unknown, by name at least, to the ancient Greeks in the works of their earliest writers, Orpheus, Herodotus, and Aristotle, &c. Nor should this very early acquaintance with Ireland on their part excite surprise, when it is recollected that the Greeks had this knowledge from the Phœnicians. These primeval mariners are supposed to have confined their nautical skill, like a secret charm of which they would envy others the possession, to their own countrymen solely: and, passing by Greece and other countries extended their voyages into the great Atlantic, and so reached the island of Ireland.

Here they were induced to plant a colony, being attracted by the rich mines of lead and copper which they discovered and worked. The first who is represented as having brought lead from Ireland was Midicratus, which Bochart, and after him Sir Isaac Newton, thinks should be written Melicartus, the Phœnician Hercules. From him then could Orpheus, and the Grecians, have heard the name of Ireland. It has been said that the first Irish colonists were Carthaginians and not Phœnicians. But, had the former ever visited Ireland, the recollection of its existence would have been preserved, either by history or tradition, by which the Romans would have obtained the knowledge of it: whereas we know that, until the time of Julius Cæsar, the existence of such a country was a circumstance totally unknown to the Romans, although the Greeks, as we have shown, wrote its name 500 years before. It is true the old Irish language is very similar to the Carthaginian, as is plain from the well-known passages in the Himilco of Plautus; but Carthage herself was but a daughter of Phœnicia. Had the Carthaginians colonised Ireland, that colonisation would have been of a date much later than we have shown: it has therefore with much probability been concluded, that the existing reliques of eastern antiquity in Ireland are, though resembling the Carthaginian, wholly and purely of Phœnician origin; for instance the brazen swords, found in the Irish bogs, which are precisely similar to the swords of the Carthaginians found in the field of Cannæ, and now preserved in the British Museum. The letters, language, and customs of the ancient Irish were doubtless Phœnician. The Phœnician letters or characters are found in the ancient Irish MSS. The identity of the languages has been established for us by Plautus; and the Irish Druids used an alphabet, called the 'Boboleth Character, exactly resembling the Phœnician, Egyptian, and Carthaginian letters. The ancient Irish too had a sacred character called Agharn, the existence of which is proved by the stone pillars scattered on the face of the kingdom, bearing inscriptions in that letter, resembling the character now found in the ruins of Persepolis.

To return to our narrative:—The Partholani landed in Ireland A.M. 1956, and after a reign of thirty years left the government to their posterity, who maintained it for 300 years after. To the descendants of the Partholani succeeded the Neimhedians, of the family of the Partholani; a colony from Greece, who landing in Ireland, and suffering great difficulties, most of them were compelled to abandon it again; the remnants of these invaders, however, possessed some authority for upwards of two centuries. These again were succeeded by the Firbolgs, or Bogmen, a sort of Helotes, descended from the expelled Neimhedians, who had returned to Greece. After a reign of about half a century the Bolgian or Fir-bolgian government terminated with the death of Eochaidh, who had been united in marriage to Tailte, a royal princess of Spain. In the tenth year of the reign of the last prince, and A.M. 2541, the tranquillity of the island was disturbed by a new set of adventurers, called Damnonii, or 'Tuatha de Danons.' These intruders were also descended from the race of Neimhedius, and had, like the Fir-bolgs, been enduring a life of much slavery in Greece. These Damnonii expelled the Fir-bolgs (who fled for shelter to the islands of Arran and the Hebrides), and assumed the government in their stead, ruling unmolested for nearly two centuries, when they in turn were driven out by the sons of Milesius, who ruled, as the Chronicles say, with great glory for 2400 years, giving to Ireland 171 princes. The name Tuath-de-danan, appears to be derived from Tuath, a lord: Dee, God: and Dan, a hymn: for these people were divided into three classes, the nobility, the priests or Druids, and the people who chaunted the praises of the Supreme.

These foreigners, who passed some time also in Denmark (whence possibly another reason for their name may be derived), are supposed to have introduced thence Druidism, and some learning into Ireland: they also brought with them the famous Liagh Fail, or stone of destiny, on which all succeeding kings of that race were crowned. Fergus the Great borrowed the Liagh Fail to be crowned on, after his invasion of North Britain; and, being deposited in the abbey of Scone, it continued there until the reign of Edward I., who had it conveyed to Westminster Abbey, where it is now placed beneath the inauguration chair, having its name changed for that of 'Jacob's stone.' Its value appears to rest upon the destiny contained in a very ancient Scythian or Irish verse, the purport of which is, 'that where the Stone of Destiny is preserved, there a prince of the Irish race should govern.' Toland calls this 'the ancientest respected monument in the world.' See our article CORONATION.

2. Ith, a *Milesian* prince, descended from Phenius, whose history has been already given, sailing from Galicia in Spain, landed near Derry, in the north of Ireland. Understanding that the governors of the Damnonians were at variance, he undertook to arbitrate, and mediated satisfactorily and successfully. This introduction afforded him so great an insight into the condition and resources of the kingdom, that the Damnonian prince resolved to cut him off, on his way back to his ship, apprehensive of a second descent, accompanied by a more powerful armament. In this design they had nearly succeeded, Ith not escaping to his vessel until he had received a mortal wound. The treacherous conduct of the Damnonian chiefs, strengthened by the prospect of new conquests, soon raised up a numerous body of avenging warriors, amongst the Milesian kindred of the departed prince, Ith. An expedition was now prepared, of which the sons of Milesius were to be the conductors; of this the chief commanders were Heber, Heremon, and Amerghin.

The first descent was made on the coast of Kerry, by Heber, while Heremon agreed to sail round by the coast of Leinster, and so distract and divide the efforts of the invaded. Having disembarked their forces, Amerghin, one of the sons of Milesius, went in person to the king of the Tuatha-de-Danans, and demanded compensation for the treacherous murder of his kinsman. The result of this negociation was rather singular: the king of the Damnonians complained of dishonorable conduct, on the part of the Milesians, in so sudden and unexpected an invasion, and in presenting a challenge to battle, without allowing him time for preparation. The Milesians, acknowledging the justice of his complaint, are said to have consented to re-embark, and attempt a second landing; which if they should be able to effect, the invasion would be acknowledged equitable, and then the Damnonians would submit or oppose, as seemed to them most advisable. The Milesians withdrew to their ships, and cleared out to sea, once more: but, a violent storm ensuing, many of their galleys suffered shipwreck, and five of the sons of Milesius perished in the calamity.

Ir, from whom the name Ireland is said to be deduced, was cast away on the coast of Desmond, and all his retinue lost. Notwithstanding these dreadful misfortunes, misfortunes consequent upon a chivalrous spirit of honorable warfare, Heber accomplished a second landing at Bantry Bay, and Heremon and his squadron happily secured their disembarkation at Colpa Inbher, now Drogheda, on the coast of Leinster. Having accomplished a safe landing, Heber engaged the Damnonians, in a bloody conflict, at a place called Sliebh-mis, in which he was completely successful, and then, directing his march eastward, united his forces with those of Heremon at Colpa Inbher. The Milesian princes now strengthened in numbers, sent a deputation to Cearmada, to desire the surrender of his territories, or bring the contest to the decision of the sword: the latter alternative was immediately embraced, and the opposing armies met in the plain of Tailten in Meath. The Milesians animated by their recent conquests, anxious for the enjoyment of possessions now almost within their grasp, and encouraged by the presence and example of their courageous princes, rushed eagerly to the onset. The Damnonians, on the other hand, had all those innate causes of excitation in which country, prosperity, domestic happiness, and life itself are involved. Under the influence of such motives, with equal courage, nearly equal numbers, but unequal military skill, these two great armies hurried forward to decide the fate of a great kingdom. An obstinate and death-dealing scene succeeded, for many hours; at length the destiny of Ireland, like that of ancient Rome, hung upon the swords of three royal princes engaged on either side. The Milesians' fortune still attended them, and the three sons of king Cearmada fell by the swords of Heber, Heremon, and Amerghin.

Heber and Heremon, now seated on the throne, gave a race of 171 kings to Ireland. Imitating, or infected by, the example of their founders, they did not long continue to rule in amity. The Milesian kings always held their sceptre with a blood-stained hand, few of their line either dying a natural death, or enjoying a peaceful reign: deposition and assassination mark the progress of their government for nearly 2000 years. But amidst this sanguinary history some peaceful reigns and salutary examples are to be found. The first great man deserving of particular historic notice is Ollam Fodbla, of the race of Ir, a man distinguished by many amiable qualities, above all, by his wisdom and learning. He collected the ancient records of his country, and drew up many wise and necessary laws. The gentle character of his reign resembled that of Numa; and he was considered the Solon of his age. He is said to have introduced armorial bearings on the chieftains' shields, and to have instituted the celebrated triennial meeting of the Irish kings and princes, at Teamor or Tarah, for the establishment of laws, and regulation of government. From the decease of Ollam Fodhla to the accession of Kimbach and Macha, an interval of 260 years, history furnishes little more than a genealogical table of thirty-one kings, most of whom were cut off by violent

deaths, and their thrones usurped by the assassins. Kimbach is acknowledged to have possessed considerable abilities for governing: he revived the laws and regulations of Ollam Fodhla, which had for some time lain dormant, and built a splendid palace in Eamania near Armagh. He died a natural death, and left his queen Macha in peaceable possession of the government. Ireland was then divided into five dynasties, four of which usually conspired to harass and oppose the best efforts of the fifth. Hugony, an immediate successor to Kimbach, who still acted the part of a reformer in morals, to break their coalition, divided the island into twenty-five districts, and bound each by a solemn oath not to accept a governor unless of his own family. Nor were these bonds of sufficient strength; for, not only did Hugony perish by the hand of an assassin, but for ages after his successors, without one exception, were removed by violent deaths. About a century previous to the Christian era, the pentarchal form of government was restored, which was attended by a political revolution of much importance. The Fileas, or Irish Bards, had for ages been the guardians, interpreters, and dispensers of the law. Their honors were considerable, their numbers burdensome, and, from too much indulgence, they became abusers of their trust and power. The result of this abuse was naturally a resistance on the part of the governed, and to such a pitch of violence was the popular opposition urged, that nothing short of the total extermination of the order of Fileas could satisfy the rage of party. In this extremity the order turned their attention to the only power able or disposed to shield them; this was Concovar Mac-Nessa. Nor was their application vain, for he undertook to procure their pardon, upon a solemn pledge from them of future amendment. He caused the wisest and most learned of their body to be assembled, and to them he entrusted the task of compiling a clear and equitable code of laws: these, disencumbered of the studied technicality in which the Fileas had formerly involved the statutes, were hailed with joy by the multitude, and called, in the enthusiasm consequent upon their liberation from the thraldom of Fileasm, the celestial decisions. Again the page of our history is stained with sanguinary deeds of the blackest dye, until the times of Crimthan, the history of whose achievements is another bright spot in the clouded sky. He it was, the terror of whose name defended his country from a Roman invasion; and from him the Picts derived that assistance which enabled them to make many and successful irruptions into the Roman province. Upon the decease of that monarch, the Milesian line of Heremon was suspended, and the ancient Firbolgs, now grown powerful and factious, seized the reins of government, and placed a king, from their own race, upon the Irish throne. This was the occasion of the servile commotion usually called the plebeian or Attacotic war. This usurpation, which was but of short continuance, was interrupted by Tuathal, a prince of Milesian blood, who had gathered some auxiliaries amongst the Picts of North Britain, ancient allies of his family, and returned to vindicate the honor and recover the throne of his ancestors.

Being seated on the throne of his father he restored their institutions, assembled the states at Tarah, where his supremacy was acknowledged; selected Meath for the chief royal appanage; and instituted games, of a character resembling the ancient Olympian. Here the happiness and prosperity of Tuathal's government were interrupted by a circumstance remarkable for its baseness, perfidy, and infamy. The king of Leinster had, some time before, espoused a daughter of the monarch Tuathal; but, conceiving an unlawful passion for her sister, he concealed his queen, and represented himself, at the monarch's court, as a widower and suitor of the surviving princess. This base design he unluckily effected, and returned with his bride to his palace in Leinster, where the two princesses, shortly after, accidentally met each other. The consequence may readily be conceived; grief and treachery broke their hearts. Tuathal, enraged at the perfidy of his son-in-law, invaded Leinster, and stayed his desolating sword, only upon the concession of a grievous tribute, to which the Lagenians were necessitated to submit. This tax, called the Boromæan tribute, was the foundation of all the civil discords and distractions that rent the land, and shook it to its centre for ages after. It was in resisting this oppressive tribute that Conn, of the hundred battles, won all his fame, and lost for a season all his possessions: this great warrior was assassinated by a band of ruffians, habited as females. Cormac Mac Conn, the grandson of Conn of the hundred battles, is celebrated as the most illustrious of all the Pagan kings, both in respect to the splendor of his court and the glory of his arms, for the latter of which he is indebted to his general, the heroic Fian Mac Cumhal, father of Ossian the celebrated Irish bard. The fate of many succeeding monarchs, who are acknowledged to have possessed considerable talents and learning, is of the most deplorable character. Crimthan, who invaded Gaul and Britain, was destroyed by poison: and the brave Nial of the nine hostages, who had with so much spirit supported the Albanian Dalraidans, and carried his victorious arms into Armorica, fell by the hand of an assassin. Dathy, his successor, and the last of the Pagan line, was permitted to enjoy a long and peaceful reign, till at length, embarking in foreign wars, he was killed by lightning at the foot of the Alps.

3. To Nial succeeded Laogary, in whose reign *Christianity* is said to have been established in Ireland by St. Patrick, although it had been introduced there before this time. Palladius appears to have preceded St. Patrick, and to have founded three religious houses in Leinster. But for the latter was reserved the great honor of converting the whole kingdom to the Christian faith. Patrick had been carried from Armorica into Ireland at the age of sixteen years, by king Nial, along with 200 captives, and by this means had an opportunity of obtaining a knowledge of that country, which must have proved, in the highest degree, auxiliary to his subsequent labors there Upon his second visit to Ireland he met with

but little opposition from the Druids, for that wily order of men had been brought into contempt by the philosophic monarch Cormac Mac-Conn, who taught his subjects to despise paganism. St. Patrick converted the king and court at Tarah, founded various bishoprics, was submitted to, and acknowledged primate, by the Romish clergy, and acted, in all respects, as patron and patriarch of his own church, without admitting any interference from the pope. The Irish church continued on this independent ground, consecrating their own bishops, and appointing no arch-bishops, for 700 years, until Eugenius III., A.D. 1511, sent four bulls into Ireland. St. Patrick afterwards visited Rome; and, returning, died on his way to Armagh, and was interred at Downpatrick, in the county of Down.

Laogary, the monarch of Ireland, was continually engaged in wars, endeavouring to res st and obliterate the Boromœan tribute; but he was subjected to many and great vicissitudes, and tarnished his new title of Christian king by the violation of a treaty which he had taken a solemn oath to observe. After an interval of about half a century, Hugh, of the Heremonian line, ascended the throne, and reigned twenty-seven years. This prince had resolved upon redressing many abuses, and, for that purpose, called an assembly at Dromkeat: his first intention was, either to reduce and limit the number of Fileas or Bards, or to banish them totally from the kingdom. But, at the intercession of St. Columb-Kill, the latter part of his purpose was abandoned, and the number of the Fileas reduced. This wise prince fell, like many of his predecessors, in asserting his claim to the Boromœan tribute. About the year 800, in the reign of Hugh the Vth, the Danes, with a great fleet, made descents upon various parts of the Irish coast, whose example was quickly imitated by the Norwegians. Their attempts met much and spirited opposition, until at last Turgesius, a Norwegian prince, with a large fleet, arriving in Ireland, was joined by the different parties of Danes and Norwegians, who had secured themselves on the island, and laid the foundation of many years of slavery and subjection to a savage yoke.

A.D. 833, when Nial reigned, the Normans arrived with two great fleets, one of which entered the river Boyne, and the other the river Liffey. These intruders excited the active jealousy of the Danes, by whom, shortly after, they were completely expelled the kingdom, the Irish continuing passive spectators of their sanguinary conflicts. After twelve years of inactivity the Irish kings began once more to assert their prerogative, while the Danes continued to call Furgesius monarch of Ireland. Many engagements took place between them, and with alternating success. The Danes, however, fortified several towns, kept possession of the sea coast, and destroyed all remnants of civilisation and learning on which they could lay their ferocious and barbarous hands. At this period an accident liberated the Irish for a time from the dominion of their savage invaders. Furgesius having built a palace near to that of Malachy, king of Meath, and paying occasional visits of ceremony to that prince, became violently enamoured of one of the young princesses. Malachy, having observed his growing passion, resolved to convert this accident into an opportunity of liberating his country. The barbarous Dane's proposal to have the princess granted to him, not as a wife, but a mistress, was received by Malachy with all the appearance of an honor conferred, rather than of an indignity offered to him, and a day was appointed when the beautiful young princess, accompanied by fifteen female attendants, was to be delivered up to him and his retinue. Furgesius had prepared his banquet hall, with becoming elegance, to receive the tender charge, and admission was accordingly forbidden to all his household, except to his fifteen companions, who were to be presented to the Irish maids, the attendants of the princess. The party were but just seated at the table, when the Dane perceived the stratagem that had been adopted, but too late, for the supposed maidens rose at a signal, and with the strength of manhood, augmented by a deep-seated spirit of vengeance, plunged their daggers in the hearts of the unhappy Danes. Furgesius was reserved for the more perfect gratification of Malachy's revenge.

A short time only, however, was Ireland freed from this barbarous tribe, both Danes and Norwegians returning again before the death of Malachy; but they never recovered their former strength in that country. About this time, A.D. 900, flourished Coomac Mac Cuillenar, surnamed the Holy, king of Munster, and archbishop of Cashell; who, despite his sacred character, embroiled his country in civil wars, and fell, afterwards, in the field of battle, where a prophecy had warned him not to appear. Nial the IVth was king of Ireland when the Danes recovered their wonted ferocity, and acquired great accession to their strength under the dominion of Sitric, the Danish king of Dublin. This king, possessed of both courage and treachery, contrived to ensnare Callachan, prince of Munster, into his power; and, not being able to induce that proud monarch to resign his chief towns into his hands, detained him captive. This treacherous conduct called the Irish once more into arms against the Danes. The battle of Dundalk, in which the king of Desmond, king Sitric's brother, and Sitric himself, fell; the last of whom Fingal, seizing in his arms, leaped with him into the sea, where they both perished. Callachan was thus restored to his crown; and, though he lived and reigned in troubles and calamities, he descended to his grave full of years and honors.

About the year 950, when Congall II. was monarch of Ireland, Brian Boiromhe, succeeded his brother Mahon in the crown of Munster, reduced the Irish Danes to obedience, and nearly exterminated the Danes themselves. The Irish nobles, reflecting upon the services rendered to Ireland by the exploits of Brian, required Malachy II., who then held the sceptre of Ireland, to resign it to that brave hero. To this proposition Malachy consented, and Brian Boiromhe was proclaimed sovereign, and crowned

at Tarah, amidst the acclamations of the Irish nation. Once more we find the Danes infesting the coast of Ireland, being invited thither by a traitorous and dastardly prince; but, the battle of Clontarf, in which fell the Danish king, and Mortough the Irish general and son of Brian, and where Brian himself lost his life, finally terminated the power of the Danes in Ireland. Upon the death of Brian, Donagh, his son, returned with his brave band into Munster, and Malachy II., the deposed monarch, resumed the reins of government. Civil broils, which for so many ages wasted the Island, proved too strong for Donagh; and, retiring to Rome, he laid his crown at the pope's feet, assumed a religious habit, and retired to the abbey of St. Stephen. To Malachy succeeded two rival princes, one the great grandson of the brave Brian Boiromhe, the other Donald, of the Heremonian line; their claims were at length adjusted by that partition of the kingdom called Leith Conn, and Leith Maghall. After some years Roderic O'Connor, king of Connaught, was crowned with much pomp in Dublin, and exhibited proofs of ability for government; but the Irish were not in a condition to be ruled by wisdom, unassisted by strength, so his ordinances did not prove very effective.

At this period there were five sovereignties in Ireland, those of Munster, Leinster, Meath, Ulster, and Connaught; the Irish were fully converted to Christianity, but had never recognised the authority of the see of Rome. In the year 1156, therefore, Adrian granted a bull to Henry II. for the total subjugation of Ireland, and a reduction of the authority of the Romish church, imposing an obligation of one penny per house, for the support of that see: but continental negociations occupied Henry so much, that this bull was neglected, and he awaited a more favorable moment for bringing the Irish under the English yoke.

4. *Ireland since the English invasion.*—A licentious tyrant, Dermot Macmorrogh, king of Leinster, had now conceived an unlawful passion for Donergilda, the wife of Ororic, king of Breffing; taking advantage of that prince's absence, he invaded his palace, and carried his queen away. This act of infamy called all the latent dislike of the Irish into light; and Ororic, assisted by Roderic of Connaught, invaded Macmorrogh's territories, and drove him from his kingdom. The exiled prince applied to Henry II., then at Guienne, for aid in recovering his kingdom, which henceforward he consented to hold in vassalage to the English crown. Henry, then unable to assist him farther, granted letters patent, empowering all his subjects to aid the Irish exile in the recovery of his dominions. Reaching Bristol, Dermot at length formed a treaty with Richard, surnamed Strongbow, earl of Strigul, and of the house of Clare; the conditions of which were, that Strongbow should espouse Eva, Dermot's daughter, and be declared heir to all his dominions. He also engaged Fitz-Stephen, constable of Aberdovey, and Maurice Fitzgerald of Wales, in his cause. Fitz-Stephen was the first who landed in Ireland, with 300 men, to whom Fitzgerald, with 100, soon succeeded. These so far assisted Dermot as to place him once again upon his throne. Having recovered with his ancient dignity his former insolence, Dermot cast his eyes towards the crown of Connaught. And, to further this object, sent his ambassador to remind Strongbow of his former treaty, and to offer him additional inducements. Strongbow had been preceded by one of his retinue, Raymond, who, with a small band, landed near Waterford, and, proceeding to Dublin, made himself master of that place. But the earl himself now fulfilled his promise, by celebrating his nuptials with Eva; and, Dermot dying shortly after, he succeeded without opposition to the crown of Leinster, of which, after some severe engagements with the king of Connaught, he was able to keep the possession.

Henry, who had been a silent observer of Strongbow's successes, now thought it full time to demand his submission, and, accordingly, landing in Ireland with 500 knights, he received the homage of his new subjects, bestowed some lands on the English adventurers, and appointed Strongbow seneschal of Ireland. By these mere ceremonies, important in their consequences, was Ireland annexed to the crown of England.

The government of Ireland was now settled by Henry upon a more definite and satisfactory footing: shires or counties were introduced, and a chief governor was appointed. But Strongbow had much to encounter in his new government, from the machinations of his enemies at court, and the eternal and harassing opposition of Roderic, king of Connaught, aided by Donald Cavanagh, son of the late king of Leinster. It was at this season that he recalled Raymond from Wales to assist in the command of the army, and gave him his sister, the lady Basilia, in marriage, besides extensive lands in Ireland, as a dower. The king of Connaught, appearing in the field shortly after, was routed by Raymond, with great loss, and Donald Cavanagh was slain, while Thomond, who made a brave defence, was besieged in Limerick and obliged to fly.

Roderic, finding the faithlessness of his countrymen as allies, applied to king Henry, at Windsor, for leave to do homage for his kingdom of Connaught; and king Henry's jealousy was now excited by the coalition of his English barons in Ireland. We have already seen how Raymond and earl Richard became connected: Mountmorres at this time married the daughter of Fitzgerald and cousin of Raymond, and one of the house of Fitzgerald had espoused a daughter of earl Richard. In this crisis Henry despatched commissioners to desire Raymond's attendance at court, and also to inspect closely the conduct of Strongbow; but Raymond's attendance was delayed by insurrections in the south, where his presence was required at the head of the army, and Strongbow's death rendered farther surveillance unnecessary. Fitz-Andelm, a nobleman allied by blood to king Henry, was appointed to succeed the brave Strongbow; and, upon his arrival at Waterford, the bulls of popes Alexander and Adrian, asserting the king's title, were solemnly promulged. But these efforts did not produce the least effect upon the turbulent Irish: the new governor was withdrawn, and a second appointed with no better success, until Henry appointed the prince John to the lordship of Ireland.

In 1185 John, attended by a train of dissipated young noblemen, having however two sage advisers, a lawyer named Glanville and the historian Cambrensis, landed in Waterford, and was received with every mark of respect by the Irish chieftains: but their attentions were returned by his followers with the greatest insolence, and even with personal indignity. Eight months was a weak system of government administered by this young prince, when Henry, alarmed at the situation of the kingdom, withdrew him from Ireland and appointed De Courcy his successor. This dauntless commander was put to a severe trial of his courage and military skill, by the confederate armies of Connaught and of Thomond, from which with great difficulty he effected his retreat in Connaught. He was more successful in his campaign in Ulster, the dissensions of the Irish weakening their efforts, and De Courcy's vigorous proceedings still maintaining the authority of the English.

The Lacys and De Courcys succeeded to the chief part of the administration upon the accession of John, the lord of Ireland, to the English throne; and, from the great neglect of that king towards all the affairs of his Irish dominions, these turbulent nobles assumed an independence which was productive of dangerous consequences by the force of example. De Courcy's disobedient conduct obliged John to summon him into England, where he was thrown into prison, and lay unnoticed, until the following accidental occurrence not only procured him liberty, but added to his former honors. A champion from Philip II. of France asserted his master's claim to Normandy, and proposed to prove it in single combat. No English champion accepting the challenge, John yielded to De Courcy's brave offer of vindicating the honor of his country. Upon the appointed day the French champion first presented himself, in all the confident assurance of an easy victory: but, upon the appearance of De Courcy, his stern aspect and gigantic stature struck such a terror into his opponent, that he declined the combat and withdrew into Spain. The two kings, who were witnesses to De Courcy's triumph, requested some test of that strength for which he had been celebrated, whereupon he ordered a post to be erected, and a coat of mail and helmet to be placed thereon, and, raising his trusty Irish sword, struck through the helmet and armour so deep that no one but himself could extract the sword. The success of De Courcy so gratified his prince, that to the reward of freedom was added the honor of appearing covered in the first audience with the kings of England, which honor was made hereditary. John now visited Ireland a second time, but did little more than assign boundaries to a few more shires.

On the accession of Henry III. the English power was much strengthened by the alliance of O'Neal, the bold chieftain of the north, and of Donald O'Brien, who obtained a grant of his own kingdom of Thomond from the king. During this reign, and that of Richard I., Ireland presented a scene of singular anarchy, from the contentions of the English-Irish, who seized upon the lands of every deceased noble, and asserted a species of right derived from strength solely. The Geraldines were the most turbulent as well as the most successful disturbers of every act of settlement. The Irish were treated with much severity during these commotions, and were obliged to sue for charters of denization. On the accession of Edward II. his favorite, Gaveston, was appointed chief governor, who drove the septs from their strong holds, and was proceeding vigorously to a more perfect conquest of the kingdom, when the jealousy of the nobles procured his recall. It was about this period that Edward Bruce, brother to the famous Robert Bruce of Scotland, invaded Ulster, and, prompted by the prospect of a crown, advanced into the province of Leinster. Being joined by O'Neal, and other discontented chieftains, he obtained many signal successes, and was solemnly crowned king of Ireland at Dundalk, in the county of Louth. The new monarch now advanced towards Dublin, where he was vigorously resisted by the citizens, who set on fire great part of their city: but, passing on to the south, he continued to spread havoc and destruction every where, until checked by the courage and power of the Geraldines, near Kilkenny. The English interest seemed once more to revive. Bruce withdrew to Dundalk, and set his crown upon the hazard of an engagement; in which his allied army was totally defeated, and himself slain by an English knight named Maupas, whose body was found lying upon that of Bruce after the battle was concluded. Robert Bruce had actually landed in Ireland, when he heard of the melancholy fate of his ambitious brother, upon which he immediately returned to his own kingdom, without waiting to strike a single blow in vengeance.

In 1327 the unhappy Irish again petitioned king Edward III. to be admitted to the privileges of English subjects: but this address met only the usual fate, and insubordination and insurrection continued to be cherished by the very government itself. The noble families of Thomond, Desmond, Ormond, and Kildare, were alternately supporters and opponents of the English, being driven into the latter character by an undue preference given by Edward to the English lords who migrated into Ireland in his reign. To aggravate these miserable disturbances, lord Lionel, the king's second son, who had been affianced to Elizabeth, heiress of Ulster, and claimed in right of his wife that earldom, and also the lordship of Connaught, was appointed to the government of Ireland. This prince, filled with hateful prejudices, forbade the old English, and all Irish by birth, from approaching his camp, which so irritated and disgusted the most honorable as well as the most powerful subjects, in the kingdom, that, being left by them to wage an ineffectual war, he was soon recalled; bequeathing to Ireland much more dissension than he found, together with the odious distinction of 'English by birth and English by descent.' Severe laws were now enacted against the Irish, declaring intermarriage, and all close intercourse with the Irish, to be high treason; all which were ratified in the great convention of Kilkenny.

A period seemed to arrive, not long after, when the distresses af the nation were likely to be terminated: this was the visit of Richard II. to Ireland. In the month of October, 1394, king Richard landed at Waterford, accompanied by a train of nobles, and at the head of an army of 4000 men at arms and 30,000 archers. The magnitude of this force rendered all attempts at opposition vain, and accordingly the insurgents of Thomond and Ulster made ready submission, in which they were imitated by no less a number than seventy-five Irish lords. The king received them kindly, treated all with condescension and hospitality, and studied to reconcile them to English customs. After a residence of nine months, amongst his Irish subjects, he embarked for England, leaving Mortimer, earl of Marche, his vicegerent. The government of Mortimer proved unhappy, and, in attempting to suppress the Byrnes of Wicklow, he was unfortunately surprised, defeated, and slain. To revenge the death of this brave, but incautious, nobleman, Richard resolved to make a second voyage to Ireland, and, embarking at Bristol, arrived at Waterford on the 13th of May 1393. After a delay of some weeks he led his forces against Mac-Murchard and a body of Irish insurgents, but was not allowed the opportunity of coming to a battle, the Irish retreating continually to their woods, where they enjoyed shelter from the enemy's darts, and were able to harass and annoy the king's troops. It was upon this expedition that the young lord Henry of Lancaster gave the first proofs of that distinguished valor which marked his after years. While Richard continued a treaty with the Irish chieftain he was not aware that his own crown was tottering to its fall: but at length those tidings of his deposition in England arrived which obliged him to return immediately, and leave Ireland once more to confusion and insurrection.

The vicegerency of the duke of Lancaster brought some tranquillity to the kingdom, although in his time was established the 'Black rent,' which Borderers were necessitated to pay to the Irish chieftains, to purchase their protection. The earl of Ormond was appointed to succeed to the lieutenancy, and found nine counties of Ireland completely subdued by the Irish chieftains, little more remaining to be governed by him than Dublin and its vicinity.

Hitherto the Kildares and Desmonds attracted little notice, while the earl of Ormond was the only Irish nobleman in whom the crown appeared to repose confidence. The consequences of this preference were jealousy and animosity, which scarcely subsided but with the extinction of one of those noble houses. Desmond becoming insolent, Ormond led the king's forces against him, but was compelled to make conditions with him, as an independent monarch; for which he was soon after removed from his authority. In the tumultuous state of things, which now resulted from the disputes of the houses of York and Lancaster, Kildare, having espoused the cause of the former, was appointed lord chief justice: while the noble earl of Ormond was brought to the scaffold by the same party. The animosities of these great families increased to their greatest height. Attempts were made, in a parliament assembled in Dublin, to attaint the earls of Desmond and Kildare of treason; and an act was passed ordering the tallage, called Black-rent, to be henceforth paid to the king's deputy for the support of the army, thereby reflecting upon the treaties lately made by Desmond. The parliament was then removed to Drogheda, where the enemies of the Geraldines felt more secure in urging their false accusations.

Desmond, in the confidence of a guiltless conscience, repaired thither to justify his conduct, when, to the astonishment of all, he was instantly brought to the scaffold and beheaded. Kildare meanwhile escaped to England, where he represented the cruelty and injustice of the sentence executed upon earl Desmond; and such was the effect of his appeal, that Tiptoft, who was recalled, suffered the like punishment as he had inflicted upon Desmond, while Kildare was made deputy in his stead, a rank which his family continued to retain for a length of time, almost in opposition to the authority of the crown. The improvidence of Henry, in intrusting the government of Ireland to such zealous adherents of the house of York, became now but too apparent, for, upon the breaking out of Simnel's insurrection, the impostor found a large body of supporters in Dublin, whither he instantly repaired, and was crowned in Christ Church, in that city, by the style and title of Edward VI.

The lords Thomas and Maurice Fitzgerald, with Plunket and other Irishmen of rank, accompanied the impostor to England, and all fell in the battle of Stoke, bravely fighting by his side. Kildare, who still governed Ireland more like an independent prince than a vicegerent, sent an acknowledgement of his error, with a confession of allegiance to the king: notwithstanding which Henry deemed it prudent to send his ambassador to witness Kildare's conduct and obtain some pledge for his future loyalty. For this purpose Sir Richard Edgecumbe was despatched, with a troop of 500 men; but, arriving at Kinsale, he appeared apprehensive of landing, and received the homage of Barry on board his ship. Sailing thence, by Waterford, to Dublin, he landed and was presented with the submission of the citizens, and, after a tedious negociation with Kildare, received that proud nobleman's homage and fealty, which were performed publicly. This ceremony was considered a sufficient guarantee for his future allegiance, whereupon he was absolved from the sentence of excommunication, and presented with a chain of gold, from the king, in token of perfect reconciliation. In 1494 the violent feuds of the Butlers and Geraldines, obliged the king to withdraw his delegated power from their hands, and commit the deputyship of Ireland to Edward Poynings. This wise governor summoned a parliament at Drogheda, where many valuable acts were passed, tending to diminish the power of the great Irish nobles. The most famous in its consequences, and one which still bears the enactor's name, is that which declares 'that no bill shall be introduced in Ireland until

it has previously received the sanction of the English council,' by which the English authority was ever after fully established in that country. Poynings returned to England, and had the honor of the order of the Garter conferred upon him in token of his services.

The Geraldines being now once more restored to favor, ruled Ireland with haughtiness and rigor, the adherents of their rivals the Ormonds being treated with all possible severity. At length the Ormonds obtained the attentive ear of Cardinal Wolsey, and, improving this opportunity, turned it to the ultimate ruin of their rivals. Every art of the Geraldines was henceforward viewed with suspicion, the earl was called over to London to answer charges of an unknown informer, but was allowed to return. A second time he was summoned, but with less good fortune, for he was detained and thrown into confinement. The intercourse between the two countries was of an irregular and tedious nature, which left the Irish in a state of distracting suspense as to the fate of their late master: a suspense which the rashness of his son and deputy, lord Thomas, did not permit him to endure, and, without waiting to learn his noble father's fate, he broke out into open rebellion and bid defiance to the crown. This young nobleman, but twenty-two years of age, was spirited, generous, and humane: he possessed the ardent love of his followers and kinsmen, and gave very early promise of future greatness. Being now a declared enemy he collected his forces and laid siege to Dublin, but was opposed by the citizens. He continued to wage a desultory war for some short time, when, being betrayed by some of his followers and deserted by others, he found himself compelled to make conditions with lord Grey, which were, 'that upon the final dismissal of his troops, he should be received into the king's pardon.'

Lord Thomas, assured of pardon, readily consented to repair to London and throw himself at Henry's feet. But the violence of this unfeeling monarch's temper overcame his regard for his honor; and lord Thomas, and his five uncles, who were seized at a banquet in Dublin, were ignominiously put to death. The unhappy youth had the mortification to learn, before his death, that he had been driven into all his wild opposition by false rumors, for that his father was still alive, and sinking into the grave from sorrow for his son's fortunes and fate. The relentless Henry, though he well knew that two of the Geraldines, whom he had executed, were opponents of the late rebellion, still continued to persecute the race, and sought to exterminate the name. A youth of twelve years of age, the brother of lord Thomas, was now sought out, as an enemy to the crown that could not be permitted to survive. The widow of Mac Arthy, and aunt of the young lord, at first undertook the guardianship of his person, but, finding Henry thirsting for his blood, she consented to a marriage with a powerful chieftain. O'Donnel, on the express condition, that he should protect her nephew. O'Donnel's sincerity appearing doubtful, the king of France was induced to protect that youth and innocence, which could not plead with the heartless Henry; and, when the English monarch had the meanness to demand the boy, as a rebel subject, the king of France favored his escape into Flanders. A similar demand was now made to the emperor; but with no better success. Finally he was permitted to seek the protection of cardinal Pole, who received him as his kinsman, and preserved him to regain the honors of the family of Kildare.

During these transactions in Ireland the course of events in Europe was undergoing a total revolution, by the introduction of the reformed religion and the doctrines of Luther. The wantonness and severity of Henry's natural temperament involved him more than other princes in the great religious change that now occurred; and probably he no where found the task of reformation more difficult than in Ireland. However Browne, who had been provincial of the friars of St. Augustine, a man also remarkable for the liberality of his religious opinions, after his elevation to the archdiocese of Dublin, led the way in the new reformation, and read the reformed service in Christ Church Dublin. Parliament also acknowledged the king's supremacy in spiritual matters, and confirmed and annulled his marriages, as often as his lust or his cruelty prompted him to select a new queen, or to cut off the unhappy partner of his throne and bed. In addition to the violent opposition of the clergy, who, secretly encouraged by the pope's legate, resigned their benefices, Henry found a new and troublesome enemy in O'Nial, of the north, who formed a confederacy for the suppression of heresy: but, by the activity of lord Leonard Grey, the confederates were defeated and scattered. Lord Grey was soon after recalled, and rewarded, by his royal master with a death upon the scaffold. The discomfiture of O'Nial, followed by the most complete overthrow of the Irish, under O'Brien, in Munster, threw the king's enemies into the greatest despair: many monasteries were surrendered to the crown, and their constitutions re-modelled: while the chief youths of the kingdom were obliged to consent to be educated after the English manner.

A change was now made in the executive, which assumed a more dignified character, the style of lord of Ireland, with which the English monarchs had hitherto been contented, being relinquished for that of king. During the reign of Mary, O'Nial continued to resist the authority of the English; while the inhabitants of Seix and O'Fally could not patiently resign their claims and possessions to the new settlers; and, taking up arms, they were either cut off in the field, or suffered death by martial law. But the changes consequent upon the return of a queen of the reformed religion, to the British throne, revived all former feuds, both of a civil and religious character. Sidney was now entrusted with the government of Ireland, and the most sanguine hopes were entertained of beneficial results likely to arise from it. O'Nial had now grown into the pride of sovereignty, he razed the castles on the borders of the Pale, burned the cathedral of Armagh, and sent ambassadors in his own

name to Spain and to Rome. But the discernment of Sidney proved too much for the rashness of O'Nial, and, when the latter thought himself surrounded by faithful allies, he was in the midst of nobles, whom he had formerly, perhaps, treated with some degree of haughtiness, and who now listened to the overtures of the deputy, in order to gratify petty jealousies and vengeance. Thus surrounded by enemies O'Nial at last resolved to relinquish so unequal a contest: and, being induced to capitulate, was invited to a banquet, where the terms were to be agreed upon; but here a quarrel was purposely raised, and O'Nial and his followers treacherously assassinated. The author of this cowardly stratagem was an English officer named Piers, who received 1000 marks as his reward.

The province of Munster was now in a state of great insubordination, nor were the best exertions of Sydney capable of subduing the insurgents. To effect this, Sir John Perrott, an austere and vigorous officer, and a natural son of Henry VIII., was appointed president of that province. Perrott's conduct did not disappoint expectation: he pursued the Irish with unabated fury, nor ceased until he had driven them from every haunt, and no alternative remained but submission to the queen's mercy. The next interruption to the repose of the country was derived from an invasion of the Spaniards on the south-west coast. They brought with them arms and ammunition for 5000 men, and a sum of money to be delivered to earl Desmond. Effecting a landing at Smerwick, they entrenched themselves at Golden Fort, and proclaimed their determination to hold out to the last in the glorious cause of the extirpation of heresy, and the assertion of their master's right to the kingdom of Ireland. In this position they were attacked by lord Grey, and, after an obstinate resistance, obliged to surrender at discretion. The Irish rebels found in the fort were executed by martial law; and to Sir Walter Raleigh was committed the odious service of putting the unarmed garrison to the sword.

The unhappy earl of Desmond now sued for pardon, but in vain; his co-operation with the Spaniards her majesty could not forgive. In this deplorable situation he was hunted from one miserable hiding-place to another, disguised in a dress resembling that of the meanest of his followers, and a price was set upon his head; until, overtaken in a hut by a few soldiers commanded by Kelly of Moriesta, he called to him for mercy, saying, 'Spare me, for I am the earl of Desmond;' but Kelly smote off the aged nobleman's head, and sent it to Ormond. It was afterwards conveyed to the queen, and impaled upon London bridge. Such was the melancholy extinction of a family which had existed for four centuries, in rude magnificence, and had proved too powerful to be governed.

The government of Perrott, which left a lasting impression upon the peaceable part of the Irish, was shortened by the private slander and calumnies of his enemies at court. Perrott had laid the foundation of a peaceful reign for his mistress in this part of her dominions, and gained a favorable juncture for the introduction of civilising institutions. Many attempts had been previously made to establish a college in Ireland, but with no success. So far back as 1311 archbishop Leck had procured a bull from the pope for the erection of a university in Dublin, but the project ended with that prelate's death. A second attempt was made by his successor Bicknor, in the reign of Edward II.: and in the reign of Edward IV. an act actually passed the Irish parliament for the foundation of a university in the town of Drogheda, which also was neglected. For the reign of Elizabeth it was reserved to establish the sources of light, humanity and civilisation, in a country darkened by ignorance, and ferocious from persecution.

The rebellion of Tyrone now again burst out, and raged like a destructive conflagration through a great part of Ireland. Essex, the queen's favorite, was appointed to oppose him with a newly raised force, and with the style and title of lord-lieutenant of Ireland; whereby his powers were increased, and authority granted him of pardoning offenders, even those guilty of treason against the queen. Essex's campaigns were not successful, much treasure and many lives being expended in fruitless attempts to reduce Tyrone; and the lord-lieutenant found himself at last only in a situation to make terms and offer pardon. The cautious and crafty chieftain obtained such conditions as were displeasing to her majesty; and Essex, fearing the secret whispers of his court rivals, returned to England to justify his conduct. Lord Mountjoy, Sir George Carew, and others, were now appointed to different commands in Ireland, and executed them with better fortune. Tyrone and O'Donnell were reduced to extremities, and must have surrendered to the English power, if assistance had not appeared from an unexpected quarter. A Spanish fleet anchored in the harbour of Kinsale, under the command of Don Juan D'Aquila, and the forces on board, having effected an undisturbed landing, possessed themselves of the towns of Kinsale, Castlehaven, and Baltimore, which they strongly entrenched. The rebellious chieftains of the north soon joined them, and a general engagement followed, in which, to the amazement of the Spanish general, they were defeated almost instantly, and fled with precipitation from the field of battle. Disgusted at this contemptible conduct of his Irish allies, Don Juan resolved upon sparing the lives of his own countrymen, and accordingly surrendered upon honorable conditions.

Tyrone withdrew to the north, and renewed hostilities against the English; but being cut off from his own territories, by the skilful manœuvres of the English general, the miseries and privations of his followers determined him to sue for pardon and amity. Mountjoy, dreading a repetition of a Spanish war, and fearing the expense and tediousness of a new rebellion, accepted Tyrone's conditions, particularly as, when pending the negociations with Tyrone, private accounts of the queen's death were brought to him. He, on this, instantly despatched Sir W. Godolphin to Tyrone with a safe conduct, and renewed the assurances of his pardon. The earl immediately

accompanied the envoy to Mellifont, and at Dublin publicly renewed his submission to the queen, which he had scarcely made when he learned the tidings of her death. Upon the receipt of this intelligence he is said to have burst into a flood of tears, which he explained to be an excess of grief at the loss of so merciful and tender a mistress, but historians have sometimes otherwise interpreted his sorrow.

After an unceasing struggle of 440 years, the enemies of the English crown were entirely subdued in this island, and an opportunity was presented for the introduction of wholesome laws. During the short administration of Carew, sheriffs were sent into the counties of Tyrconnel and Tyrone, and itinerant judges through all the northern counties. The old Irish customs of tanistry and gavelkind were abolished by judgment in the king's bench, and Irish estates made descendible, according to the course of the common law of England. While these improvements were in progress, a letter, dropped in the privy council chamber, intimated that Tyrone and Tyrconnel were once more in league with Spain; and these noblemen fled to the continent, abandoning their extensive possessions in Ulster to the crown. James considered the hasty flight of these traitors as a fortunate issue, and proceeded forthwith to partition their vast domains amongst Scotch and English settlers. He also conferred large grants of land, and several valuable church livings, upon the university of Dublin. By which measures a number of loyal and industrious inhabitants were substituted for free-booters and ungovernable subjects: many towns were built, and some of them incorporated, and obtained the right of representation in parliament.

The repose and calm, which Ireland would otherwise have enjoyed, were disturbed and ruffled by the continued applications to the crown, of the recusants. Finding their prayers neglected, they are said to have had recourse to pecuniary arguments, by which they found themselves more likely to be secured. And, indeed, their feelings were inflamed and their passions constantly roused by the Roman pontiff, who besought them to lose their lives rather than submit to the pestilent oath of supremacy, which wrested the dominion of the church from the Vicar of God Almighty. The result of their perseverance, however, was the enaction of many beneficial regulations, some relaxation in the laws concerning recusants, and a general act of pardon.

The religious feelings of the Irish were now put into a state of great fermention, by the public preaching of a fraternity of Carmelites who appeared in Dublin, and resisted the interference of the law. In this crisis a lord deputy was chosen, by king Charles, possessed of great cunning and activity of mind, and a haughty and commanding demeanour; this was lord viscount Wentworth. He resolved, in the first moment of his authority, upon an extensive plantation of Connaught, by the annihilation of the title to every estate in the province. He summoned and dissolved the parliament at pleasure; treated the remonstrances cf the lords with contempt; issued order for the reparation of churches, and compelled a restitution of the rights of the clergy by the landholders. To him, however, is due the praise of uniting the churches of England and Ireland, a task of considerable difficulty at that precise moment, when the primate Usher had just drawn up distinct canons for the Irish church. The lord deputy escaped the danger of an encounter with a man of such learning and piety, by ordering that there should be a selection only from the English canons adopted in Ireland. Shortly after a high commission court was established, after the model of that in England.

Wentworth's severity to the inhabitants of Connaught, who did not acknowledge the king's title, occasioned strong representations to be made against him at court. In addition to this, the trial and condemnation of lord Mountmorres, by the deputy and a court martial, were warmly urged by his numerous enemies. But the attachment and confidence of his royal master were, at this time, too entire to be shaken. Wentworth had soon an opportunity of showing his gratitude to Charles, which he did not hesitate to embrace. On the first alarm of the Scottish insurrection, he remitted £30,000 from the Irish exchequer to the king, and added a noble donation from his own private fortune. He transmitted, besides, a body of 500 well disciplined men under the command of Willoughby, an experienced officer, to establish a garrison at Carlisle. Upon which the king confirmed him in his government by the more honorable title of lord-lieutenant, advanced him to the dignity of an earl, by the title of Strafford, and created him a knight of the garter. The state of England, as well as the dissensions between the Romish and Puritan parties, now rendered the administration of Ireland a service of no small danger. Lord deputy Wandesford's sudden death was imputed to the vexations of his government, and the prosecution of his predecessor Strafford: a prosecution followed by his attainder and death.

An unnatural and bloody insurrection burst forth at this time, the flames of which were kindled by one Roger Moore, and kept alive by Macguire the lord of Enniskillen. The design of this conspiracy was the subversion of all the late establishments of property, by acts of settlement or otherwise; the restoration of the native Irish to all that they had lost, either by the rebellions of their ancestors or by decisions at law; and the complete re-establishment of the Romish religion. The inactivity of the lords justices has never been satisfactorily explained: it appears not merely blameable but suspicious; for little doubt exists that the nefarious conspiracy could have been smothered in its very cradle, had their lordships not wilfully disregarded the information laid before them. At first it was confined to Ulster: here Sir Phelim O'Neil ordered his followers to massacre all the Protestants of those parishes where he had been previously defeated. Lord Caulfield was basely murdered in one of O'Neil's houses, whither he had been conveyed as a prisoner. The miserable Protestants and settlers were driven from town to town, like beasts, at the point of the bayonet: sometimes they were forced into the nearest house, which was then set on fire, while their inhuman persecutors stood around enjoying their

tortures and cries. At the bridge of Portadown 190 were precipitated into the stream, while their murderers ran to the river side, and there plunged their bayonets into the unhappy beings who approached the shore struggling for life. Women are said to have been driven, in a state of absolute nudity, along the highway, by those of their own sex; and children were torn untimely from the womb. All which scenes of blood and torture, Sir William Temple assures us, were performed or encouraged by Irish ecclesiastics. After the trial and execution of lord Macguire and his confederates, and notwithstanding the culpable indifference of Balase and his coadjutor Parsons, this insurrection was terminated by the defeat of the rebels at Kilrush. The instrument of this deliverance was the earl of Ormond, whose signal services, during this disgraceful civil war, were rewarded by a jewel of £500 value voted to him by the parliament, and the order of the garter bestowed on him by his royal master.

The commotions that followed for some years were comparatively trifling. In the north Robert Monro, a severe Scottish general, preserved tolerable tranquillity, and by crafty negociations occupied the attention of the rebel leader, while lord Ormond, by his great military and diplomatic abilites, both suppressed violence, and treated for a peace with the Roman Catholic confederates. The conditions proposed by him appeared to the confederates so satisfactory, that the blessings of peace were about to be restored, when Rinuncini, the pope's nuncio, presented himself and insisted upon a magnificent establishment for the Romish clergy: this so much embarrassed the proceedings that the treaty was instantly broken off. But the attachment of Ormond to his unhappy master would not permit him to abandon the prospect of attaching so many faithful adherents to his cause; and having renewed his proposals, with some little alterations, they were received and approved by the confederates. Meanwhile Rinuncini addressed himself to Owen O'Nial and his band of rovers, and besought him to assist in enforcing the command of his holiness to re-establish the Romish church throughout the kingdom. Owen gladly embraced an occupation that might lead to plunder (his only mode of subsistence), and, advancing towards a place called Benburb, engaged the English army commanded by Monro. Owen was successful, having killed upwards of 3000 of the British, with the loss only of seventy on his part. In this battle also fell that gallant officer, lord Blayney. The consequences of this victory might have been fatal to the English in Ulster, had Owen pursued the advantage gained, but he was suddenly called into Leinster, by the meddling nuncio, to oppose the peace with the confederates.

Ormond found himself now surrounded by difficulties and dangers: the interference of Rinuncini with the confederates, and his threats of excommunication against the moderate of his party: the increased violence of O'Nial, from his late victory at Benburb, and the treachery of Preston, who had yielded to the conditions of peace, contributed so much to harass and distract him, that he at at last resolved upon resigning the lieutenancy of Ireland; and brought home with him the regalia.

Landing at Bristol he proceeded to London, to assist and advise his royal master; but, finding his liberty threatened, he withdrew to St. Germains. The Irish now addressed the queen when conditions of peace were by the prudent counsel of Ormond obtained: and the immediate consequence was the return of Ormond to Ireland. Here he soon after learned the bloody death of his affectionate master, and instantly caused the prince of Wales to be proclaimed king. His exertions in the royal cause from this date were less fortunate than well designed; and at last arrived Cromwell, against whose power and cruelty Ormond's means and provisions were of little effect. Well supplied with all the necessaries of war, Cromwell landed in Dublin, and advancing to Drogheda besieged that town, where he put all the inhabitants to the sword, thirty excepted, who were transported to Barbadoes. Wexford and Ross shortly after shared the fate of Drogheda; but a strong detachment commanded by Ireton was unable to make any impression upon the fort of Duncannon: Wogan, the governor, having repulsed them from the walls by a brave and vigorous sally. Waterford was next the object of Cromwell, but here the superior skill of Ormond frustrated his plans, and the petty quarrels of the corporators, who refused to supply boats to ferry the troops across, probably saved him the hazard of a final engagement. Cromwell, escaping from Waterford, continued both personally and by his officers, the subjugation of Ireland to the parliament of London. In the north, every town was in his power, Charlemont and Enniskillen excepted; and Kilkenny was surrendered into his hands, when Cromwell resigned his command to Ireton and returned to England.

Ormond, meanwhile, surrounded by the most distressing difficulties, preserved his attachment to the royal family, and used his ablest exertions to keep together his small body of troops. In his opposition to the English parliament he was but little supported by the confederates, as he never entirely yielded to the conditions they required: and at length, finding the demands of the Romish clergy too exorbitant, he entrusted his commission to the marquis of Clanricarde, and, embarking at Galway, after a tempestuous voyage arrived in France.

Clanricarde, anxious to preserve the king's authority, was at the same time unwilling to offend the church. The Irish in this difficulty addressed themselves to the duke of Lorrain, who for a short time hearkened to their representation, and advanced funds for supplying arms; but whatever were his designs he soon found they were not likely to be promoted by any treaty with the Irish, and accordingly withdrew his agents.

Ireton continued to reduce Ireland to the authority of parliament: Limerick was soon besieged and admitted to a surrender: and O'Brien, the popish bishop of Emly, together with Fennel and Geoffery Browne, suffered by

the hands of the executioner: this severity procured the surrender of Galway without much delay.

The restoration of Charles II. excited various emotions in the different parties of the Irish nation. Some were impatient to be restored to their ancient possessions; others to be continued in their new acquisitions: some were solicitous to be pardoned for their delinquency; and others to be rewarded for their services. To allay these disorders, a bill of indemnity was first prepared by which the Romish party was effectually excluded from power: but, this measure not proving satisfactory, the famous declaration for the settlement of Ireland was published. By this declaration adventurers in possession of lands or tenements, on 7th of May 1659, were confirmed in the same: soldiers, to whom lands had been allotted for their pay, were allowed to retain them, with some exceptions: officers who had served previous to June 1640] were to be paid in houses and lands allotted for the purpose: Protestants, whose estates had been given to adventurers, were to have the same restored: and innocent papists, though they had taken lands in Connaught, were to be restored to their estates. But those whose estates lay within corporate towns were to be indemnified. Though a meeting of parliament shortly after confirmed this act of settlement, the injured Roman Catholics, and the ejected adventurers, appealed to the king and the English parliament for redress.

The arrival of the duke of Ormond was now looked to, by all parties, as the only thing likely to relieve the nation from its embarrassment, and parliament voted him a sum of £30,000. But the wisdom and integrity of Ormond, who had relinquished his own rights to facilitate a general accommodation, were not able to allay the irritated feelings, or satisfy the numerous demands, of the claimants. He returned to London, and there framed a bill of explanation, by which one-third of the king's grants was retrenched, and twenty persons added to the list of nominees, whom the king was to restore to their estates. The disorders of Ireland had just been brought to a termination, by the last prudent and moderate act, when they were again renewed by a measure originating with the English commons. In a parliament held at Oxford, 1665, a bill was brought in for the 'perpetual prohibition of importing cattle from Ireland, dead or alive;' and, though it passed the commons, it met opposition in the lords, and caused the prorogation of parliament. The commons foolishly supposed that the importation of cattle from Ireland was the occasion of the greatly diminished rental of English estates at this period, their total value amounting to but £200,000 annually: whereas the real causes were, the expulsion of so many industrious Puritans, who fled to Holland: a diminution in the trade of the kingdom, arising from the French and Spanish wars: and the plague which had lessened the consumption of provisions. Ormond, being removed and restored again, was ultimately and indecently dismissed from the lieutenancy, upon the accession of James II. His age and infirmities were assigned as the reasons for this, and he affected to believe they were the real cause. But the speedy disarming of the Protestants soon established the fact, that the eagerness of the Romish party for ascendancy was the real motive. The history of Ireland from this period is intimately connected with that of England. Some facts, however, are so entirely Irish, that they may with propriety be added.

The violent conduct of James extended to Ireland, perhaps with more calamitous consequences than elsewhere. The zealous Romish advocate, lord Tyrconnel, continued to aggravate the mischiefs James was desirous of inflicting upon Protestants: at his instance three judges were removed without cause, and an equal number of Roman Catholics substituted, some of whom were themselves aware of their unfitness and declined the honor. The Irish seals were suddenly taken from primate Boyle, and handed to Porter, a submissive retainer about the court. The king refused to fill the vacant see of Cashel, appointed his trusty Tyrconnel lord deputy, and formed his Irish army almost exclusively of papists,. A king's letter now reached Dublin, appointing Green, a Roman Catholic, to the professorship of Irish, an office which did not exist in the university: this was but the commencement of the spoliations meditated by James upon that institution. Their plate was next seized upon and lodged in the king's stores; and Doyle, a profligate ignorant person, was appointed to a fellowship by a king's letter. Such was the entire transition to a Romish establishment in progress in Ireland, when the prince of Orange effected a landing in England.

Tyrconnel's zeal frequently blinded his judgment, particularly in the rash act of withdrawing the garrison from Derry. But, as soon as he perceived his error, he detached thither the earl of Antrim's regiment, composed entirely of Papists, Irish, and Highlanders. Upon the approach of this body of men, the inhabitants, urged on by nine spirited youths who seized the keys of the city, raised the draw-bridge, and locked the ferry-gate. Philip Timavady, who had chiefly encouraged them to this enterprize, was chosen governor, and an account of their situation, accompanied by a solicitation for protection, was instantly transmitted to the prince of Orange. Tyrconnel, finding the citizens resolute in their refusal to admit the Antrim regiment, sent thither a detachment of six companies, under the command of lord Mountjoy, a Protestant nobleman, and highly acceptable to the inhabitants. Mountjoy was readily admitted upon conditions, and assumed the command of the city as a friend and associate.

The state of the prince's affairs in England left him but little time to reflect upon the cruel government of the Irish deputy, and Mountjoy, finding his services elsewhere might be more beneficial to his party, withdrew from Derry, having entrusted the command to Lundy, a man who affected great attachment to the Protestant cause. A commission being now sent to Lundy, he refused to take the oaths in public, which raised suspicions of his integrity amongst the

citizens; suspicions afterwards too strongly confirmed. Upon the landing of James in Ireland, Derry presented the most formidable prospect of resistance: thither the Protestants of the north had been driven, by the ferocity and rashness of Tyrconnel, and there the little assemblage of heroes led on by George Walker, a Protestant clergyman, were prepared to resist, to the last, the partizans of the abdicated king. Lundy alone proved himself, not only deserving of the suspicion he was held in, but also a base coward, having fled from the field and hid himself within the walls of Derry. Nor was this the only baseness he was guilty of; for, upon the approach of James, he advised the surrender of the city, assuring the garrison that it was untenable: but the heroic temperament of the townsmen was rather kindled into a spirit of resentment, than overwhelmed by any feelings of despair; and in the enthusiasm of the moment they rushed to the walls, and pointing their cannon, fired upon the advanced guard of James, who was approaching in the confident assurance of taking a quiet possession of the place. The siege now became formal, the timid were allowed to retire, while Lundy escaped, from the confinement of his own house, on shipboard, and James sat down before the walls for eleven days. But, impatient of disappointment, the king returned to Dublin, leaving Derry closely invested. The inhabitants became at length straightened for provisions, and famine and disease made equal and continued ravages in the garrison. Meanwhile, an unfortunate multitude of Protestants, of all ages and conditions, were goaded on by the king's army to the very walls, and there suffered to perish miserably in the presence of the besieged.

The most powerful antipathies of nature were overcome by the invincible horror, now conceived by the besieged, of their relentless enemy. The flesh of horses, dogs, and vermin, purchased at extravagant prices, were eagerly devoured by the wretched citizens, who, nevertheless, continued to persevere in a most heroic defence, and sometimes made successful sallies on the besieging army. In the midst of these calamities, death, famine, and disease, two vessels, laden with provisions and convoyed by a frigate, advanced in view both of the garrison and of the king's troops; the enemy thundered furiously upon them, from their batteries, which fire was returned with equal spirit. The foremost of the victuallers struck forcibly against the boom, which had been stretched across the river, and snapped it: but, rebounding with violence, ran aground. The enemy, exulting in loud acclamations, prepared to board her, while the garrison on the walls remained stupified with despair. At this critical moment the vessel fired her guns, was extricated by the shock, and almost instantly floated. Passing the boom, she was followed by the other vessels: and, the town being thus relieved, the enemy abandoned the siege.

During the course of this siege James's troops were much embarrassed by the operations of the Enniskillen men. A brave band of Protestants who had confederated, chose one Gustavus Hamilton for the governor, and proclaimed William and Mary. This small body was enclosed by three great armies under the separate commands of Macarthy, Sarsfield, and the duke of Berwick. But, by a peculiarity of fortune ignorance of danger procured their deliverance for, knowing of but one enemy, they advanced and defeated him, which caused the others to retire; not, however, without suffering in their retreat from the Enniskilleners, who at length detected their danger, and were become more familiar with it.

James's disappointments increased his follies and extravagancies: he assembled a parliament in Dublin, and there passed acts, by which the personal estates of all absentees were vested in the king: also an act declaring that the parliament of England cannot bind Ireland: against writs and appeals to England: an act for liberty of conscience: an abolition of the provision made for ministers in corporate towns: and an act entitling the Romish clergy to all tythes payable by those of their own communion. His arbitrary conduct was also strongly marked by his assumption of the right of copper coinage, and his conversion of old cannon, broken bells, and such like materials, into pieces of money valued at £5, the intrinsic value not exceeding 4*d*. Ireland was in this deplorable situation when Schomberg arrived near Bangor, in the county of Down, and laying siege to Carrickfergus speedily reduced that fortress; but being much pressed by the sickly nature of the climate, and difficulty of crossing the country, he was contented with a defensive warfare, until the arrival of king William, on the 14th of June 1690, near Carrickfergus; a measure which brought the cause of the abdicated monarch to a speedy issue. Upon the intelligence of William's landing, James, contrary to the advice of his council, resolved to take the chance of an engagement. And meeting on the banks of the river Boyne, on the last day of June, both armies prepared for an engagement, and the following day William crossed the river, by the ford of Oldbridge, and engaging James totally routed and defeated him. See Boyne. William received a slight wound in the shoulder previous to the battle, and the brave Schomberg, and Caillemote commander of the Huguenots, fell in attempting to ford the river: the celebrated Walker, the defender of Derry, whose military ardor had led him to follow William, also received a wound of which he shortly after died. This battle determined finally the conquest for the crown, and closed the hopes of the Romish party in Ireland: the pusillanimous James fled to France, and left his infatuated followers to the vengeance or the mercy of the conqueror. Some few fortresses held out for James, but the arms of Marlborough soon reduced them: and the distinctions of English and Irish, Protestant and Papist, were almost annihilated by the abdication of the Stuarts, and by the articles agreed upon at the surrender of Limerick, upon the 3d of October 1691.

PART II.

STATISTICS OF IRELAND.

Topography. — Ireland contains about 20,000,000 of English acres, and is on the whole of a *mountainous* character: the highest land,

M'Gillicuddy's reeks, reaching an elevation of 3410 feet. The soil, which is remarkable for its fertility, rests principally upon a substratum of limestone, to which circumstance, in all probability, its fertility is mainly attributable. This valuable species of stone occupies the central district of the island, extending from Lough Erne, in Fermanagh, to the county of Cork, and from Dublin in the east, to Galway in the west coast: supporting and nourishing nearly two-thirds of the whole area of the kingdom: even the flat bogs of the country rest upon limestone. In the lower beds of the great central limestone district very beautiful black marble occurs, which is worked into forms for domestic purposes, and made an article of export. A more beautiful species of brown marble, totally unknown beyond the limits of the barony in which it is raised, occurs in Fermanagh, where it is worked into chimney pieces and other useful articles. Statuary marble of excellent quality is found in the primary regions of Donegal and Galway, besides some beautiful rose marble. The granite regions are, the Donegal or Northern, Connaught or Western, the Down, and the Leinster.

These great primary fields abound in *mineral* riches. Donegal contains gray granite and sienite, or sienitic granite, exactly resembling the Egyptian; besides rich veins of statuary marble, and valuable mines of lead. The Connaught range is beautified and enriched by inexhaustible stores of green serpentine, of the most exquisite colors, and capable of being raised in slabs and blocks of great magnitude. Two quarries are now worked, one called Darcy's and the other Martin's quarry, and supply a brisk export trade. The Leinster granite field abounds in mines of lead and copper, and alluvial gold in small quantities has been found in the county of Wicklow, near to the centre of the region. The Down district has not unfolded its treasures with equal benefit to speculators, but it has been less subjected to trial. In the superficial blocks of granite, beryls of a bright green are frequently found, which bring a good price in the London and Edinburgh markets. The most durable granite in Europe, superior even to that of Aberdeen, occurs in the primary county of Leinster. It was not long since submitted to a test, together with the granite of Dartmoor and Aberdeen, the result of which established the high state of crystallisation of the felspar in the Killiney granite; on which the durability of this species of rock depends. In these districts, besides valuable mines, large beds of felspar, i. e. disintegrated granite, equal to that of St. Stephen's in Cornwall, constantly occur; chiefly in Wicklow. This has been tried and found to be superior potters' clay.

There are in Ireland eight principal *coal* fields: these are called the Antrim, Tyrone, Fermanagh, Connaught (in several counties), Monaghan, Leinster, Tipperary, and Munster. The first is thought to have been worked previous to the discovery of coals in England. Fermanagh coal field remains still totally unexplored. The Connaught coal district has been known to contain a valuable bed of coal, and has been worked with success for many years. An inexhaustible supply of iron stone is found near Arigna, contiguous to the Connaught coal district, which is acknowledged to be superior to any used in the British iron works. Owing to the improved navigation of the Shannon, aided by the canal from Tarmonbury, both coals and iron can be conveyed to Dublin with great facility, and at a small expense; but, though the iron would amply repay the manufacture, lord Lonsdale can always afford to undersell the coal merchant. The coal of the Leinster district has also been long known, and profitably worked; but the coal is of the non-flaming kind.

The Munster district, though of later discovery, is now conferring employment, and thereby happiness and tranquillity, upon the central district of the county of Cork (See article CORK), where *potteries* and other useful establishments have been formed, and are conducted with a success corresponding to the wisdom with which they were instituted by Mr. Leader at Dromagh. But the coals here are of the same character as those of the Leinster or Kilkenny region; and, generally, the coal fields of Ireland may be divided by an imaginary line drawn from Galway to Dublin, the coal fields to the north of which contain bituminous coal, while all those to the south contain non-flaming or stone coal. The flaming coal of Ireland, generally, is of a medium quality between the swift burning coal of Scotland and the caking coal of Whitehaven, and equals any in Europe, for either culinary or manufacturing purposes.

In the county of Antrim, north-east of Ireland, is found the most extensive range of *basalt* in Europe. Here is the famous stratum of columnar basalt, called the Giants' Causeway, forty-five feet in thickness, which dips into the sea, and appears again, though less beautifully and minutely articulated, on the coast of Scotland, amongst the Hebrides. Greenstone occurs in this county, in masses rudely columnar, and of ten feet diameter; the perpendicular cliffs in this part rising to 400 feet, and the whole basaltic region dipping towards the land. The limestone of this district is magnesian or lias, which occurs less frequently in other parts of Ireland, and contains nodules of flint imbedded in rude bolders as well as in continuous beds. This region is separated from the granitic by a vein of red sand stone, dividing the counties of Antrim and Derry, being exactly analogous to that of Cheshire, in England.

The mines of Ireland, though known in the very remotest ages, were allowed to slumber in their deep retirement undisturbed, until the late speculative season, so ruinous to other societies, called the mining associations into a more propitious existence. The companies lately formed are, nearly all of them, eminently successful, and shares of the Hibernian Mining Company, which the calamitous fate of so many Joint Stock Companies had reduced to perfect worthlessness, are now at a premium in the London market. The localities of Irish mines, generally, are analogous to those in the neighbouring island of Great Britain, being placed mostly at the junction or rather separation of two different

geological regions; and, with the exception of those contained in the Sliebh Bloom, and Galtee regions, are all found to be at convenient distances from the sea coast; a circumstance of paramount importance, not only as regards the exportation of ore, but also with respect to the importation of fuel. The mining company of Ireland have collieries at work in Roscommon; at Sliebhardagh in Tipperary, and at Surgabucy in Tyrone, at the latter of which there is always a good store bank for the supply of the vicinity. The same company are working the rich and valuable Audley *copper* Mines in Cork county, and a second vein of copper in the county of Waterford. At Bally Corus in the county of Dublin, the company are now applying their machinery to rolling lead and making pipes; having a smelting house at that place, and finding some difficulty of disposing of lead in pigs, with sufficient despatch.

In the royalty of Glendalough, in the county of Wicklow, belonging to the archbishop of Dublin, are two veins of rich *lead* ore, at one of which, the Hero mine, lead is raised at an expense of £1 5*s*. per ton, and within twelve fathoms two parallel veins have been this year (1827) discovered, equally rich, and capable of profiting so much by the adits now forming, that they can be unwatered at a very trifling and light expense; the produce of this mine affords an average of two tons per fathom. The same company have a profitable lead mine at Kildrun, in the county of Donegal, where galena is raised in great quantities, yielding an average produce of one ton and a quarter per fathom; large shipments from this mine are annually sent to the London market, where it merits a preference. The *slate* quarries at Killaloe in the county of Tipperary, so conveniently situated for water carriage by the Shannon and by two great canals, are composed of very superior metal, resembling that worked in the quarries of Llanberris in North Wales. The baneful spirit of combination, which made its appearance at these works, rendered their suspension necessary for awhile, but they are again resumed, and must, if prudently and skilfully conducted, be successful. The shipments of the company in the month of August 1827 were, 240 tons of copper ore, 260 tons of lead ore, producing seventy-five per cent. of lead with 600 pigs of lead, independent of their Irish sales.

The Hibernian Mining Company are not less successful. Their copper mine at Ross Island, on the beautiful lakes of Killarney, yields a produce of 100 tons of ore per month; this mine, formerly worked by the Danes (as is evident from the discovery of the stone hammers, and other rude mining implements belonging to that people, constantly found on the island), was abandoned, from the great difficulty of freeing it from water; but the application of the steam engine, and the very great ingenuity of the superintendant engineer Mr. Weaver, an experienced practical miner, have overcome these obstacles, and obtained the singularly abundant produce already mentioned. To this company also belongs the *slate* quarry at Valentia Island, in the county of Kerry, which is at full work, the slates raised there finding immediate sale in the adjacent country. At Killery harbour is a good slate quarry, admirably placed for exportation. There is but one mine of *antimony*, as yet, worked in Ireland, that is, at Tullybuck in the county of Monaghan; and at Inveran Castle, in the county of Galway, occurs the only vein of *molybdenu*, hitherto discovered in this kingdom. At the copper mines of Beerhaven are ten great contemporaneous veins of copper, sixty-six feet broad, in a matrix of quartz; and so rapidly is the ore raised, in bunches, as it is always found, that the mere breaking of it occupies upwards of 500 hands. The famous silver mines of Tipperary still remain neglected: they were clumsily wrought in the reign of queen Anne, by lord Abercorn's agent, Mr. Hamilton. The working would certainly be attended with difficulty, the matrix being iron ochre, and the vein very irregular: the works were never extended farther than eighteen fathoms. In Croghan Kinshelagh, in the county of Wicklow, alluvial gold was found, and stream works erected on the Ballinvally rivulet, when 2666 ounces of pure gold were gathered, worth about £10,000: but, after a scientific test and careful analysis of the contents of the mountain mass, the Wicklow gold mines were abandoned by government, in whose hands they had been for two years. The mines of Ireland appeared to deserve this notice here, because hitherto no geological chart, or mineralogical essay upon the construction and internal contents of that country, has been published.

The *waste lands* of Ireland attracted the attention of the Irish parliament in 1715, when an act was passed to render the rivers of this kingdom navigable, thirty-two of which had been surveyed with a view to that object. In 1726 a bill enabled the bishops to lease bogs for sixty years; and in 1732 was passed the barren land act, empowering the court of chancery to issue commissions for ascertaining the interests of persons claiming portions of these lands, and for obliging them to contribute to the drainage thereof, in proportion to such their interest, with this stipulation, that no greater sum than £10 should be levied in one year upon any proprietor. In 1742 the Dublin society applied part of their funds to further the reclamation of bogs, and continued their useful exertions for thirty-three years; and in 1743 pecuniary and honorary rewards were awarded for the reclamation of 760 acres of bog in Queen's county Westmeath, Tipperary, and Limerick, and much land was brought under tillage, at the same time, for which no premium was sought. The extent of bog in Ireland is calculated at nearly 3,000,000 of English acres, one half the flat red bog, convertible to the general purposes of agriculture, the remainder mountain land, covered by a thin peat, convertible to pasture, or applicable to the growth of timber. These returns were made by commissioners appointed, in the year 1809, to enquire into the nature and extent of the bogs in Ireland; but their report does not embrace all the bog and waste land in the kingdom. Numerous advantages would result to the public, from the reclamation of the Irish bogs, such as an improvement of climate, increase of public wealth,

employment for a dense and starving population, besides obvious and considerable individual benefit to the proprietors. In addition to the bog returned in 1812 as unprofitable, there are about 300,000 acres covered by the expansions of lakes and rivers, arising from obstructions both natural and artificial, which are daily accumulating: if these bogs and flooded lands were rendered available to agriculture, by reclamation, Ireland would yield about £10,000,000 worth per annum of additional agricultural produce to be disposed of, being nearly the amount yearly expended by England (exclusive of what she now pays to Ireland), upon agricultural importations from foreign countries. Hence it follows, that a market is already provided for this greatly increased product, without in the least deteriorating the present value of arable land.

The Irish red bog consists of a porous, spongy, undulating moss, generated by the capillary attraction of aquatic plants, resting on retentive argillaceous strata called lacklea; impervious to water and favorable to the growth of aquatic plants. The general plan recommended for the reclamation of the Irish bogs, and recovery of flooded lands, is to deepen and widen the bog-streams, and also to deepen, widen, and render navigable, the rivers into which those streams fall; for lowering the beds of the rivers would not only drain the great expansions of lakes and large rivers, but withdraw the water from the bogs also, which bogs have actually been created by the obstructions to the discharge of their superfluous waters. Many of the rivers in Ireland now roll in beds twenty feet above their ancient channels, nor has this change been noticed, because the peaty soil upon their banks has risen pari passu. To reclaim the red bog, then, either the bog-stream must be deepened, or a water-course cut of a depth sufficient for the purpose: but this would be useless if the beds of the rivers were previously restored to their former levels. In confirmation of the fact, that the beds of the rivers have risen, the following well authenticated cases may be quoted. The bed of the Inny, in the county of Longford, was ascertained to have risen precisely three feet within the last forty years. At Moninea, in Roscommon, it was fully ascertained that the bed of the bog-stream had risen twenty feet in 120 years, but that did not attract observation, because the elevation of the bog surface was in a like ratio with that of the river's bed. The river Banow also exhibits an irregularity not less remarkable, having altered its course, deserted its ancient channel, and wandered to a distance of three miles from its original bed: and, by another aberration, part of this river has migrated from the county through which it passed in the fifteenth century. The bottoms of many rivers have been proved, by boring, to be superinduced over earlier beds of a totally different formation. A very singular and equally satisfactory case is that of the river Liffey in the city of Dublin. In 1816, in sinking for a foundation for Whitworth Bridge, coins, boats, and various articles, supposed to belong to the early part of the fifteenth century, were discovered at a depth of ten feet below the present bed of the river.

From the same cause, viz. river obstructions, the lakes in Ireland are rising above their ancient levels, and inundating the adjacent country. In the vicinity of Lough Neagh 10,000 acres of land are flooded for nine months in each year, exclusive of which 60,000 are under bog and waste. Lough Mask now stands fifty feet above the level of Galway town, and the inhabitants are only protected against its annual threats of inundation, by a great dyke or embankment. The obstructions in this case are, it is true, partly artificial, arising from mill-dams: but thus, not only are the inhabitants of a large town held in continual peril, but 100,000 acres of rich land are totally sacrificed, and an inland navigation of 200 miles completely destroyed. On the banks of the river Boyne there are 4000 acres of land under water for six months in each year; and in the Barrow district there are 7500; while the river Blackwater in the south, which is now only navigable to Capoquin, lord Orrery mentions to have been navigable as far as Mallow, forty miles, in his younger days. Enough has now been said to prove the fact, that bogs have originated from river obstructions: that the quantity of flooded land which is estimated as equal to one-tenth of the bog land, is increasing and must continue to do so until channels shall be cut to withdraw the superfluous water; and that, by lowering the beds of the principal rivers, these great evils would be materially mitigated. This then, our first position, being established, the detail of reclamation is but brief in theory. Drainage can be effected either by cutting a deep trench in the bog, or, in preference, by deepening the bog stream. The masses of matter raised, in cleansing the bottom, will be found in many cases to be the most valuable manure for the reclamation of the bog surface, the central bogs of Ireland flowing over soft calcareous bottoms. But to effect this the levels of the adjacent rivers must be lowered, by which depression it is an acknowledged fact that many of them, such as the Inny, the Brusna, and others, would then be rendered important lines of inland navigation. Besides drainage, gravelling is recommended; but this and other directions are of minor importance in a view such as the present is intended to be, being more properly practical considerations. Where bog streams cannot be made available, deep canals should be cut, which may sometimes repay the expense of constructing by the sale of the fuel so raised. The town of Pappinheim, in Germany, was built by the sale of turf raised in cutting a canal from a noisome bog to the river Ems, and now exists by that trade.

For the accomplishment of so desirable an end, one which a century ago engaged the attention of parliament, great means it is true will be required. The legislation have done much already to foward that end, by the survey of the bogs presented to the public in 1812; what remains for them now to accomplish is the public measure already alluded to, viz. of rendering the great rivers of Ireland navigable, by deepening and widening their channels, thereby enabling private speculation and joint companies to carry their bog streams to a sufficient depth for the dis-

charge of all superfluous water. How far the Board of Inland Navigation, with considerable powers and funds at their control, might facilitate the object, it is not so easy to conclude: but surely when there is a fair prospect of converting 2,000,000 of unemployed, and therefore dissatisfied persons, into industrious subjects—of retaining in England, or, what is preferable, transferring to Ireland, £9,000,000 sterling, now expended among strangers in foreign climates, upon corn, hemp, flax, rape, rye, and wool, all necessary for the manufacture and consumption of England, and when produce to this amount in value, could be raised upon the bog and waste lands of Ireland; when such consequences appear likely to result, the legislature should at least stand the hazard of the die.

Rivers.—There are but few rivers in Ireland navigable to any extent: the principal is the Shannon, which nearly divides Connaught from the rest of Ireland. This noble body of water takes its rise from a spring at the foot of Culbagh Mountain in the county of Cavan, 275 feet above sea level. From this well, which is twenty feet in diameter and of great depth, a considerable volume of water descends, by a fall of 115 feet, to Lough Allen in the county of Leitrim, whence, in a distance of 250 miles, its descent is only 160 feet. In the lengthened course of this sluggish river it expands itself into several large lakes, the principal of which, Lough Ree and Lough Davy, vary from two to six miles in breadth, and, until the introduction of the steam boats for towing, their navigation was rather dangerous and extremely tedious. The navigation of this river is now completed by adjutory cuts in various places, and it is now rendered a source of improvement to the interior of the kingdom, affords a safe and sufficiently expeditious mode of communication, and engenders a spirit of commerce amongst the dense population inhabiting its banks. The Bann, the Boyne, the Lee, the Glaney, the Blackwater, Inny, Brusna, and others, are only navigable for short distances, but are capable of improvement by the means already suggested. The Suire at Waterford is a noble river, and navigable by large boats up to Clonmel. The Nore pours along a great body of water; but its rapidity, and sudden swell and subsidence, have hitherto resisted all attempts at confinement or government. The Liffey, on which Dublin is seated, is only navigable to a distance of one mile from its embouchure: at high water boats pass up two miles farther, but, as it is not connected at that point with any other navigation, this capability is of no advantage.

Canals, and Inland Navigation.—Great facilities for inland navigation, exist in Ireland. The chief canals that have been completed are the *Grand* and *Royal* Canals, both originating in Dublin, the one at the north the other at the south side of the city, and both terminating in the river Shannon; the one at Tarmonbury in Longford, the other at Banagher in King's County. The length of the main trunk of the Grand Canal from Dublin to Banagher is eighty-seven English miles, but it throws out several branches at Lowtown, near the nineteenth lock, a branch of twenty-seven miles extends to Athy, passing Rathangan, Monasterevan and Vicarstown. There is also a branch of one mile at Edenderry. The summit level of the great trunk is 264 feet above sea level, and 160 above the Shannon; its width at bottom is twenty-five feet, and at top forty; its average depth on the sills is five feet, and in the canal six. The summit level of this canal should be lowered sixteen feet, which would save much lockage, and cause a subsidence in the bog country, from the deep cutting necessary to accomplish this depression. The Royal Canal, from Dublin to Tarmonbury, extends eighty-six English miles and a half, ascending to an elevation of 307 feet above the sea level, and 191 above the Shannon. There are likewise several branches issuing from the main trunk, one from the Broad-stone near Dublin, others to Trim, Kell, Castletown, Deloin, &c. The average depth of water in the Royal Canal is six feet, the width at bottom being twenty-four, and at the surface forty-four. On these great works £2,500,000 of public and private money have been expended, and that they have not realised expectation is attributable to the inactivity of the proprietors of bog land, in the various counties through which this navigation passes, not less than 300,000 acres of waste land lying wholly unproductive, on the banks and in the vicinity of these noble canals, though the navigation has been complete above half a century. Many minor branches of inland navigation, besides those mentioned, are either completed or in progress. The *Barrow* and *Boyne* navigation (the latter of which would multiply its revenue ten fold, if the harbour and river of Drogheda were improved, see Drogheda), have long been in full operation. A new branch from the Grand Canal, between Monasterevan and Mountmellick will be opened in the course of the next year (1828). A useful line is also in progress from Shannon Harbour to Ballinasloe; and a cut of four miles in length, from the town of Longford to the Royal Canal, has been for some time in contemplation.

In the northern counties it has been proposed to open a communication between the great inlets called Lough Foyle and Lough Swilley, an object which could be very readily accomplished and at small expense. A second and more useful line, forty four miles in length, has been contemplated, and the country surveyed and reported on by an eminent engineer, viz. from Derry or Lough Foyle to Ballycassioly or Lough Erne, four miles from the town of Enniskillen in the county of Fermanagh; the lake being navigable, this canal would thereby form a water communication from Derry to Beltuchet on the south-east, and to Belleek, within four miles of Ballyshannon, on the west. In the same province a bold and valuable design in inland navigation has also been recommended, and carries such strong characters of utility along with it, that it cannot long remain unexecuted; that is, the Junction Canal between Lough Neagh and Lough Erne. This line passes through a thickly peopled and manufacturing district, close to the towns of Monaghan, Caledon, Cloves, and Loughall. The length of the entire navigation re-

quired is forty-six miles and a half, and the number of locks necessary amounts to twenty-two in the distance, i. e. from Wattle Bridge to Portadown. This admirably chosen line is to be called the Ulster Canal, and the expense of its construction is estimated at £147,738 sterling. For the furtherance of this object the exchequer bill loan commissioners have appropriated £100,000, and many great land holders in Ulster have subscribed to the undertaking. There are, in the same province, the Newry and the Lagan navigations, both important lines, but both much in want of improvement.

There is one more project, which is of such magnitude, and of such obvious utility, connected more properly with the inland navigation of Great Britain, which has lately been suggested, and to which it is supposed the legislature is decidedly favorable; this is the plan of uniting Galway Bay with Kingstown asylum in Dublin Bay, by a great trunk, which the projectors are anxious to have honored with the title of The Royal Ship Canal. The advantages of this design to England would be an abridgment of one-third in the duration of the voyage from America and the West Indies, while the tedious and perilous voyage of the Channel would be avoided. If this great plan be considered in conjunction with the similar projects of England, of ship canals from Bristol to the British Channel, and from Portsmouth to London, it must be acknowledged the noblest succession of inland navigation in the world; a plan which, from the introduction of steam navigation, would render the intercourse between the old and new worlds proportionately as expeditious and just as secure as that now established between town and town in England. The vein of country between Dublin and Galway is peculiarly calculated to facilitate this undertaking. The distance is 133 miles, ninety of which are already cut through by a boat canal from Dublin to Ballinasloe; forty feet wide at the surface. All the central region of Ireland, through which the proposed canal should pass, is nearly a champaign country, the highest level being only 270 feet above the sea; and, by deep cutting, this level could be most readily lowered, whereby nearly 500,000 acres of bog would be effectually drained, and the produce rapidly conveyed to the English market. Whatever funds, subscriptions, or parliamentary grants may afford, would be returned with more certainty, expedition, and profit, than any other improvement, deriving its revenue solely from Ireland, could possibly be expected to do.

Harbours.—Few countries in Europe possess either a greater number or more safe and extensive asylums for shipping than Ireland. The harbours on its western and southern coasts have long been proverbial for depth of water, capacity for anchorage, shelter against weather, and facility of ingress and egress. The most remarkable are upon the coast of Connaught, one of which, the *Killeries*, stretches nine miles inland, is but five furlongs broad in the widest, and sixty perches in the narrowest parts, having water to float a first rate man of war at all times of tide. By a reference to M'Kenzie's Chart (the only general one of the Irish coast yet in existence) the capabilities of the Connaught Harbours, may be readily seen; but by an inspection of Mr. Ninno's beautiful charts, executed for the Fishery Board, a still more correct idea may be formed of them. M'Kenzie's charts are in many points extremely erroneous; two remarkable instances may be here mentioned: first, they represent Strangford, on the east of Ireland, as a Bar-Harbour, with twelve feet water, while no such thing exists; on the contrary there is a depth of thirty feet across; secondly, the Burford Bank, in Dublin Bay, is totally omitted. If, however, the exertions of the Fishery Board be continued, the naval world will soon be furnished with faithful and correct charts of the Irish coast, which, as specimens of the excellence to which the hydrographic art has been carried, are extremely interesting and honorable to the age. *Bantry Bay* is one of the noblest basins in the world, capable of containing the shipping of Great Britain. *Cove*, the harbour of Cork, is completely land-locked; has deep water at all times, and safe anchorage; nor is it interrupted by any bar or other impediment. Its position as a naval station was acknowledged and experienced during the late French war.

To the swelling tide of the Atlantic the west of Ireland is indebted for her bold and beautiful shores, as well as for her deep-water harbours; the west winds, which blow for nine months in the year, continually rolling in a sea which washes away the alluvial matter, and deepens the rocky basins in its retreat. The heavy sea on this coast appears to have hitherto rendered the western harbours less inviting to the mariner than the dangerous shallows and exposed harbours on the coast opposed to England. Even from this objection, though it is not a substantial one, the harbour of Cove is exempt. The eastern coast possesses but few safe natural asylums for shipping. At Dunmore, near Waterford, a pier is erected, and a packet station established (see Dunmore); at Courtoun, midway between Dublin and Waterford, a small harbour has been constructed; and an extensive asylum of 226 acres has been enclosed at Kingstown near Dublin. Other harbours of less consequence have been formed along this line of coast, mostly under the direction of the Fishery Board, who have already given sixty asylums to the boats engaged in fishing, some of them capable of floating vessels of large burden. The north-east coast is still a cheerless prospect to the navigator of the dangerous and rapid-flowing sea between Scotland and Ireland; nor would the construction of useful harbours on this litorale be a work of moderate difficulty or expense.

Fisheries.—Connected with the harbours of Ireland are its fisheries. This profitable and desirable mode of occupation attracted the attention, and has been favored by the protection, of the legislature, since the year 1819, when the Fishery Board held its first meeting in Dublin. For the better regulation of their works they divided the whole coast into fourteen districts, and appointed local inspectors. The engineer, who was appointed by the lord-lieutenant, has already surveyed the greater part of the coast, and

his valuable reports and charts are now before the public.

To this board is due the merit of giving permanent employment to about 100,000 hands, whose labors support about 400,000 dependents. Besides the erection of piers, formation of harbours, building of breakwaters, &c., this Board have opened new lines of road through the kingdom, the primary object of which was to open the markets to the fishermen on the sea-side: but in this advantage the population generally have also participated. Schools connected with the Board, for the manufacture of nets, building of boats, and where navigation, upon popular principles, might be taught, would possibly be a great auxiliary to the agricultural and horticultural seminaries already mentioned.

Road-Making, Railways, &c.—Besides the encouragement of the fisheries as a means of support, an article of export for English consumption, a source of wealth and employment to the impoverished inhabitants of the coasts, and a nursery for the British navy, whenever their services may be required, there are other and equally important objects claiming public attention, as ministering to the amelioration of the condition of the Irish peasantry. Road-making has been introduced with much advantage: it affords present employment, opens districts before secluded from the world, admits and occasions intercourse, and renders the market accessible to the farmer of the former desolate region. The employment of a few able civil engineers, for some years back, has accomplished much in this way. In Connaught, where roads have been opened through districts thirty miles in length, where no wheeled vehicle had ever been seen, where no communication by post existed, and where it is wonderful the name of England continued to be known, this has more particularly occurred. Towns and villages have suddenly arisen, commerce has raised her drooping banners from the harbours of Connemara; and the town of Clifden, since its birth, just four short years ago, now carries on a direct commercial intercourse with Liverpool. Perhaps there is no part of Ireland in a more rapidly progressive state of improvement than the province of Connaught, all which is attributable to the opening of its recesses by the construction of roads.

The remote parts of Cork and Kerry, unknown until the operations of the Bog Commissioners introduced their engineers to a knowledge of their importance and value, are now thrown open; new and improved lines of road are constructed from Tralee to Dingle, to Cahirzeveen and Valentia, to Kenmare by the lakes of Killarney, and from Bantry to Bear Haven and Island, which places are the most westerly points of land in Ireland, serving as useful land-marks to the mariner, but hardly known as the haunts of man. Since the employment of civil engineers the Irish roads have improved more rapidly than those in England; for the great abundance of the best materials renders the task more easy and less expensive to perform; then the skill of the engineer was the only thing required, to select the most judicious line, and to direct the disposition of the materials. The introduction of rail-ways into Ireland has been but of slow operation; the extent of her manufactures not demanding their adoption. In one line of country, however, a considerable commercial intercourse, now conducted by a circuitous and difficult navigation, might be advantageously and profitably carried on by this mode of transportation. For this purpose a rail-way is proposed to connect Limerick and Waterford, two of the most prosperous trading towns in Ireland, extensively occupied in the provision trade. The length of the principal line is seventy-six miles, having an ascent to its summit level of 279 feet eight inches; and the estimated expense is £165,000. Collateral branches are also intended to Cashel, Killenaule, and Thurles. Funds, to the amount of £45,000, have already been advanced by government, to assist this great provincial undertaking.

A second rail-way has been suggested, but not of equal length, though likely to yield a high rate of interest to subscribers; this line is to run from Mallow to Cork. In speaking of the present state of Ireland, although it may appear that existing institutions only should be described, yet would it not be unfair to pass by those which, now in embryo, will speedily start into life, and whose infancy will require some fostering care? Such are the Ulster Canal, The Royal Ship Canal, and Waterford Railway; and such also is the proposed Valentia Steam-Navigation Company. There is in the south-west of Ireland an island, called by a Spanish name Valentia, so attractive by the commodious harbour and safe lying between it and the mainland, for 'Insula efficit portum,' in a channel but half a mile wide, that Oliver Cromwell erected forts at each end of the channel, duly estimating the security within; and, in queen Anne's wars, the French privateers, no incompetent judges, selected this channel as their safe retreat. The American and Colonial Steam Navigation Company contemplate establishing a packet station here, to communicate, by regular monthly voyages, with Nova Scotia; the passage could be made, with tolerable certainty, in one fortnight, and coals could be stored at Valentia, while an ample supply exists on the American side. For the furtherance of the objects of this company two acts of parliament have already been obtained.

The Irish Church.—Church property, in Ireland, appears unequally and injuriously disposed: its better arrangement should be made the subject of serious consideration. Church property should be, at least, as sacred as any other; therefore it is not meant that the quantity should be infringed upon; but, if its present partition be injurious to the interests of the church, and not beneficial to the condition of society, and the improvement of the country generally, another disposition should be made. As to the collection of tithes, the cause of so many unhappy disturbances, Mr. Goulbourn's bill, like the wand of the Irish Saint, has banished the serpent from the land. The tithe proctor is now almost unknown; deeds of blood have been succeeded by a friendly intercourse between the

pastor and his parish; and the plough of the husbandman goes prosperously and peacefully forward. Of about 2500 parishes, 1000 had compounded for their tithes in September 1827, and others were in progress of composition (a sufficiently convincing proof of the utility of the bill); and perhaps the returning appearance of tranquillity to the disturbed counties at the same period may not be altogether disconnected with its operation. When disproportionate arrangements of church property are mentioned, parochial glebe or property alone is alluded to. In the four dioceses of Fuam, Killalla, Elphin, and Clonfort, that is, in the whole province of Connaught, parochial glebe does not amount to 2000 acres; and, in the province of Munster, it amounts only to 7000: while, in Ulster, the quantity of parochial glebe is not less than 72,000 acres. Now the system at present adopted by the heads of the church, and one which cannot be too highly applauded, is to sever the different unions of parishes, upon their vacations by death or preferment; but, the question naturally suggests itself, how are the incumbents of the different members into which the union has been separated to be provided for? perhaps the following suggestions may lead to a satisfactory answer.

Much of the rectorial tithes is now in the hands of laymen, of bishops, and of other church dignitaries. Many of the laymen contribute nothing whatever to the support of the parochial clergy; many more grant a miserable stipend; while the churchmen allow only the sum enforced by the law; although a case has lately occurred in which a learned dignitary, upon his elevation to a mitre, voluntarily raised the salaries of the curates, vicars, &c., of those parishes, the rectorial tithes of which were in his own possession. As to the lay proprietors, it is but reasonable that they be compelled to allow a salary, at least equal to that which the clerical ruler is obliged by law to grant, for the performance of the duty of his parish: whereas we find in many cases no allowance whatever made to the vicar; and one case, laid before the public in 1810, and not noticed since, states that the lay lord formerly allowed £4 per annum, out of his rectorial tithes, for the performance of his parochial duties, but had then withdrawn even that sum. In many dioceses a great proportion of the episcopal income is derived from tithes; but, in this case, the remedy is suggested, and has been applied by the learned and liberal dignitary mentioned above, whose example, no doubt, will instruct his brethren.

Thus the church establishment appears capable of much improvement, at the same time that any additional burden for its support can be totally avoided by the partial restoration of the rectorial tithes to the parochial clergy, which can be made without the least private grievance, or injustice. Nor is precedent wanted for such a step: on 28th May, 1824, amongst other matters, parliament resolved that the rectorial tithes then vested in the chancellor, archdeacon, and precentor, of the chapter of Connor (in the county of Antrim), should, on the decease of the incumbent dignitaries, be re-annexed and restored to the vicarages, or vicarial parishes, to which they formerly belonged. In this way then it is possible, that, upon the dissolution of the great church unions, and erection of new churches, adequate support might be provided for the curates and vicars of the subdivisions.

In fine, then, the natural soil of Ireland is abundantly rich, the internal mineral wealth is considerable, the population great, and the climate healthy. The arable land yields its fair proportion to the support of the population, and of legal institutions:—and the landed proprietors of the bogs and waste lands are the principal persons, in whose power it lies to give immediate and permanent employment to the peasantry, in the reclamation and subsequent cultivation of the bogs, whereby, possibly, poor rates may be avoided.

The mines are now beginning to repay the subscribers, and give constant occupation to thousands. And although the coal mines of England have always given her a manufacturing advantage, particularly since the introduction of steam, yet even in this point Ireland possesses an equivalent in the great power of her rivers: the daily waste of water power at one fall, on the river Shannon, being equal to the sum of the united powers of all the steam engines in England; i. e. to the power of about 300,000 horses: and, the fall of Lough Erne, at Belleek, being equal to half that quantity. Such extensive tracts of land, amounting in flooded, waste, and bog lands, to 5,000,000;—such powers as those of the Irish rivers, exceeding that of all the machinery in Europe, cannot remain much longer inactive;—and such a population as the Irish cannot continue without exertion. Certainly the employment of the peasantry, at home, should be attempted, by the legislature, previously to the establishment of any systematic plan of emigration; for,

'A bold peasantry, their country's pride,
If once destroyed, can never be supplied.'

Ireland, New, a long narrow island of the eastern seas, first visited by Carteret, who discovered its separation from New Britain by a channel, named by him St. George. Sailing along the south coast, for eighty leagues, he observed it to be in general elevated. His Gower Harbour is the port Praslin of Bougainville, where the latter navigator discovered the pepper plant. Near Carteret Harbour Labillardière observed mountains partly composed of marine substances, and one of whose inland summits has an elevation of 8000 feet. Here were met the enormous bat named vespertilio vampyrus, and the bread-fruit tree; and on Cocoa-nut Island of Carteret, which forms the harbour, and which is a mass of calcareous rock, were found the borringtonia speciosa; the pandanus, a species of areca palm, 140 feet high, with a very slender stem; a very large species of solanum; the teak; and several gum-trees. The sago palm and bastard nutmeg were also noticed on the shores of this harbour.

The natives are Papuas, who go entirely naked, smearing their faces, and powdering their heads with white clay: their ornaments are strings of shells and teeth; their arms bows and arrows, spears, clubs, and shields; their huts have only an opening to crawl in on their hands and knees. Their canoes, however, are neatly formed of a single tree, sometimes ninety feet long, and furnished with outriggers.

IRELAND (John), a modern writer on works of art, was a native of Shropshire, and originally a watch-maker in the metropolis. Here he became a print and picture-dealer. He died at or near Birmingham in 1808. His publications are, The Emigrant, a poem, 1785, 4to.; Letters and Poems, by John Henderson, with Anecdotes of his Life, 1786, 8vo.; and Hogarth illustrated, 1791, 3 vols. 8vo.

IRELAND (Samuel), a silk-manufacturer in Spitalfields, became a speculator in scarce books, prints, &c., and published a multitude of picturesque tours, in England and on the Continent, embellished with aquatint engravings; but his chief claim to notice arises from his bringing forward the publication entitled Miscellaneous Papers and Legal Instruments, under the hand and seal of William Shakspeare, including the Tragedy of King Lear, and a small fragment of Hamlet, from the original MSS. London, 1796, folio. Of a wilful share in this experiment on the credulity of the public he was acquitted, by the declaration of the acknowledged forger of these papers, his son, in an Authentic Account of the Shakspeare MSS., which appeared in 1796, 8vo.; and in a subsequent account of the fabrication of the MSS., published under the title of Confessions, in 1805, 8vo. Samuel Ireland died in 1800.

IRENÆUS (St.), bishop of Lyons, was born in Greece about A. D. 120. He was the disciple of Papias and St. Polycarp, by whom, it is said, he was sent into Gaul in 157. He stopped at Lyons, where he performed the office of a priest; and in 178 was sent to Rome, where he disputed with Valentinus, and his two disciples Florinus and Blastus. On his return to Lyons he succeeded Photinus, bishop of that city; and suffered martyrdom in 202, under Severus. He wrote many works in Greek, of which there remains only a barbarous Latin version of his five books against heretics, some Greek fragments in different authors, and Pope Victor's letter mentioned by Eusebius. The best editions of his works are those of Erasmus, in 1526; of Grabe, in 1702; and of F. Massuet, in 1710. St. Irenæus's style is close, clear, and strong, but plain and simple. Dodwell wrote six curious dissertations on the works of St. Irenæus.

IRENÆUS (St.), a deacon, who, in 275, suffered martyrdom in Tuscany, under the reign of Aurelian.

IRENÆUS (St.), bishop of Sirmich, suffered martyrdom on the 25th of March 304, during the persecution of Dioclesian and Maximanus.

IRESINE, in botany, a genus of the pentandria order, and diœcia class of plants; natural order fifty-fourth, miscellaneæ. Male CAL. diphyllous. COR. pentapetalous; nectaria five. Female CAL. diphyllous: COR. pentapetalous; there are two sessile stigmata: CAPS. with flocky seeds. Species one only, a native of the West Indies.

IRIDESCENT, from Iris, Lat., in mineralogy, optics, &c., exhibiting the colors of the rainbow.

IRIDIUM, in chemistry, from ιρις, the rainbow, a name given by Mr. Tennant, to a metallic substance he discovered in the dross of platina, on account of the striking variety of prismatic colors it exhibits while dissolving in muriatic acid. Mr. Tennant, on closely analysing the black powder left after dissolving platina in nitro-muriatic acid, which had been supposed to consist chiefly of plumbago, found it to contain two distinct metals, never before noticed, which he named iridium and osmium. To analyse the black powder, Mr. Tennant put it into a silver crucible, with a large proportion of pure dry soda, and fused the mixture for some time. The alkaline mass being then dissolved in water, it had acquired a deep orange or brownish-yellow color, but much of the powder remained undissolved. This, on being digested in muriatic acid, afforded a dark-blue solution, which afterwards became of a dusky olive-green; and finally, by continuing the heat, of a deep red color. The residuum, being treated as before, with alkali and the acid alternately, the whole appeared capable of solution. As some silex continued to be taken up by the alkali, till the whole of the metal was dissolved, it seems to have been chemically combined with it. The alkaline solution contains oxide of osmium. The acid solution contains both the metals, but chiefly iridium. By slow evaporation it affords an imperfectly crystallised mass; which, being dried on blotting paper, and dissolved in water, gives by evaporation distinct colorless octohedral crystals. The iridium may be obtained pure, by exposing these crystals to heat, which expels the oxygen and muriatic acid. The metal itself is white, and could not be melted by any heat Mr. Tennant could employ. It does not easily combine with sulphur, or with arsenic. Lead unites with it easily, but is separated by cupellation, leaving the iridium on the cupel in the form of a coarse black powder. Copper forms with it a very malleable alloy, which, after cupellation, with the addition of lead, leaves a small proportion of the iridium. Silver forms with it a perfectly malleable compound, the surface of which is merely tarnished by cupellation. Gold remains malleable, and little altered in color, though alloyed with a considerable proportion; nor is it separable either by cupellation or quartation. If the gold or silver be dissolved, the iridium is left as a black powder. The French chemists observe, that this new metal gives a red color to the triple salt of platina and sal ammoniac, is not altered by muriate of tin, and is precipitated of a dark brown by caustic alkali. Vauquelin has succeeded in forming sulphuret of iridium, by heating a mixture of ammonia, muriate of iridium, and sulphur. It is a black powder consisting of 100 iridium + 33·3 sulphur; whence, supposing it a neutral compound, the prime equivalent iridium would be 6·0. In the year 1805 Dr. Wollaston discovered a native ore of iridium,

composed of that metal and osmium alloyed together; it occurs in alluvial soil in South America, in the form of small white grains along with the ore of platinum. It is heavier than crude platinum, having a specific gravity of 19·25, whereas the native ore of platinum has a specific gravity seldom exceeding that of 17·6.

I'RIS, *n. s.* Gr. ιρις. The rainbow; any appearance of light which resembles it; the circle round the pupil of the eye; the fleur-de-lis.

Iris all hues, roses and jessamine. *Milton.*

Beside the solary *iris*, which God shewed unto Noah, there is another lunary, whose efficient is the moon. *Browne.*

When both bows appeared more distinct, I measured the breadth of the interior *iris* 2 gr. 10'; and the breadth of the red, yellow, and green in the exterior *iris*, was to the breadth of the same colours in the interior as three to two. *Newton's Opticks.*

Those who weep not for kings shall weep for thee,
And Freedom's heart, grown heavy, cease to hoard
Her many griefs for one; for she had poured
Her orisons for thee, and o'er thy head
Beheld her *Iris*. *Byron. Childe Harold.*

Iris, in botany, the fleur-de-lis, or flag flower, &c., a genus of the monogynia order, and triandria class of plants, natural order sixth, ensatæ: cor. divided into six parts; the petals alternately reflexed; the stigmata resembling petals. There are fifty-six species, all herbaceous flowering perennials, both of the fibrous, tuberous, and bulbous rooted kinds, producing thick annual stalks from three or four inches to a yard high, terminated by large hexapetalous flowers, having three of the petals reflexed quite back and three erect; most of which are very ornamental, appearing in May, June, and July. All the species are easily propagated by offsets from the roots, which should be planted in September, October, or November, though almost any time from September to March will do. They may also be raised from seed, which is the best method for procuring varieties. It is to be sown in autumn, soon after it ripens, in a bed or border of common earth, and raked in. The plants rise in spring, and are transplanted next autumn. The roots of the Florentine white iris, when dry, are supposed to have a pectoral virtue. They have an agreeable smell, resembling that of violets; and hence are used in perfumes, and in flavoring liqueurs. When recent, they have a bitter, acrid, and nauseous taste; and when taken prove strongly cathartic; on which account they have been recommended in dropsies, in the dose of three or four scruples. The juice of the species called bastard acorus, or yellow flag flower, is also very acrid, and has been found to produce plentiful evacuations from the bowels when other means had failed. For this purpose, it may be given in doses of eighty drops every hour or two; but the degree of its acrimony is so uncertain, that it can hardly ever come into general use. Goats eat the leaves when fresh; but cows, horses, and swine refuse them. Cows will eat them when dry. The roots are used in the island of Jura for dyeing black. The roots or bulbs of a species growing at the Cape are roasted in the ashes, and used as food by the natives: they are called oenkjes, and have nearly the same taste with potatoes. The Hottentots use the word oenkjes in the same sense in which Virgil used aristæ, i. e. for reckoning of time; always beginning the new year whenever the oenkjes push out of the ground, and marking their age and other events by the number of times in which in a certain period this vegetable has made its appearance. The Siberians cure the venereal disease by a decoction of the root of the Iris Siberica, which acts by purging and vomiting. They keep the patient three days in a stove, and place him in a bed of the leaves of the arctium lappa, or common burdock which they frequently change till the cure is effected.

Iris is also applied to those changeable colors which sometimes appear in the glasses of telescopes, microscopes, &c., so called from their similitude to a rainbow. The same appellation is also given to that colored spectrum, which a triangular prismatic glass will project on a wall, when placed at a due angle in the sunbeams.

Iris, in mythology, the daughter of Thaumus and Electra, one of the Oceanides, the goddess of the rainbow, and messenger of Juno, whom she attended. She was supposed to supply the clouds with water, colors, &c.

IRISH Bible. Our article Bible will be found to contain an account of the formation and preservation of the sacred canon. The efforts of piety and benevolence in supplying the sister island of Ireland with the Scriptures, in the vernacular tongue, we have deemed worthy distinct treatment.

Some scattered passages of Scripture in the Irish language are found in those celebrated Irish records (Leabhar Breac and Leabhar Leacan) to which the learned O'Brien often refers in his Irish Dictionary. The style of these fragments is very ancient; but their exact date is unknown. In 1577 Nicholas Walsh, chancellor of St. Patrick's Dublin, was created bishop of Ossory. Soon after his appointment he commenced the translation of the New Testament; and procured the assistance of Nehemiah Donellan, and John Kearney treasurer of St Patrick's. They had made some progress in the work; but the completion of this noble design was prevented by the murder of the bishop in 1585. See *Ware's Irish Bishops of Ossory*.

Fifteen years after W. Daniel (or O'Donnel), fellow of Trinity College, and afterwards archbishop of Tuam, with the help of other learned men, translated the New Testament and the book of common prayer. O'Donnel was particularly qualified for this undertaking by his profound knowledge of the Hebrew, Greek, Latin, and Irish languages. The work was completed and published in 1602, Sir W. Usher (clerk of the council) bearing the expense of printing. See *Vallancy's Collectanea*, vol. iii., and *Ware's Archbishops of Tuam*.

It is only to be regretted that this excellent scholar did not extend his labors to the Old Testament. He seems, unfortunately for Ireland, to have been the only translator who has hitherto attempted to render the Scriptures into the vernacular tongue direct from the inspired originals.

The next laborer in this field was Dr. William Bedell, appointed bishop of Kilmore in 1629. He undertook the arduous task of translating the Old Testament. And, although he understood the Irish language very well, yet, as it was not his native language, he chose for his assistant (by the advice of the primate) one King (who had been converted from the Roman Catholic Religion some years before), ordained him, and gave him a living. King was a good scholar, but did not understand Hebrew (Acta Erud. Leipsic, 1686): and is said to have been the best Irish writer of his time; but bishop Bedell, unwilling to entrust so important a work entirely to the care of one man, tasked himself to read a chapter of the translation every day, comparing it with the English, the Septuagint, the Italian translation of Diodati, and the Hebrew. But neither his learning nor his piety could save bishop Bedell from the malice of his enemies; he was persecuted; King was degraded, fined, and imprisoned; and the translation, which they had finished, lay neglected in MS. for many years. *Burnet's Life of Bedell*, third edition, p. 91—107.

The celebrated Robert Boyle, son of the earl of Cork, first effected the printing of this work. He caused a set of Irish types to be cast, and a printer to be taught the characters and mode of printing in that language. The New Testament was executed at his sole cost: it was published in 1681, and 500 copies given to the poor. He began a subscription for printing the Old Testament, by a donation of £50, and used all his influence to get it completed, which was accomplished in 1685. By what means he procured the MS. may be seen in his letters.

For the use of the Scotch, the Old and New Testaments were printed in the Roman character, and published in 1690. It appears, by comparison, that the editor (R. Kirk) copied Boyle's edition closely; not a single alteration of importance is to be found. Kirk, however, added contents to the chapters, and a short Vocabulary.

Such is the history of the existing translations of the Irish Scriptures.

Early in its career the British and Foreign Bible Society was anxious to extend the benefits of its labors to this benighted part of the empire; and opened a correspondence, upon the subject of reprinting the Irish New Testament, with various intelligent persons in Ireland, from many of whom the proposal met with marked discouragement; the result, however, was that they proceeded to print, in the year 1810, the Irish New Testament in the Roman character, from the edition published under the patronage of Mr. Boyle. The Society having procured a competent Irish scholar to edit the work, it was stereotyped, and six new editions of it have been published, amounting in the whole to 17,000 copies.

In the year 1816 the same Society printed the Irish Bible, from the version of Bishop Bedell, which was also in the Roman character, consisting of 5000 copies.

Subsequently to the publication of the above works, as the number of readers was rapidly increasing in those parts of Ireland where the Irish is currently spoken, the Anglo-Hibernians began to encourage the people to read their native language, and unitedly urged upon the Society the necessity of printing the Scriptures in the ancient Irish character; in consequence of which the New Testament of the same version was stereotyped in that character in the year 1818, and has gone through six editions, amounting in the whole to 25,000 copies.

The British and Foreign Bible Society has also in the press an edition of Bedell's Irish Bible, in the ancient Irish character, consisting of 5000 copies, which is nearly completed, and which it is expected will be much in demand. A Committee of revision has been for some time engaged in carefully examining and correcting it.

The Hibernian Bible Society in Dublin are also printing a pocket edition of the Irish Bible, which is stereotyped. In aid of this work the British and Foreign Bible Society granted to that Society the sum of £300.

IRK', *v. a.*, IRK'SOME, *adj.*, IRK'SOMENESS, *n. s.* } Isl. yrk, work. This word is used only impersonally, it irks me; mihi pæne est, it gives me pain; or, I am weary of it. Thus the authors of the accidence say, tædet, it irketh: irksome, tedious; troublesome: irksomeness, wearisomeness.

Come, shall we go and kill us venison?
And yet it *irks* me the poor dappled fools
Should in their own confines, with forked heads,
Have their round haunches gored. *Shakspeare.*

It *irks* his heart he cannot be revenged. *Id.*

IRKOUTSK, a government of Russia, comprising all the eastern part of Siberia. The empress Catherine gave it the privileges of a state, and divided it into four separate oblasti or districts, Irkoutsk Proper, Nertschink, Yakoutsk, and Okhotsk. The two first comprehend the fertile districts round the lake Baikal, and near the sources of the Lena. Yakoutsk consists chiefly of those vast and frozen plains which extend northwards to the Arctic Ocean. Okhotsk extends along the eastern shore of Asia, and includes Kamschatka, and the Aleutian and Kurile islands. The government of Irkoutsk is thus bounded on the east by the Pacific Ocean, or more properly by its gulf, called the seas of Kamschatka, Okhotsk, and Anadyr; on the north by the Frozen Ocean; on the west by Tobolsk; and on the south by vast chains of mountains, continued from the Altay, under the appellations of the Sayanskie, Yablonoy, and Slanavoy mountains, which separate it from the vast regions of Chinese Tartary. It extends about twenty-eight degrees from east to west, and twenty-five from north to south, and comprises 126,460 square geographical miles. The only large river is the Lena, which traverses it in its whole extent from north to south. The Olonek, the Indigirka, and the Kovyma, are rivers which fall into the Icy Sea.

A considerable proportion of the inhabitants are Russians and Cossacs, who are colonists, or merchants, or employed in the military and civil service. In the southern parts are several Mongol tribes. Of the natives, the most numer-

ous ar. the Tunguses, who are divided into pastoral, h anting, and fishing tribes.

The Aleutian and Kurile islands have races peculiar to themselves. The expenses of the civil government of this territory amount to 275,000 rubles, besides 7200 which are spent in maintaining the intercourse with China. There is an archbishop of Irkoutsk; and in the government 101 churches, and ten convents. Inhabitants about 400,000.

IRKOUTSK Proper (the circle or district of), has the Baikal Sea and the Mongolian Mountains on the east and south, the province of Tobolsk on the west and north. It is nearly encircled by mountains, and the land low and swampy. A great part of it, however, is extremely fertile, and fit for all the purposes of agriculture. It is traversed by numerous rivers, the Angara, the Oka, the Irkut, the Hun, and others, which flow from the Baikal and the surrounding mountains The country is subject to earthquakes.

IRKOUTSK, a city of Russia, the capital of the above government, is situated on the right bank of the Angara. Of 1500 houses, it has only two of stone, the rest being of wood: the streets are unpaved. It contains two cloisters and thirty-three churches. Here is a seminary, a popular school, and since 1762 a school for the Japanese language and for navigation: also an hospital for the small-pox. Irkoutsk possesses great commercial importance, from its being the centre of the trade between Russia and China. It appears half a Chinese Town. Population 13,000. Long. 103° 30′ E., lat. 52° 16′ 41″ N.

IRON.

I'RON, *n. s., adj.* & *v. a.*
I'RONMONGER, *n. s.*
I'RON-WOOD, *n. s.*
I'RON-WORT, *n. s.*
I'RONY, *adj.*
Sax. iren; Fr. *fer*; Lat. *ferrum*; Span. *hierro*. A metal common to all parts of the world; considerably the hardest, and, except tin, the lightest, and when pure naturally mall able. See below. An instrument made of iron, as a flat iron, box iron, smoothing iron; in this sense it has a plural: a chain; a manacle; as, he was put in irons: iron, made of iron; resembling iron: figuratively, harsh; severe; rigid; miserable; calamitous: as, the iron age, for an age of hardship and wickedness. These ideas may be found more or less in all the following examples. Indissoluble; impenetrable; iron, to smooth with an iron, or to shackle with irons: ironmonger, one who deals in iron articles: ironwood, a kind of wood extremely hard, and so ponderous as to sink in water. It grows in America.—*Robinson Crusoe*. Irony, made of or partaking of iron.

If he smite him with an instrument of *iron*, so that he die, he is a murderer. *Numbers* xxxv. 16.

Can't thou fill his skin with barbed *irons*, or his head with fishspears? *Job* xli. 7.

His feet they hurt with fetters: he was laid in *irons*. *Psalms*.

This noble ensample to his shepe he yof,—
That first, he wrought; and, afterward, he taught,
Out of the gospel he the wordes caught,
And this figure he added yet thereto,
That if golde ruste, what shuld *iren* do?
For if a preest be foule, on whom we trust,
No wonder is a lewed man to rust.
Chaucer. Prologue to Canterbury Tales.

I will converse with *iron* witted fools,
And unrespective boys: none are for me,
That look into me with considerate eyes.
Shakspeare.

In *iron* walls they deemed me not secure. *Id.*

The force they are under is real, and that of their fate but imaginary: it is not strange if the *irony* chains have more solidity that the contemplative.
Hammond's Fundamentals.

O sad virgin, that thy power
Might bid the soul of Orpheus sing
Such notes as warbled to the string,
Drew *iron* tears from Pluto's cheek,
And made hell grant what love did seek. *Milton.*

The power of drawing *iron* is one of the ideas of a loadstone, and to be so drawn is a part of that of *iron*. *Locke.*

Rash Elpenor, in an evil hour,
Dryed an immeasurable bowl, and thought
T' exhale his surfeit by irriguous sleep,
Imprudent; him death's *iron* sleep opprest.
Phillips.

In all my *iron* years of wars and dangers,
From blooming youth down to decaying age,
My fame ne'er knew a stain of dishonour.
Rowe.

Some springs of Hungary, highly impregnated with vitriolic salts, dissolve the body of one metal, suppose *iron*, put into the spring; and deposit, in lieu of the *irony* particles carried off, coppery particles. *Woodward on Fossils.*

Some of them are of an *iron* red, and very bright. *Id.*

A piece of stone of a dark *iron* grey colour, but in some parts of a ferruginous colour. *Woodward.*

In a piece of *iron* ore, of a ferruginous colour, are several thin plates, placed parallel to each other. *Id.*

Jove crush the nations with an *iron* rod,
And every monarch be the scourge of God.
Pope.

Till at death's toll, whose restless *iron* tongue
Calls daily for his millions at a meal,
Starting, I woke, and found myself undone.
Young's Night Thoughts.

These limbs
Will yield with age to crushing *iron*; but
There's that within my heart shall strain your engines. *Byron.*

IRON, in chemistry and mineralogy, is the most abundant as well as the most useful of the metals. It is very generally diffused throughout the globe, being found mixed with all kinds of sand, clay, chalk, or stone, in the ashes of vegetables, and the blood of animals. Its color is a livid white, approaching to gray, and when broken it appears to be composed of small facets. It is susceptible of a very fine polish, and next to platina of all metals the most difficult of fusion. In some states it is superior both in elasticity and hardness to all other metals, and it has the additional advantage of suffering this hardness to be increased or diminished at

pleasure by certain chemical processes. Its tenacity is greater than that of any other metal, except gold: an iron wire, the tenth part of an inch in diameter, has been found capable of sustaining more than 500 lbs. without breaking. Its ductility is such as to allow it to be drawn into wire as fine as hair. But these and other properties of this metal vary with the method of preparing it, the ore from which it is obtained, and the degree of purity to which it is brought.

In this article, however, it is our intention to confine ourselves to the mineralogical and chemical properties of this metal; under the title IRON MANUFACTURE giving a description of the usual mechanical methods of obtaining it from its various ores; and of the principal uses to which iron is applied; while the reader is referred to STEEL for the various branches of that manufacture.

In this paper we shall first notice the ores of iron, following the arrangement of Kirwan, and then detail its chemical combinations. Native iron, formerly supposed not to exist any where, is now known to have been met with in several places. It is, however, by no means common, but occurs sometimes in iron mines. Margraff found a fibrous kind of it at Eibenstock in Saxony, and Dr. Pallas found a mass in Siberia, weighing 1600 lbs. Mr. Adanson likewise informs us, that native iron is common about Senegal; but some naturalists are of opinion that these pieces, which have been taken for native iron, are in reality artificial, and have been accidentally buried in the earth. The large piece mentioned by Dr. Pallas is of that species called red short, which is malleable when cold, but brittle when red-hot. A mass of a similar nature was found in South America, in the district of St. Jago del Estero, in a wide extended plain. Some private persons visited this mass, and sent a specimen of the metal to Lima and Madrid, where it was found to be very pure soft iron. As it was reported that this mass was only the extremity of an immense vein of the metal, a commission was given to Don Michael Rubin de Celis to examine the spot; and the following is an abstract of his account:—'The place is called Otumpa, in lat. 27° 28′ S. and the mass was found almost buried in pure clay and ashes. Externally it had the appearance of very compact iron; but internally was full of cavities; as if the whole had been formerly in a liquid state. I was confirmed in this idea, says our author, by observing, on the surface of it, the impression of human feet and hands of a large size, as well as of the feet of large birds which are common in this country. Though these impressions seem very perfect, yet I am persuaded, that they are either a lusus naturæ, or that impressions of this kind were previously upon the ground, and that the liquid mass of iron falling upon it received them. It resembled nothing so much as a mass of dough; which having been stamped with impressions of hands and feet, and marked with a finger, had afterwards been converted into iron. On digging round the mass, the under surface was found covered with a coat of scoriæ from four to six inches thick, undoubtedly occasioned by the moisture of the earth, because the upper surface was clean. No appearance of generation was observed in the earth below or round it to a great distance. Its weight might be estimated at about 300 quintals. It is likewise an undoubted fact, that in these forests there exists a mass of pure iron in the shape of a tree with its branches.'

In the reign of the emperor Ichaugire, a similar mass fell in India: a violent explosion was heard at a village in the Punjaub, and at the same time a luminous body fell through the air on the earth. The officer of the district immediately repaired to the spot where it was said the body fell, and, having found the place to be hot, he caused it to be digged, on which he found the heat kept increasing till they reached a lump of iron violently hot. This was sent to court, where the emperor had it weighed in his presence, and ordered it to be forged into a sabre, a knife, and a dagger; the workmen reported it was not malleable, but shivered under the hammer; and that it required to be mixed with one-third part of common iron, after which the mass was found to make excellent blades. A piece of native iron, of two pounds weight, has been also met with at Kamsdorf, in the territories of Neustadt, which is still preserved there. These masses evidently did not originate in the places where they were found. The native iron said to have been found about Senegal has a cubical form; and out of this the black inhabitants make different kinds of vessels for their own use. Some masses have been found in a polyhedral granulated form, and of a bright yellow color; but which, on being polished, show the proper color of the metal.

The following description and analysis of some similar masses is given by Boussingault:—'On our arrival at Santa Rosa, a village on the road from Pamplona to Bogota, says this writer, we were told that an iron mine had been discovered in its vicinity, and that a specimen of the mineral was serving as an anvil to a blacksmith. On inspection, we were agreeably surprised to find that this specimen possessed all the characters of meteoric iron. This mass was found upon the hill of Tocavita, at the distance of a quarter of a Spanish league to the east of the village in 1810, by a native of the place. We went to examine the hill, where we still saw the cavity which was made at the time the mass was taken out, and which, when found, was nearly buried, and only visible to the extent of a few inches. The formation of the hill of Tocavita belongs, like that of Santa Rosa, to a secondary sandstone, and is observed to a considerable extent. The latitude of Santa Rosa is 5° 40′ N., and the longitude 75° 40′ W. of Paris; its height above the level of the sea is 2744 metres. The inhabitants joined in getting this mass to the village, where it was deposited at the town-house for seven years; and seven years after that, till our arrival, it was used by the blacksmith. This iron contains cavities, but we have found no vitrified traces in them; it is malleable, and can be cut; its structure is granular, its lustre of a silver white, and the specific gravity 7·3. The weight of this mass

was much exaggerated by our informants; but, judging from its diameter, notwithstanding the irregularity of the surface, it will be found that its volume is nearly 102 cubic decimetres, and consequently its weight must approach 1580 pounds.

By analysis this iron gave, in a mass of 7·18 grains, oxide of iron 9·46, oxide of nickel 0·75, residue insoluble in nitric acid 0·02: 100 parts gave iron 91·23, nickel 8·21, residue 0·28. The residue is insoluble in the nitric acid, and is hardly acted upon by the nitro-muriatic acid even in a state of ebullition. It seems to be composed of nickel and iron, and perhaps may contain a little chrome. Another mass weighing 561 grammes, also found near Santa Rosa in the year 1810, is of a porous structure, malleable, very hard to file, with the metallic silvery lustre, and its grain similar to that of fused steel: 1·98 grains gave oxide of iron 2·62, oxide of nickel 0·16: 100 parts, iron 91·76, nickel 6·36. The nickel may be traced in many other specimens, which were found with the preceding about the same time, in the vicinity of Santa Rosa; the largest weighed 145 grammes. But it is not only in the neighbourhood of Santa Rosa that iron has been met with in a metallic state: we shall therefore still mention two masses, which were discovered at some distance from the salt-mine of Zipaquirá, at a spot named Rasgatá. The one weighs forty-one kiliogrammes, is without traces of cavities, very malleable, of a structure composed of very minute planes, yielding with difficulty to the file, of a metallic lustre, and having its specific gravity = 7·6. 4 grains gave oxide of iron 5·23, oxide of nickel 0·40: 100 parts gave iron 90·76, nickel 7·87. The other mass weighs twenty-two kiliogrammes, is very porous, almost spheroidal, a very malleable iron, of a foliated texture, and its silvery lustre gives it the aspect of certain irons, glossed with white. It seemed to contain from seven to eight per cent. of nickel. Zipaquirá, in the limits of which these last masses were found, is in lat. 4° 57′ N., and long. 76° 33′ W. of Paris. Its elevation above the level of the sea is 2650 metres.

The following are M. John's analyses of meteoric iron:—

	Iron of		
	Pallas.	Elbogen.	Humboldt.
Iron	90·0	87·5	91·5
Nickel	7·5	8·75	6·5
Cobalt	2·5	1·85	2·0
Chromium	trace.	0·0	trace.
Manganese	0·0	1·9	0·0
	100·0	100·0	100·0

The subjoined list contains, we believe, all the principal masses of native meteoric iron at present known.

SECT. I.—*Spongy or cellular masses containing nickel.*—1. The mass found by Pallas in Siberia, to which the Tartars ascribe a meteoric origin. Voyages de Pallas, tom. iv. p. 545, Paris 1793. 2. A fragment found between Eibenstock and Johanngeorgenstadt. 3. A fragment probably from Norway, and in the imperial cabinet of Vienne. 4. A small mass weighing some pounds, and now at Gotha. 5. Two masses in Greenland, out of which the knives of the Esquimaux were made.

SECT. II.—*Solid masses where the iron exists in rhomboids or octohedrons, composed of strata, and containing nickel.*—1. The only fall of iron of this kind is that which took place at Agram in 1751. 2. A mass of the same kind has been found on the right bank of the Senegal.—Compagnon, Forster, Goldberry. 3. At the Cape of Good Hope; Stromeyer has lately detected cobalt in this mass.—Van Marum and Dankelman; Brande's Journal, vol. vi. 162. 4. In different parts of Mexico. Sonneschmidt, Humboldt, and the Gazette de Mexico, tom i. and v. 5. In the province of Bahia in Brasil. It is seven feet long, four feet wide, and two feet thick, and its weight about 14,000 lbs.—Mornay and Wollaston, Philosophical Transactions, 1816. 6. In the jurisdiction of San Jago del Estera.—Rubin de Cœlis, in the Philosophical Transactions 1788, vol. lxxviii. p. 37. 7. At Elbogen in Bohemia.—Gilbert's Annal. xlii. and xliv. 8. Near Lenarto in Hungary. Gilbert's Annal. xlix.

Native iron is not, however, necessarily meteoric, it has been discovered in mines in Saxony and France. A specimen from a mine near Kamsdarf, in Saxony, yielded, according to Klaproth,

Iron	92·5
Lead	6·0
Copper	1·5
	100·0

Of the ores of iron, properly so called, the first species is the *common magnetic iron stone; gemeiner magnetischer Eisenstein* of Werner. Color dark iron, or bluish-gray, inclining to steel gray, sometimes to the cochineal red in its fresh fracture, but its surface is generally brownish-black. Found massive, or disseminated, foliaceous, globular, or crystallised in four sided prisms, or double quadrangular pyramids joined base to base, and thus forming octohedrons; or in short hexahedral prisms, terminated with three quadrangular faces, &c., or in cubes. External lustre 2, of the crystallised; internal 3. Of the massive 1 or 1·5 metallic. Transparency 0. Fracture generally fine grained, uneven, or intermediate between that and the fine grained conchoidal. Streak black. Harder than apatite. Brittle. Specific gravity 4·8 to 5·2. Highly magnetic, with polarity. Before the blowpipe it becomes brown, and does not melt with borax; it gives a glass of a dark green color. Its constituents, according to Berzelius, are peroxide of iron 69, protoxide of iron 31. It occurs in beds of great magnitude, in primitive rocks at Unst; at St. Just in Cornwall; at Arendal in Norway, &c. It affords excellent bar iron.

Most of the Swedish ores are of this family; all are magnetic, and rather gain than lose weight by calcination. The magnet itself belongs to this family, and differs from other ores

only in being actively, as they are passively magnetic; it commonly betrays some tendency to the octohedral form. Mr. Rinman observes, that all the magnetic ores give red short iron, but that this is easily remedied by a second fusion.

Another variety or family of this species is *the magnetic iron sand; magnetischer eisen-sand* of Werner. Color deep iron black, which passes sometimes to ash-gray. Occurs in angular or roundish grains; and also in small octohedral crystals. Surface rough and feebly glimmering. Internal lustre shining, metallic. Fracture perfect, conchoidal. Fragments indeterminate, sharp-edged. Streak grayish-black. Semi-hard, brittle, easily frangible, and heavy. Specific gravity 4·6 to 4·8. Magnetical with polarity. Its constituents, according to Klaproth, are oxide of iron 85·5, oxide of titanium 14, oxide of manganese 0·5. It occurs imbedded in basalt, &c., in the river Elbe near Schandau in Saxony, imbedded in floetz trappe in Bohemia, and is also found in St. Domingo, Guadaloupe, in Norway, France, the Tyrol, Greenland, and the isle of Skye.

Second species, *specular iron ore: Gemeiner eisen glanz* of Werner, *fer oligeste* of the French. Color light or dark steel gray, or of tarnished azure blue, or gold yellow. Massive, disseminated or crystallised in cubes, either perfect or with their edges truncated or in octohedrons or double three-sided pyramids or tabular in flat hexahedral masses, regularly accumulated or lenticular in thin sharp plates. Primitive form a rhomboid in which the angles are 87° 9, and 92° 51'. Lustre, 3, 4. Splendent metallic. Transparency, 0. Fracture, fine or coarse grained, uneven, or minute conchoidal, presenting granular, columnar, plain or curved lamellar distinct concretions, sometimes inclining to the broad striated, very rarely slaty. Hardness from 9 to 10, between felspar and quartz. Specific gravity from 4·939 to 5·218, Brisson, or 4·158, Gellert. Its streak is grayish-red, or cherry-red, seldom black. Nitrous acid does not affect this species. But marine acid, especially when heated, attacks it, and acquires a light or deep orange-yellow color, according to the proportion it has dissolved. The highest specific gravity of this ore is very remarkable, and shows its particles must be very intimately united. The blow-pipe has but little effect on it; to borax it gives an obscure yellow tinge. Its constituents are, according to Hisinger, reddish-brown oxide of iron 94·38, phosphate of lime 2·75, magnesia 0·16, mineral oil 1·25. It occurs in beds in primitive mountains. It is found at Cumberhead in Lanarkshire; at Norberg in Westmannland, in Norway, &c. It affords an excellent malleable iron.

Third species.—*Brown Hæmatites, Brauner Glaskopf* of Werner.—Color, externally, brown or black, or bluish-black, occasionally, of a middle color between the yellow and nut-brown; sometimes iridescently variegated yellow and red. Internally nut-brown. Found massive, or in nodules of various sizes, or globular, tabular, cellular, stalactitic, or crystallised in hollow secondary sharp-angled hexahedral pyramids, or in pentagonal pyramids. External lustre 2, 3. Internal 2, 1. Common, but the variegated looks metallic. Transparency 0. Fracture, delicately fibrous, straight, curved or diverging, often presenting fine or coarse grained curved lamellar distinct concretions turned outwards. Fragments 3. Hardness from 8 to 10. Brittle. Specific gravity 3·789. Gellert. Streak yellowish or reddish-brown. Its powder is also red. Not magnetic till calcined. Before the blow-pipe it blackens and give to borax a dirty yellow tint with some effervescence. According to the analysis of M. D'Aubuisson its constituent parts are,

	From Bergzabern.	From Vicdessos.
Peroxide of iron .	79	82
Peroxide of manganese	2	2
Silex . .	3	1
Volatile matter .	15	14
Loss . . .	1	1
	100	100

The specific gravity of the former was 3·8, and of the latter 3·9. The specimen from Vicdessos afforded a slight trace of alumine. This species, which is so very abundantly distributed in the German states, is of rare occurence either in Sweden, Russia, Norway, or England. In the former it furnishes materials for very extensive iron-works; and the wrought-iron produced from it is very valuable.

Fourth species.—*Compact brown iron-stone. Dichter braun eisen stein* of Werner. *Mine de fer hepatique* of the French. Light or deep nut-brown, or brownish-black. Found massive, disseminated, stalactitic, cellular, nodular, or crystallised in rhombs, as secondary crystals, &c. External lustre casual. Internal lustre 0, 1. Metallic, or nearly so. Transparency 0. Fracture sometimes passing into the earthy or fine grained uneven, or gross conchoidal, when mixed with brown hæmatites. Fragments 2, rarely presents columnar or lamellar distinct concretions. Hardness from 6 to 8, rarely 9. Brittle. Specific gravity from 3·4771 to 3·5027. Brisson. Streak reddish, or yellowish, dark brown. When heated this ore becomes magnetic and blackens, to borax it gives an olive-green color. The proportion of its ingredients, as stated by M. D'Aubuisson, in the seventy-fifth volume of the Annales de Chimie, is as follows:—

	From Bergzabern.	From Vicdessos.	From Voightsberg.
Peroxide of iron	84	81	69
Peroxide of manganese . .	1		3
Silex . .	2	4	10
Alumine . .	·		3
Volatile matter	11	12	13
Loss . ·	2	3	2
	100	110	100

The specific gravity of the specimen from Vicdessos was 3·4.

Fifth species.—*Brown scaly iron ore. Braun eisen ram* of Werner.—Its color is intermediate between the tomback or nut-brown, and steel-gray. Generally found incumbent on other fossils, sometimes detached, imperfectly rounded or branchy. Lustre from 1 to 2. Metallic. Fracture seems fine-foliated or scaly, passing into the even. Fragments 1, 2. Hardness from 3 to 5. Brittle; light, so as often to float on water. Stains the fingers, or marks strongly, feels somewhat unctuous. From its lightness some have called it eisen bluthe. Before the blow-pipe it blackens, and gives to borax a greenish-yellow color.

Sixth species.—*Brown iron ochre. Ockriger braun eisen stein* of Werner.—Its colors extend from the nut-brown to the ochre-yellow, and orange. Found massive and disseminated. Transparency 0. Lustre 0. Fracture earthy. Hardness from 3 to 4. Strongly stains the fingers. When slightly heated it reddens. Before the blow-pipe it blackens, and gives borax a yellowish or olive-green color.

Seventh species.—*Red hæmatites rother glass kopf* of Werner.—Color between brownish-red and dark stell-gray. Massive, imitative, and in supposititious double six-sided pyramids from calcareous spar. Glistening, semi-metallic. Opaque. Streak blood-red. Brittle. Specific gravity 4·74. Its constituents, according to D'Aubuisson, are 90 oxide of iron, silica 2, lime 1, water 3. It affords excellent malleable and cast iron. Its powder is used for polishing tin, silver, and gold vessels; and for coloring iron brown. Baron Born assures us, it is often mixed with calcareous earth, and then effervesces with acids. The baron and Bergman also mention a yellow hæmatites, which differs from this only in presenting a yellow powder when pulverised.

Eighth species.—*Compact red iron stone, Dichter roth eisen stein* of Werner.—Color between dark steel-gray and blood-red. Massive, and in supposititious crystals; which are an acute double six-sided pyramid from calcareous spar; and a cube from fluor spar and iron pyrites. Lustre metallic. Fracture even. Streak pale blood red. Easily frangible. Specific gravity 4·232. When pure it does not affect the magnet. Its constituents are, oxide of iron 70·5, oxygen 29·5. Of this sort is the Lancashire ore, sometimes used at Carron, in Scotland. Externally it is invested with a rosy red ochre; internally its color is a purplish-gray.

Ninth species.—*Red ochre, ockriger roth eisen stein* of Werner.—Its color blood-red, more or less dark. It is found sometimes loose, sometimes indurated. Lustre 0. Fracture earthy, sometimes slaty. Hardness from 3 to 4. Brittle. Rarely 5. Stains the fingers. Heated, it blackens. It does not effervesce with acids, unless mixed with mild calx, as it often is in England. Specific gravity 2·947. It occurs in veins, with the preceding ore. It melts more easily than any of the other ores of this metal, and affords excellent malleable iron.

Tenth species.—*Red scaly iron ore*, *Rother eisen ram* of Werner.—Color dark steel-gray to brownish-red. Friable, and consists of semi metallic shining scaly parts, which are sometimes translucent and soil strongly Its constituents are, iron 66, oxygen 28·5, silica 4·25, alumina 1·25. But Bucholz found it be a pure red oxide of iron, mixed with a little quartz sand. Harry asserts that it consists of

Iron . . .	66·
Oxygen . .	28·5
Silex . .	4·25
Alumine . .	1·25
	100·

It occurs generally in veins in primitive and transition mountains, accompanied with other ores of iron, copper, pyrites, quartz, barytic spar, &c. Although a rare variety of this metal, it is found rather plentifully in the neighbourhood of Ulverston, Lancashire, and is also met with in Cornwall. It occurs too in Norway, the Hartz, Saxony, Silesia, Salzburg, Hungary, and South America.

Eleventh species.—*Upland argillaceous iron ore. Gemeiner thonartiger eisen stein* of Werner.—Color, steel, reddish or yellowish-gray, or yellowish and dark nut brown, or dark brick-red, or dark ochre yellow. The gray becomes blacker by exposure to the air.

On an ore of this kind, the celebrated iron foundries of Carron in Scotland are principally founded. Its color is partly light, partly dark bluish gray: some specimens are also of a light, or whitish purple externally, but internally dark ochre yellow. It is found in masses, apparently slaty, and in nodules in an adjacent coal mine, of which it sometimes forms the roof. Lustre 0·1. Transparency 0. Cross fracture, compact, uneven, or imperfectly conchoidal, longitudinal, even. Fragments 2. Hardness from 5 to 6. Specific gravity of light gray, found by Dr. Rotheram, before calcination, 3·434; after calcination, 3·652. Of the dark gray, before calcination, 3·205; after calcination 4·190. Of the yellowish, before calcination, 3·357. Streak of the light gray, dark red. Of the yellowish, yellow. It gives out no smell when breathed on. It affords about thirty per cent. of cast iron.

Some specimens of the mineral yield as much as forty per cent. of oxide of iron, whilst others do not afford more than twenty per cent., and many even less than that. The following are the results of some analyses by Richter and Lampadius:—

Oxide of iron .	20·1	33·9	39·0	42 5
Oxide of manganese	1·0	1·1		3·0
Silex . .	19·9	23·9	5·0	13·8
Alumine . .	30·2	13·0	40·0	13·6
Magnesia . .			6·0	
Carbonic acid .	28·8	28·1		27·1
Water . .			9·0	
Sulphur . .			1·0	
	100	100	100	100

This ore is found very plentifully in different parts of England and Scotland; and is also met with in Westphalia, Bohemia, Silesia, the Upper Palatinate, Poland, Russia, Siberia, Italy, and Norway.

Twelfth species.—*Scalpiform or columnar iron ore. Stanglich thonartiger eisen stein* of Werner. Color dark brownish-red, or intermediate between that and cherry red, formed of slender columns adhering to each other, but easily separable, commonly incurvated with a rough surface. Lustre 0. Transparency 0. Fracture even, or earthy, inclining to the small conchoidal. Hardness from 4 to 5. Brittle. Streak dark red. Slightly staining the fingers, and adhering strongly to the tongue. Sounding hollow when struck. Before the blow-pipe it blackens, with borax it effervesces, giving it an olive green and blackish tinge. This ore frequently affords thirty per cent. of metal.

Thirteenth species.—*Nodular or kidney-form ore, eisen niere* of Werner. *Ætites or eagle stone.* Color externally yellowish-brown; internally lighter; it has often a kernel whose color is mostly ocre yellow. Its form is generally that of a rounded nob or kidney, but occasionally quadrangular. The masses are often the size of a man's head, with a rough surface, and are generally found imbedded in clay or shale. Fracture towards the surface even; in the interior fine earthy. Fragments sharp-edged. Internal lustre dull: external glimmering, semi-metallic. External layers soft; those of the centre very soft; brittle; easily frangible; adhering to the tongue, meagre to the touch, and moderately heavy. Specific gravity 2·574. It does not melt before the blow-pipe, when heated alone; but fuses with borax, and communicates to it a dirty yellow color.

Occurs in the newest floetz rocks, imbedded in the argillaceous strata that are incumbent on coal. It is found abundantly in Derbyshire, and some of the neighbouring counties; in Scotland, Norway, Denmark, Bohemia, Silesia, Transylvania, France, and Siberia.

Fourteenth species—*Pisiform or granular iron ore. Bohnerz* of Werner. Its color is generally brown, or dark yellowish, and blackish brown. Occurs in rounded masses or grains, from the size of a pea to that of a nut, with a rough surface. External lustre casual. Internal 1, 1·5, 0. Transparency 0. Fracture even, earthy, or flat conchoidal. Fragments 2. Presents concentric lamellar distinct concretions. Hardness from 5 to 6. Brittle. Streak yellowish brown. Of this sort is the Oolitic ore, found at Creusot, near Mount Cenis. It is said to contain fifty per cent. of calx, twenty argill, and thirty of iron. Vauquelin's analysis gives iron 30, oxygen 18, alumine 31, silex 15, water 6. This ore is principally found in France and Switzerland.

Fifteenth species.—*Meadow or conchoidal bog ore. Wiesenerz* of Werner. Color blackish-brown. Massive, and tube rose. Glistening. Fracture small conchoidal. Streak yellowish-gray. Soft. Specific gravity 2·6. Its constituents are, according to Klaproth, oxide of iron 66, oxide of manganese 1·5, phosphoric acid 8, water 23. By Vauquelin's experiments it seems to contain also chrome, magnesia, silica, alumina, and lime; zinc and lead are likewise occasionally present. It is found in the Highlands of Scotland, in Saxony, &c. The latter is most easily reduced, and affords the best iron.

According to D'Aubuisson's analysis this ore contains,

Peroxide of iron . .	61·0
Peroxide of manganese .	7·0
Silex . . .	6·0
Alumine . . .	2·0
Volatile matter . .	19·0
Phosphoric acid . .	2·5
Lime, sulphur, and loss	2·5
	100

Sixteenth species.—*Swamp or bog ore. Sumpferz* of Werner. Color dark nut brown, sometimes nearly black. Found in amorphous lumps or grains, mostly corroded and mixed with sand. Lustre 0 where the color is light 1 to 1·5. Fracture compact, earthy, sometimes though rarely conchoidal. Hardness from 3 to 4. Brittle. Specific gravity 2·94. Streak yellowish-brown. Often containing thirty-six per cent. of metal.

Seventeenth species.—*Iron mica or plumbaginous ore. Eisen glimmer* of Werner. Its color is bright iron gray, sometimes bluish-gray, nearly black. Found in amorphous masses, or disseminated, or crystallised, generally in thin, minute, hexahedral lamellæ, and in botryoidal groups. Lustre 2·3. Metallic. Transparency 0, yet the single scales are somewhat transparent, and transmit a reddish light. Fracture foliated, generally curved, sometimes plain, presenting thick or thin, coarse or fine, broad or narrow, distinct lamellar concretions, rarely granular; sometimes none. Hardness from 5 to 7. Brittle. Specific gravity from 4·50 to 5·07. Streak bluish gray; some say cherry red. Slightly magnetic. Feels somewhat greasy: does not stain the fingers. Before the blow-pipe it is infusible, and communicates to borax a brown and somewhat olive-green tinge.

Eighteenth species.—*Blue martial earth. Blau eisenarde* of Werner. *Le fer terreux bleu* of the French. Its color, after having been exposed to the air for some time, is a deep blue, seldom, however, smalt blue. In its native situation it is often white, sometimes brown and green, and is found in large massy lumps. Lustre 0, moderately compact, somewhat dusty. Fracture earthy. It stains the fingers, and feels dry; its weight is inconsiderable. Readily diffusible in water. Generally found in bogs, sometimes in secondary stratified mountains, and always some feet under the surface, as in Saxony; sometimes in the vicinity of rivers, as that found near Neuilly, by Morand.

Soluble both in acids and alkalies, but precipitable from either, by the other. In water it preserves its color, but blackens in oils. Heated on a red hot coal it inflames, and leaves a red powder, which is in some degree magnetic. Before the blow-pipe it instantly becomes reddish brown, and melts into a black bead. To borax it gives a dark yellow tinge.

It occurs in nests in clay beds, amongst bog iron ore, and incrusting turf and peat. It is found, under the latter circumstances, in the Shetland Islands; it also appears in Iceland, Saxony, Silesia, Suabia, Bavaria, Poland, Siberia, Russia, and Sweden.

Nineteenth species.—*Green martial earth. Grüne eisenerde* of Werner. Color light or dark canary green, and thence passing into the olive green or yellow. Commonly found investing, or incumbent. Friable: seldom indurated. Lustre 0. Fracture nearly even. Hardness from 3 to 6. Strongly marks the fingers. Not remarkable heavy. Streak gray. Difficultly soluble in acids. When strongly heated it loses its weight, and blackens. With borax it easily melts into a yellowish brown opaque glass, with black spots.

No exact analysis has been made of this species; but it is supposed by Werner to have iron and phosphoric acid for its principal ingredients.

It is a rare mineral, and has hitherto been only found at Braunsdorf and Schneiberg, in Saxony, where it occurs in veins: in the former place accompanied with quartz and pyrites, and in the latter with quartz and native bismuth.

Twentieth species.—*Common pyrites. Gemeiner sulphur kiess* of Werner: color bronze yellow inclining sometimes to gold-yellow: occurs massive and disseminated in minute cubes, octohedrons, dodecahedrons, and sometimes though very rarely icosahedrons are met with. External lustre 4·3. Internal 2. Metallic. Transparency 0. Fracture uneven: fine or coarse grained. Hardness 10, brittle. Specific gravity from 2·9 to 4·6. It is not magnetic, and if rubbed yields a sulphureous smell. It decrepitates, and, when heated red hot, loses its fine yellow color and becomes of an iron gray and partly of a bright red. At 102, of Wedgewood's pyrometer, it melts in a covered crucible into a bluish-gray slagg, somewhat porous internally. Before the blow-pipe it emits a strong sulphureous smell, burns at first with a blue flame, and leaves a brownish bead, which tinges borax of a smutty green: otherwise, if further heated, it reddens. Its occurrence is almost universal, both with respect to geographic arrangements, and the numeral formations in which it is presented.

Twenty-first species.—*Striated pyrites: strahl kiess* of Werner. Color when fresh broken similar to those of the former variety, but more liable to be tarnished, passing into variegations resembling those of a peacock's tail. Found reniform, stalactitic, or crystallised in small cubes, or pyramids united in a common basis, generally grouped together, and implicated in each other. External lustre, when undecayed, 3·4. Metallic. Internal 2. Transparency 0. Fracture sometimes coarse and broad, sometimes fine and striated. Fragments present curved lamellar distinct concretions turned inwards. Hardness 10. Brittle. Specific gravity from 3·44 to 4·1. Brisson. Before the blow-pipe it exhibits the same appearances as common pyrites, and is constituted of about fifty-four parts of sulphur, and forty-six of iron. It is considerably more rare than the preceding and is found in veins, particularly those which contain lead or silver.

The chief places of its occurrence are, Cornwall and Derbyshire, in England; Arendal, in Norway; and in various districts of Suabia, Saxony, and Bohemia.

Twenty-second species.—*Capillary pyrites, haarkiess* of Werner. Its color generally steel gray, or intermediate between that and the pale yellow. Found in hexangular, or octangular, acicular crystals, either parallel or diverging from a common centre, or capillary and woolly, or interwoven. Lustre 3. Metallic. Transparency 0. This variety is the least common of the pyrites. Hydro-oxide of iron.

Twenty-third species.—*Magnetic pyrites: magnetischer eisen kiess* of Werner. Color intermediate between the tombac brown, and brass yellow. Often iridescently tarnished. Found disseminated and massive. Lustre 2. Metallic. Transparency 0. Fracture compact, inclining to the small conchoidal and uneven. Fragments 2. Hardness 8·9. Brittle. Specific gravity exceeds 3. Slightly magnetic: when treated with the blow-pipe, it does not give out so strong a smell of sulphur, but melts into a grayish-black bead, which is also magnetic; with borax it effervesces, and gives it a black tinge. It is composed of 63·5 sulphur and 36·5 iron.

Twenty-third species.—*Hepatic pyrites. Leber pyrites* of Werner. *Wasser kiess* of others. Color steel gray or intermediate between steel gray and pale yellow, sometimes variously tarnished by exposure to the air. It occurs massive or disseminated, or stalactitic, reniform, cellular, orbicular, tabular, &c. Its surface often striated. External lustre 2. Internal 1. Metallic. Transparency 0. Fracture even, uneven, or inclining to the conchoidal. Hardness from 9 to 10. Specific gravity from 3477 to 3502. Lustre of its streak 2·3. Exposed to air and moistened, it does not effloresce.

Twenty-fourth species.—*Calcareous or sparry iron ore. Spath eisin stein* of Werner.—Color nearly white, passing into yellowish-brown, and blackish-brown. It tarnishes on exposure either to the air or heat, and then becomes brown or black, and sometimes iridescent. It is found massive, disseminated, and crystallised. Its crystals are either rhombs, octahedrons, or dodecahedrons. They are seldom large; commonly middle-sized and small. Their surface is generally smooth. Internally it varies from splendent to glimmering. Lustre pearly. Fracture foliated. Cleavage triple. Fragments rhomboidal. The light-colored varieties are translucent, especially on the edges; but the dark-colored, opaque. The former give a grayish-white streak; the latter a yellowish-brown. It is semi-hard, inclining sometimes to soft. Rather brittle. Easily frangible, and moderately heavy. Specific gravity 3·300 to 3·810. Not magnetic. Carbonate of iron.

It blackens before the blowpipe, and enters into ebullition with borax, to which it communicates a dirty yellow color. It always effervesces more or less with acids. According to Bergman, it is composed of

Oxide of iron	38
Oxide of manganese	24
Lime	19
Carbonic acid	10
Water	9
	100

but it is liable to great variation in the proportion of its ingredients. In an examination by Descotils, the following result was afforded:—

Quartz	9·58
Oxide of iron	48·45
Oxide of manganese	1·80
Lime	·52
Magnesia	1·98
Carbonic acid, water, and loss	44·67

This is generally looked upon as the best of the iron ores, as it affords the finest iron for the nicer purposes, the best steel in greatest plenty, and with the greatest ease and least expense. Hence it is generally called steel ore.

Twenty-fifth species.—*Cube ore, wurfelerz* of Werner.—Color olive green, of different degrees of intensity. It is found massive, disseminated, and crystallised in small cubes, which are sometimes truncated at the angles. Planes of the crystals smooth and splendent. Internally it is glistening, and its lustre between pearly and adamantine. Fracture imperfect foliated. It is translucent, soft, brittle, and gives a streak of a straw-yellow color. Specific gravity 3·000. It appears sometimes in the form of a reddish-yellow powder, which is thinly distributed over the surface. Before the blow-pipe it swells up, and emits an arsenical odor; melting afterwards into a gray metallic globule, slightly tinged with yellow. From the analysis of Chenevix, it appears to be composed of

Arsenic acid	31·
Oxide of iron	45·5
Oxide of copper	9·
Silex	4·
Water of crystallisation	10·5
	100

It occurs in veins, accompanied with some ores of copper, quartz, mica, and feldspar. The only places that have hitherto afforded it, are the mines of Carrarach and Muttrell, in Cornwall.

These are all the principal species of iron ore, some of which are by Jamieson and Kirwan divided into families too numerous to distinguish in a treatise of this description. Some that are retained as important by Kirwan, are, however, omitted, the improved analysis of the present day having shown that their proportion of iron is too small to rank them as iron ores. *Smyris Emery*, for example, contains but from four to five per cent. of this metal.

It is now our task to notice the various chemical combinations of iron; in performing which we shall pretty freely abstract Dr. Ure's remarks on that important mineral.

This metal, observes Dr. Ure, is easily oxidised. A piece of iron wire, immersed in a jar of oxygen gas, being ignited at one end, will be entirely consumed by the successive combustion of its parts. It requires, however, a very intense heat to melt it; on which account it can only be brought into the shape of tools and utensils by hammering. This high degree of infusibility would deprive it of one of the most valuable qualities of metals, namely, the uniting of smaller masses into one, if it did not possess a property found in no other metal except platina, namely, that of welding. In a white heat, iron appears as if covered with a kind of varnish; and in this state if two pieces be applied together, they will adhere, and may be perfectly united by hammering.

When iron is exposed to the action of moist air or water, it acquires weight by gradual oxidation, and hydrogen gas escapes: if steam be made to pass through a red-hot gun barrel, or through an ignited copper or glass tube, containing iron wire, the iron becomes converted into an oxide, while hydrogen gas passes out at the other end of the barrel. The yellow rust, formed when iron is long exposed to damp air, contains a portion of carbonic acid. The concentrated sulphuric acid scarcely acts on iron, unless it is boiling. If the acid be diluted with two or three parts of water, it dissolves iron readily, without the assistance of heat. During this solution, hydrogen escapes in large quantities. The green sulphate of iron is much more soluble in hot than cold water; and therefore crystallises by cooling as well as by evaporation. The crystals are efflorescent, and fall into a white powder by exposure to a dry air, the iron becoming more oxidised than before. A solution of sulphate of iron, exposed to the air, imbibes oxygen; and a portion of the iron becoming peroxidised, falls to the bottom. Sulphate of iron is not made in the direct way, because it can be obtained at less charge from the decomposition of martial pyrites. It exists in two states, one containing oxide of iron, with 0·22 of oxygen, which is of a pale green, not altered by gallic acid, and giving a white precipitate with prussiate of potassa. The other, in which the iron is combined with 0·30 of oxygen, is red, not crystallisable, and gives a black precipitate with gallic acid, and a blue with prussiate of potassa. In the common sulphate, these two are often mixed in various proportions.

Sulphate of iron is decomposed by alkalies and by lime. Caustic fixed alkali precipitates the iron in deep green flocks, which are dissolved by the addition of more alkali, and form a red tincture. Vegetable astringent matters, such as nutgalls, logwood, &c., which contain tannin and gallic acid, precipitate a fine black fecula from sulphate of iron, which remains suspended for a considerable time in the fluid, by the addition of gum-arabic. This fluid is well known by the name of ink. See INK. The beautiful pigment well known in the arts by the name of prussian blue, is likewise a precipitate afforded by sulphate of iron.

Concentrated nitric acid acts very strongly upon iron filings, much nitrous gas being disengaged at the same time. The solution is of a reddish-brown, and deposits the oxide of iron after a certain time; more especially if the vessel be left exposed to the air. A diluted nitric

acid affords a more permanent solution of iron, of a greenish color, or sometimes of a yellow color. Neither of the solutions affords crystals, but both deposit the oxide of iron by boiling, at the same time that the fluid assumes a gelatinous appearance.

Diluted muriatic acid rapidly dissolves iron at the same time that a large quantity of hydrogen is disengaged, and the mixture becomes hot. If iron filings be triturated with muriate of ammonia, moistening the mixture; then drying, powdering, and again triturating; and lastly subliming with a heat quickly raised; yellow or orange-colored flowers will rise, consisting of a mixture of muriate of ammonia, with more or less of muriate of iron. These, which were called flowers of steel, and still more improperly ens veneris, were once much esteemed; but are now little used, as they are nauseous in solution, and cannot very conveniently be given in any other form. Carbonic acid, dissolved in water, combines with a considerable quantity of iron, in proportion to its mass. Phosphoric acid unites with iron, but very slowly. The union is best effected by adding an alkaline phosphate to a solution of one of the salts of iron, when it will fall down in a white precipitate. This acid is found combined with iron in the bog ores, and, being at first taken for a peculiar metal, was called siderite by Bergmann. Liquid fluoric acid attacks iron with violence: the solution is not crystallisable, but thickens to a jelly, which may be rendered solid by continuing the heat. The acid may be expelled by heating it strongly, leaving a fine red oxide. Borate of iron may be obtained by precipitating a solution of the sulphate with neutral borate of soda. Arsenic acid likewise unites with iron. This arseniate is found native. Chromate of iron has been found in the department of Var in France, and elsewhere. Sulphur combines very readily with iron. A mixture of iron filings and flowers of sulphur being moistened, or made into a paste with water, becomes hot, swells, adheres together, breaks, and emits watery vapors of an hepatic smell. If the mixture be considerable in quantity, as for example 100 lbs., it takes fire in twenty or thirty hours, as soon as the aqueous vapors cease. By fusion with iron, sulphur produces a compound of the same nature as the pyrites, and exhibiting the same radiated structure when broken. If a bar of iron be heated to whiteness, and then touched with a roll of sulphur, the two substances combine, and drop down together in a fluid state. Mr. Hatchett found, that the magnetical pyrites contain the same proportion as the artificial sulphuret. Phosphorus may be combined with iron by adding it, cut into small pieces, to fine iron wire heated moderately red in a crucible; or by fusing six parts of iron clippings, with six of glacial phosphoric acid, and one of charcoal powder. This phosphuret is magnetic; and Mr. Hatchett remarks, that iron, which in its soft or pure state cannot retain magnetism, is enabled to do so when hardened by carbon, sulphur, or phosphorus, unless the dose be so great as to destroy the magnetic property, as in most of the natural pyrites and plumbago. Iron unites with gold, silver, and platina. When heated to a white heat, and plunged in mercury, it becomes covered with a coating of that metal. Mr. A. Aikin unites an amalgam of zinc and mercury with iron filings, and then adds muriate of iron, when a decomposition takes place, the muriatic acid combining with the zinc, and the amalgam of iron and mercury assuming the metallic lustre by kneading, assisted with heat. Iron and tin very readily unite together. Iron does not unite easily with bismuth, at least in the direct way. This alloy is brittle and attractible by the magnet, even with three-fourths of bismuth. As nickel cannot be purified from iron without the greatest difficulty, it may be presumed that these substances readily unite. Arsenic forms a brittle substance in its combination with iron. Cobalt forms a hard mixture with iron, which is not easily broken. Manganese is almost always united with iron in the native state. Tungsten forms a brittle, whitish-brown, hard alloy, of a compact texture, when fused with white crude iron. The habitudes of iron with molybdena are not known.

Dr. Wollaston first showed, that the forms in which native iron is disposed to break are those of the regular octohedron and tetrahedron, or rhomboid, consisting of these forms combined. In a specimen possessed by this philosopher the crystalline surfaces appear to have been the result of a process of oxidation which has penetrated the mass to a considerable depth in the direction of its laminæ; but, in the specimen which is in the possession of the Geological Society, the brilliant surfaces that have been occasioned by forcible separation from the original mass exhibit also the same configurations as are usual in the fracture of octohedral crystals, and are found in many simple metals. This spontaneous decomposition of the metal in the direction of its crystalline laminæ is a new and valuable fact. From Mr. Daniell's ingenious experiments on the mechanical structure of iron, developed by solution, we learn, that a mass of bar-iron which had undergone all the operations of puddling and rolling, after being left in liquid muriatic acid till saturation, presented the appearance of a bundle of fasces, whose fibres run parallel through its whole length. At its two ends, the points were perfectly detached from each other, and the rods were altogether so distinct, as to appear to the eye to be but loosely compacted.

Compounds of iron.

1. Oxides; of which there are two, or perhaps three. 1st. The oxide obtained either by digesting an excess of iron filings in water, by the combustion of iron wire in oxygen, or by adding pure ammonia to solution of green copperas, and drying the precipitate out of contact of air, is of a black color, becoming white by its union with water, in the hydrate, attractible by the magnet, but more feebly than iron. By a mean of the experiments of several chemists, its composition seems to be,

Iron	100	77·82	3·5
Oxygen	28·5	22·18	1·0

Whence the prime equivalent of iron comes out, we perceive, 3·5. Sir H. Davy's number, re-

duced to the oxygen scale, is 6·86, one-half of which, 3·43, is very nearly the determination of Berzelius. But Mr. Porrett, in an ingenious paper published in the Annals of Philosophy for October 1819, conceives, that, to make the theoretical proportions relative to iron harmonize with the experimental results, we must consider 1·75, or the half of 3·5, as its true prime equivalent, or lowest term of combination. The protoxide will then consist of two primes of iron to one of oxygen. M. Thenard, in his Traité, vol. ii. p. 73, says, 'The above oxide, obtained by decomposing protosulphate of iron by potash or soda, and washing the precipitate in close vessels with water deprived of its air, consists, according to M. Gay Lussac, of 100 parts of iron, and 25 of oxygen. This determination would make the atom of iron 4·0; and is probably incorrect. This proportion is proved,' he adds, 'by dissolving a certain quantity of iron in dilute sulphuric acid, and collecting the evolved hydrogen. Now by this method extreme precision should be ensured.' 2d. Deutoxide of M. Gay Lussac. He forms it by exposing a coil of fine iron wire, placed in an ignited porcelain tube, to a current of steam, as long as any hydrogen comes over. There is no danger, he says, of generating peroxide in this experiment, because iron once in the state of deutoxide has no such affinity for oxygen as to enable it to decompose water. It may also, he states, be procured by calcining strongly a mixture of one part of iron and three parts of the red oxide in a stone-ware crucible, to the neck of which a tube is adapted to cut off the contact of air. But this process is less certain than the first, because a portion of peroxide may escape the reaction of the iron. 'But we may dispense with the trouble of making it,' adds M. Thenard, 'because it is found abundantly in nature.' He refers to this oxide, the crystallised specular iron ore of Elba, Corsica, Dalecarlia, and Sweden. He also classes under this oxide all the magnetic iron ores; and says, that the above-described protoxide does not exist in nature. From the synthesis of this oxide by steam, M. Gay Lussac has determined its composition to be,

Iron . .	100	72·72
Oxygen .	37·5	27·28

which Mr. Porrett reconciles to theory, by representing it as consisting of

3 primes iron .	. 5·25	72·5	100
2 primes oxygen .	. 2·00	27·5	38

3d. The red oxide. It may be obtained by igniting the nitrate, or carbonate; by calcining iron in open vessels; or simply by treating the metal with strong nitric acid, then washing and drying the residuum. Colcothar of vitriol, or thorough calcined copperas, may be considered as peroxide of iron. It exists abundantly native in the red iron ores. It seems to be a compound of, according to Mr. Porrett,

Iron . . .	. 100	70 = 4 primes.
Oxygen . . .	. 43	30 = 3 primes.

2. Chlorides of iron; of which there are two, first examined in detail by Dr. John Davy. The protochloride may be procured by heating to redness, in a glass tube with a very small orifice, the residue which is obtained by evaporating to dryness the green muriate of iron. It is a fixed substance, requiring a red heat for its fusion. It has a grayish variegated color, a metallic splendor, and a lamellar texture. It absorbs chlorine when heated in this gas, and becomes entirely converted into the volatile deutochloride. It consists, according to Dr. Davy, of

Iron .	. 46·57
Chlorine . .	. 53·43

According to Mr. Porrett.

2 primes iron .	. 3·5	43·75	100·0
1 prime chlorine	. 4·5	56·25	128·7

The deutochloride may be formed by the combustion of iron wire in chlorine gas, or by gently heating the green muriate in a glass tube. It is the volatile compound described by Sir H. Davy in his celebrated Bakerian lecture on oxymuriatic acid. It condenses after sublimation, in the form of small brilliant iridescent plates.

It consists, according to Dr. Davy, of

Iron	. 35·1
Chlorine	. 64·9

By Mr. Porrett

4 primes iron	. 7·0	34·14	100·00
3 primes chlorine	. 13·5	65·86	192·85

3. For the iodide of iron, see Iodine.

4. Sulphurets of iron; of which, according to Mr. Porrett, there are four, though only two are usually described, his protosulphuret and persulphuret.

The persulphuret of iron exists in nature. It has the metallic appearance of bronze, but its powder is blackish-gray. It is in fact the magnetic pyrites of mineralogy, which see among the Ores of Iron. By the analysis of Mr. Hatchett, and Professor Proust, it seems to consist of iron 63
sulphur 37

Mr. Porrett represents it as composed of

2 primes iron .	. = 3·5	63·75	100
1 prime sulphur .	2·0	36·25	57

His deutosulphate and tritosulphate are as follows:—

Deutos.	3 primes iron .	5·25	57	100
	2 primes sulphur	4·00	43	76
Tritos.	4 primes iron .	7·0	54	100
	3 primes sulphur	6·0	46	86

He conceives, that in Proust's experiments, as related in the first volume of Nicholson's 8vo. Journal, descriptions of compounds corresponding to those two sulphurets are given.

The persulphuret is the cubic iron pyrites of the mineralogist. It consists, according to Mr. Porrett, of

1 prime iron .	. 1·75	46·5	100·0
1 prime sulphur	. 2·00	53·5	114·2; and

the mean of Mr. Hatchett's celebrated experiments on pyrites, published in the Philosophical Transactions for 1804, gives of iron 100
sulphur 113

5. Carburets of iron. These compounds form steel, and probably cast-iron; though the latter contains also some other ingredients. The

latest practical researches on the constitution of these carburets, are those of Mr. Daniell, above quoted.

We annex Mr. Mushet's table of the proportions of carbon corresponding to different carburets of iron.

$\frac{1}{120}$ Soft cast-steel.
$\frac{1}{100}$ Common cast-steel
$\frac{1}{90}$ The same, but harder.
$\frac{1}{50}$ The same too hard for drawing.
$\frac{1}{25}$ White cast-iron.
$\frac{1}{20}$ Mottled cast-iron.
$\frac{1}{15}$ Black cast-iron.

Graphite or plumbago is also a carburet of iron, containing about ten per cent. of metal, which, calling the prime of iron 1·75, makes it a compound of twenty-one primes of carbon to one of metal.

Salts of iron. These salts have the following general characters:—

1. Most of them are soluble in water; those with the protoxide for a base are generally crystallisable; those with the peroxide are generally not; the former are insoluble, the latter soluble in alcohol. 2. Ferroprussiate of potash throws down a blue precipitate, or one becoming blue in the air. 3. Infusion of galls gives a dark purple precipitate, or one becoming so in the air. 4. Hydrosulphuret of potash or ammonia gives a black precipitate; but sulphureted hydrogen merely deprives the solutions of iron of their yellow-brown color. 5. Phosphate of soda gives a whitish precipitate. 6. Benzoate of ammonia, yellow. 7. Succinate of ammonia, flesh-colored with the peroxide. Protacetate of iron forms small prismatic crystals, of a green color, a sweetish styptic taste, and a specific gravity 1·368.

Peracetate of iron forms a reddish-brown uncrystallisable solution much used by the calico printers, and prepared by keeping iron turnings, or pieces of old iron, for six months immersed in redistilled pyrolignous acid.

Protarseniate of iron exists native in crystals, and may be formed in a pulverulent state, by pouring arseniate of ammonia into sulphate of iron. It is insoluble, and consists, according to Chenevix, of 38 acid, 43 oxide, and 19 water, in 100 parts.

Perarseniate of iron may be formed by pouring arseniate of ammonia into peracetate of iron; or by boiling nitric acid on the protarseniate. It is insoluble.

Antimoniate of iron is white, becoming yellow, insoluble.

Borate, pale yellow, insoluble.

Benzoate, yellow, insoluble.

Protocarbonate, greenish, soluble.

Percarbonate, brown, insoluble.

Chromate, blackish, insoluble.

Protocitrate, brown crystals, soluble.

Protoferroprussiate, white, insoluble.

Perferroprussiate, white, insoluble.

This constitutes a very peculiar chemical pigment. When exposed to a heat of about 400° it takes fire in the open air; but in close vessels it is decomposed, apparently, into carbureted hydrogen, water, and hydrocyanate of ammonia, which come over; while a mixture of charcoal and oxide of iron remains in the state of pulverulent pyrophorus, ready to become inflamed with contact of air. See Prussic Acid.

Protogallate, colorless, soluble.

Pergallate, purple, insoluble.

Protomuriate, green crystals, very soluble.

Permuriate, brown, uncrystallisable, very soluble. See the chlorides of iron previously described.

Protonitrate, pale green, soluble.

Pernitrate, brown, soluble.

Protoxalate, green prisms, soluble.

Peroxalate, yellow, scarcely soluble.

Protophosphate, blue, insoluble.

Perphosphate, white, insoluble.

Protosuccinate, brown crystals, soluble.

Persuccinate, brownish-red, insoluble.

Protosulphate, green vitriol, or copperas. It is generally formed by exposing native pyrites to air and moisture, when the sulphur and iron both absorb oxygen, and form the salt. There is, however, an excess of sulphuric acid, which must be saturated by digesting the lixivium of the decomposed pyrites with a quantity of iron plates or turnings.

It forms beautiful green crystals, which are transparent rhomboidal prisms, whose faces are rhombs with angles of 79° 50′ and 100° 10′, inclined to each other at angles of 98° 37′ and 81° 23′. Specific gravity 1·84. Its taste is harsh and styptic. It reddens vegetable blues. Two parts of cold and three-fourths of boiling water dissolve it. It does not dissolve in alcohol. Exposure to air converts the surface of the crystals into a red by separating the water of crystallisation, and a stronger heat drives off the sulphuric acid. Its constituents are 28·9 acid, 28·3 protoxide, and 45 water, according to Berzelius: consisting, according to Mr. Porrett's views, of 1 prime acid + 2 oxide + 7 water.

Persulphate. Of this salt there seems to be four or more varieties, having a ferreous base, which consists, by Mr. Porrett, of 4 primes iron + 3 oxygen = 10 in weight, from which their constitution may be learned.

The tartrate and pertartrate of iron may also be formed; or, by digesting cream of tartar with water on iron filings, a triple salt may be obtained, formerly called tartarised tincture of Mars.

Iron is one of the most valuable articles of the materia medica. The protoxide acts as a genial stimulant and tonic, in all cases of chronic debility not connected with organic congestion or inflammation. It is peculiarly efficacious in chlorosis. It appears to me, says Dr. Ure, that the peroxide and its combinations are almost uniformly irritating, causing heartburn, febrile heat, and quickness of pulse. Many chalybeate mineral waters contain an exceedingly minute quantity of protocarbonate of iron, and yet exercise an astonishing power in recruiting the exhausted frame. I believe their virtue to be derived simply from the metal being oxidized to a minimum, and diffused by the agency of a mild acid through a great body of water, in which state it is rapidly taken up by the lacteals, and speedily imparts a ruddy hue to the wan countenance. I find that these qualities may be imitated exactly, by dissolving three grains of

sulphate of iron, and sixty of bicarbonate of potash, in a quart of cool water, with agitation in a close vessel.

IRON BRIDGES, in modern engineering, are an invention exclusively British; and one of which the metropolis of this country contains two of the most complete specimens.

The first iron bridge erected was that of cast iron over the Severn, about two miles below *Colebrook Dale*, Shropshire, between the villages of Brosely and Madeley. It consists of five ribs forming the segment of a circle; and having its chord line 100 feet in length, and its versed sine forty-five feet; making its curve almost a semicircle. The arch springs at about ten feet from low water mark, which makes the entire height from the water to the vertex of the soffit fifty-five feet On the arch-shaped ribs the roadway is formed by pieces of cast iron and plates which carry the road. This bridge was cast at the Colbrooke Dale foundries by Mr. Abiah Darby, and erected in 1777. The curvature of the exterior concentric arches, which assist in supporting the roadway, though somewhat too great for the most favorable exertion of their resistance, leaves them still sufficiently strong for the purpose intended; and the partial failure, which accidentally occurred, bears testimony rather to the merits than to the faults of the bridge, as they would be estimated in any other situation: for the lateral thrust, which it is desirable to reduce as much as possible, was here actually too small, and the abutments were forced inwards, by the pressure of the loose external materials, forming the banks, against which the abutments pressed.

On the whole, if not so elegant a structure as some that have succeeded it, this is a most respectable and scientific edifice: we subjoin a sketch of it.

Colebrook Dale Bridge.

The next cast iron bridge seen in this country was designed by the celebrated Thomas Paine: it was intended to be erected in America, and was an imitation of a catenarian curve: the Messrs. Walkers of Rotherham were the founders. Paine, however, became involved in his circumstances, and the bridge, after being exhibited at Pancras, was taken to pieces and the materials used in the bridge at *Wearmouth*, erected under the direction of R. Burdon, esq. and Mr. Thomas Wilson, and which was completed in 1796. It is near Sunderland, and is often called by the name of that place. This beautiful edifice springs seventy feet above low water mark; and the arch rises thirty feet, leaving a height of 100 feet in the whole for the passage of ships in the middle of the stream: the span is 240. The abutments rest on a solid rock, but their own internal solidity appears to be doubtful. The weight of iron in it is 250 tons; 210 of them being of cast, and forty of wrought iron.

In the same year a bridge was erected at *Buildwas*, near Colebrook Dale by Mr. Telford; 130 feet in span, weighing 174 tons; and rising only seventeen feet in the roadway, but furnished on each side with a stronger arch, of about twice the depth. This indeed extends to the top of the railing, and assists both in suspending the part of the road which is below it by means of king-posts, and supporting the part nearer the abutments by braces and shores. The breadth is eighteen feet; and the construction would not be so easily applicable to a wider bridge.

Another iron bridge was erected in 1796 on the Parrot at *Bridgewater*, by the Colebrook Dale Company, consisting of an elliptic arch of seventy-five feet span, and twenty-three feet height, and resembling the bridge at Wearmouth in the mode of filling the haunches with circular rings.

Even failures may be useful to record as warnings. Two occurred at this time, one at Yarn in Staffordshire, and another in Herefordshire. The former was in a bridge of 180 feet span over the Tees; and the latter on a similar erection on the Tarne: both fell to pieces on the removal of their centres.

In 1803 an iron bridge of 181 feet span, and sixteen and a half rise, was completed at *Staines*, on the general model of that at Wearmouth, but its parts were connected somewhat differently. It began to sink, and some of the transverse pieces broke in a short time after it was finished, when upon examination it was found that one of the abutments had failed: and when this was repaired the other gave way in a similar manner. It was pushed outwards horizontally; and the architect seems to have trusted to the firmness of the iron, and the excellence of the workmanship, neglecting the calculation of the lateral thrust. The derangement, however, was not material.

Mr. Rennie's beautiful bridge over the Witham at *Boston* in Lincolnshire, we believe, was next in order of time. There is not a more elegant structure of this kind in the kingdom. The span is eighty-six feet, and the rise five and a half only; but the abutments are well constructed, and it has stood securely, notwithstanding the fracture of some of the cross pieces of the frames, which had been weakened by the unequal contraction of the metal in cooling.

Messrs. Jessop have erected two iron bridges at *Bristol*, of 100 feet span, rising fifteen; each of them contains 150 tons of gray iron: the expense of each was about £4000. The chords of their arches are segments of circles, of 100 feet in dimension, their versed sine fifteen; the diameter of the complete circle, of which the arch is a segment, 182 feet; and the height of the frame work of the arch at the vertex, two feet four. See plate BRIDGES.

In 1803 a light iron bridge, for foot passengers only, was thrown across the Seine, opposite to the gate of the Louvre. Narrow stone piers, leaving the lateral thrust uncompensated, are its

supporters, and there is great apparent deficiency in strength; but it is improbable than any failure should occur in such a situation, supposing the construction of the bridge itself to be sound. See plate BRIDGES.

In 1811 Mr. Telford threw an iron bridge over an arm of the sea, at *Bonar* in Sutherlandshire, Scotland. It consists of an arch whose chord is 150 feet, versed sine twenty feet, diameter of the circle, of which the arch is an abscissa, 391 feet, and the height of the frame-work of the arch at the vertex three feet.

But the two noble erections of this kind on the Thames have attracted the principal attention of engineers. *Vauxhall* Bridge, the first of them, was opened in August 1816: it consists of nine arches of cast iron, each of seventy-eight feet span, and between eleven and twelve feet rise. The architect was Mr. Walker. The breadth of the roadway is thirty-six feet clear. The arches resemble those of Messrs. Jessop's bridges at Bristol; but the bridge has, on the whole, a lighter appearance, while the abutments are more compact and solid.

The *Southwark*, or *Trafalgar* Bridge, at the bottom of Queen Street, Cheapside, has been considered the finest iron bridge in the world. It consists of three magnificent arches, resting on granite piers and abutments. Mr. Rennie was the architect: and the arches were cast by Messrs. Walker and Yates, late of Rotherham in Yorkshire. The chord of the middle arch is 240 feet. Its curve is the segment of a circle of 624 feet diameter; its versed sine twenty-four feet; and the height of the frame-work of the arch at the vertex, six feet. See BRIDGES.

The following is the weight of half of the middle arch of this bridge:—

	8 Blocks.	3 Oblique Stays.	Cross Frames.	Crosses.	Spandrils.	Total.
	t. cwt.	*t. cwt.*	*t. cwt.*	*t. cwt.*	*t. cwt.*	*t. cwt.*
No. 1	62 18	2 11	11 0	9 1	26 4	111 17
2	60 19	2 12	10 13	8 15	20 3	103 4
3	54 15	2 13	10 2	8 3	32 16	108 10
4	51 3	2 11	9 17		23 14	87 6
5	50 17	2 13	9 15		32 14	95 19
6	51 2	2 13	9 15		24 15	88 6
half 7	25 12	2 12			20 7	48 12
Covering plates						152 0
Cornice and palisades						77 5
Road way and pavement						650 0
Whole weight						1523 0
Springing plate						13 10
Abutment						11,000 0

Span 240 feet. Rise twenty-four. Depth of the blocks or plates at the crown six feet; at the pier eight feet.

We may notice that a still more splendid iron bridge of one arch was projected by Mr. Telford, and for some time under the consideration of a committee of the house of commons, as a substitute for London Bridge. The chord of the arch was to be 600 feet; and it was to have its centre not less than sixty-five feet high in the clear: but the opinions of respectable architects were so divided as to its merits that the plan was relinquished.

Minor erections of this kind are now common, and Mr. Telford has erected several aqueduct bridges on a large scale. One of these, near *Wellington* in Shropshire, cast by Messrs. Reynolds, was completed in 1796. It is 180 feet long, and twenty feet above the water of the river, being supported on iron pillars.

A large one was cast by Mr. Hazledine, for carrying the Ellesmere Canal over the river Dee, at *Pontcysylte* near Llangollen. It is supported 126 feet above the surface of the river, by twenty stone pillars, and is 1020 feet in length and twelve feet wide. See plate II. fig. 4.

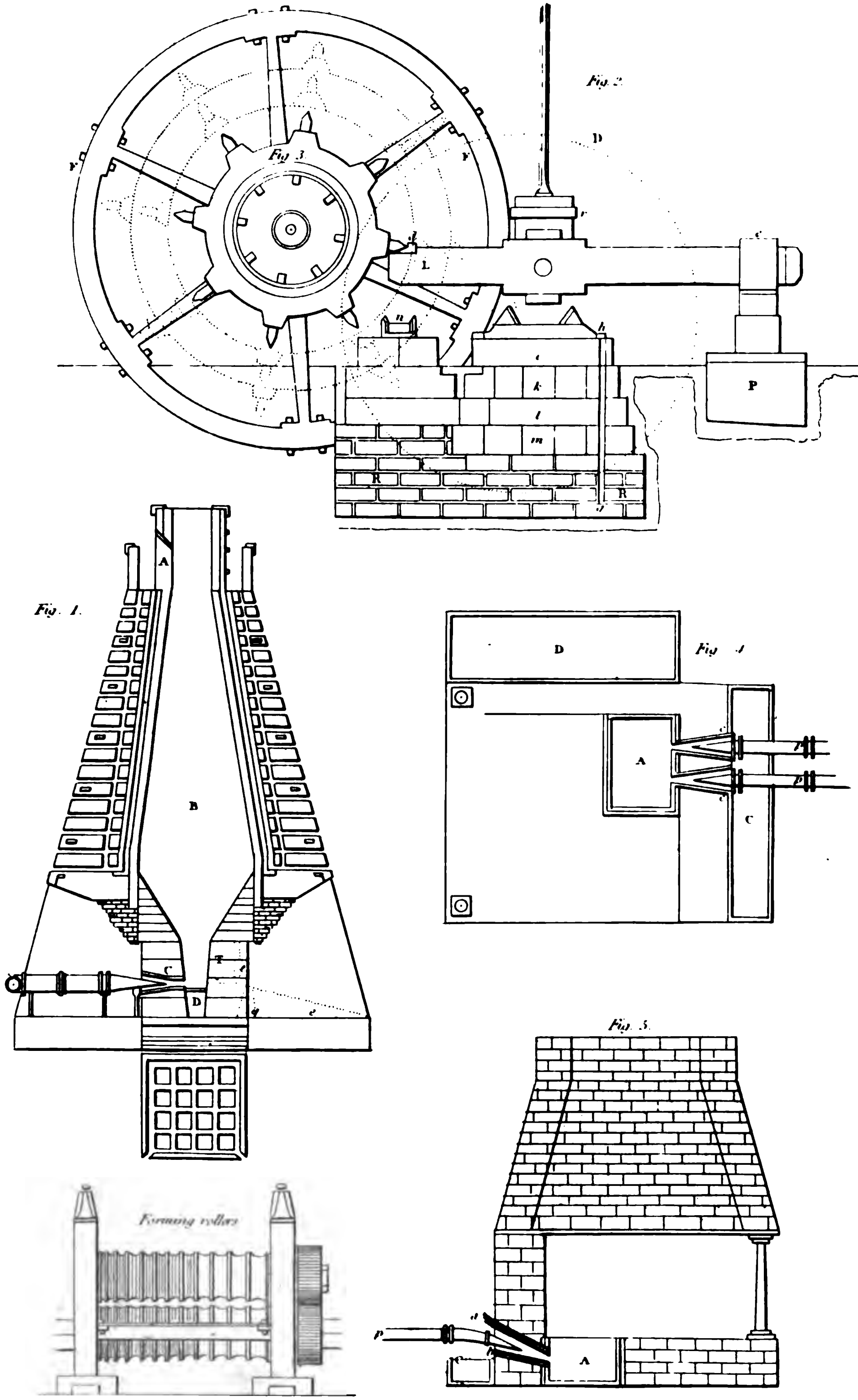
IRON FOUNDRY. See IRON MANUFACTURE.

IRON MANUFACTURE. This important branch of our manufactures has tended most materially towards establishing the commercial superiority of Great Britain over every other competitor. It is true that there are many parts of Europe that excel us both in the richness and quantity of their iron ores; and we remember one instance in which a large mountain of pure metallic iron was found in an extensive mineralogical district in Sweden. But, generally speaking, the excellence and abundance of our fuel, with the vast capitals employed by British iron masters, have enabled us to materially improve the foundry process.

We may commence our examination of this subject by a reference to the process employed by the Romans.

The ancient mode of reducing the ores of iron is thus described by Agricola. A mass of brick-work was raised five feet in length and breadth and three feet and a half high, resembling a smith's hearth, except that in the middle of this was sunk a cup-shaped cavity or crucible one foot in depth and half a foot wide, in the upper part of which was made a hole opening into a channel through the brick-work. This hole being closed with clay, the crucible was filled with lighted charcoal, heaped up so as to be above the level of the hearth; a blast of air was then admitted through a pipe let into th wall in the same manner as a smith's forge, and so contrived that the focus of the blast should be just above the centre of the crucible. Chai coal alone was added from time to time, till th heap became thoroughly hot, and then, at th discretion of the workmen, the ore, in very smal

IRON MANUFACTURE.



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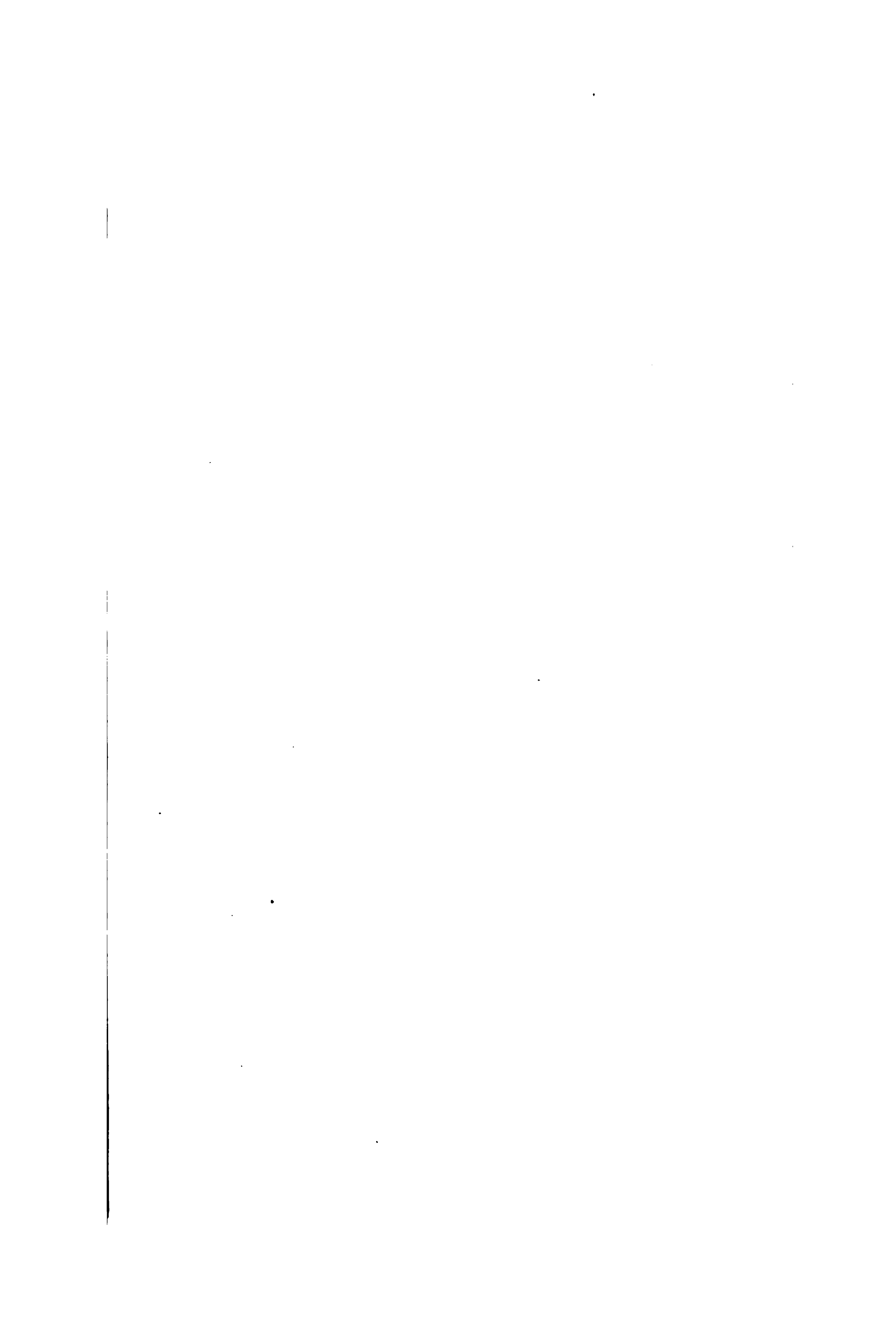


IRON BRIDGES.

PLATE I.

WEARMOUTH

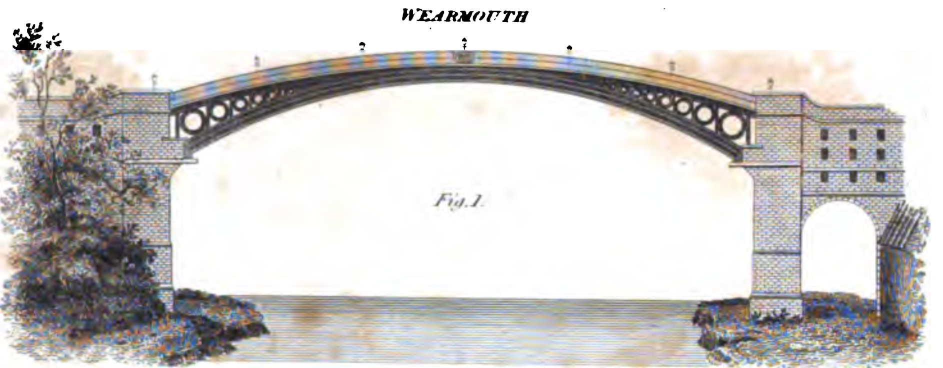


Fig. 1.

VAUXHALL
MIDDLE ARCH

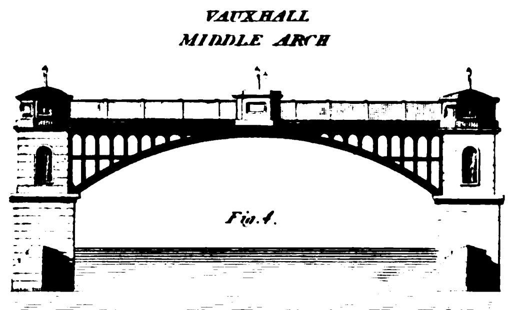
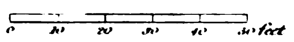


Fig. 4.



BRIDGE OF THE LOUVRE

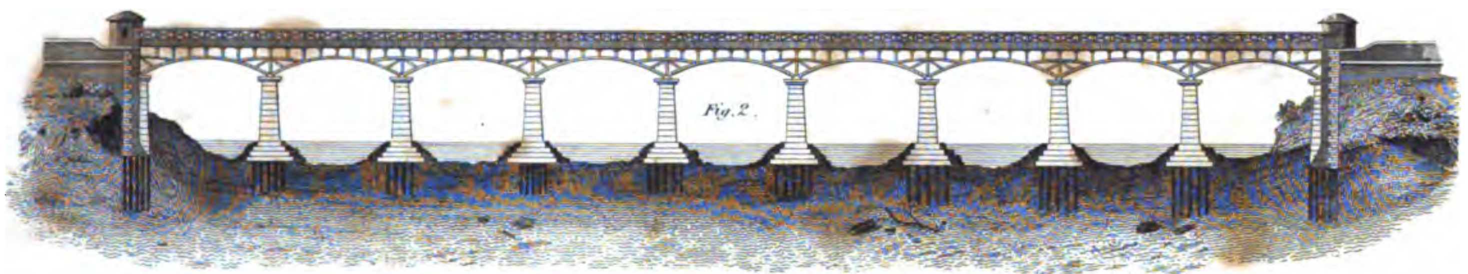
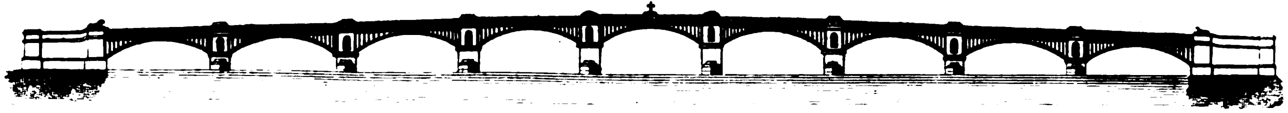
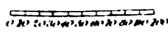


Fig. 2.

Fig. 3.
VAUXHALL





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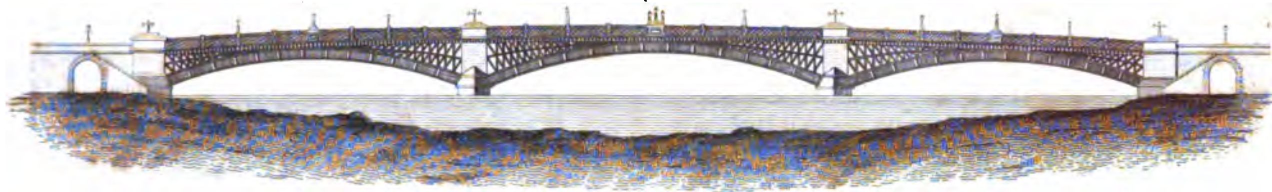
IRON BRIDGES.

SOUTHWARK

Fig. 1



Plan

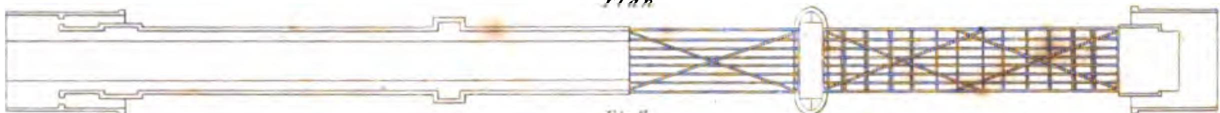


Fig. 2.

PONTCYSYLTE

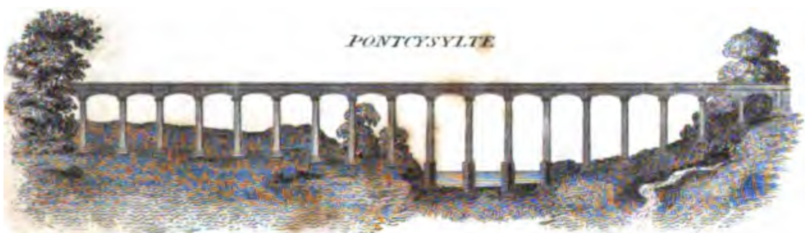


Fig. 4.

BRISTOL

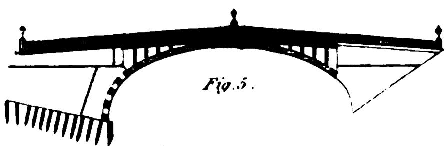


Fig. 5.

SOUTHWARK MIDDLE ARCH

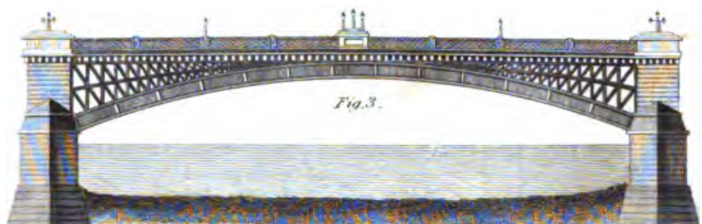
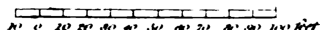


Fig. 3.



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J. Shury sculp.

pieces, unroasted, but mixed with unslaked quick-lime, was laid on alternately with the charcoal. As soon as it had descended low enough to be within the immediate influence of the blast (which in a furnace of this construction would be in a few minutes) the lime and earthy part of the ore become fused into a slag, and enveloping the iron, now in a metallic state, sunk down into the crucible, displacing the charcoal with which it had been at first charged. The matter remaining at rest in the crucible gave an opportunity to the particles of iron to sink to the bottom, which they did in greater or less proportion according to the fluidity of the slag and the completely metallic state of the iron. After this process had been going on for the space of from eight to twelve hours, the crucible became filled with melted matter: at this time the hole which had been at first stopped up with clay was opened by means of an iron bar introduced through the channel in the brick-work, and the scoriæ immediately flowed out, leaving the iron behind covered with hot charcoal. The blast being stopped, the furnace soon got sufficiently cool to allow the workmen to take out the iron, which was found imperfectly concreted together into a mass nearly of the shape of a wooden bowl: this being transferred to an anvil was first carefully hammered with wooden mallets to break off the encrusting scoriæ and render it sufficiently compact to bear the tilt hammer, to which it was next subjected; being then divided into five or six pieces, each was separately forged into a bar, and thus the operation was finished. The iron thus obtained was extremely tough and hard, but difficult to work, and was in great request for helmets and other articles of defensive armour, and in general for all purposes where toughness and hardness united were particularly required. The rich quality of the ore, and the circumstances under which it was reduced, were probably the chief causes of the excellence of this kind of iron; a peculiarity however in the method of forging may also have somewhat contributed to this; for, while it was under the tilt hammer, an assistant stood by with a ladle of water, with which he sprinkled the bar as often as it was struck by the hammer.

The poorer ores, which were incapable of being smelted in the above method, were first picked, washed, and roasted, then reduced to pieces no larger than hazle-nuts, and reduced (no doubt with the addition of lime) in blast furnaces from seven to eight feet high and shaped like a chimney. In these a considerably greater heat could be produced than in the former, but it does not appear that the metal when taken out of the furnace was in the state of cast iron; certain it is that it was always allowed to cool there, and was never run into pigs as is the modern practice.

However simple this process may at first view appear, it is attended with some very serious practical difficulties, and we may now describe another method by which the richer veins of iron ore may be worked. The ore being broken into small pieces is heaped upon a bed of charcoal in a very simple reverberatory furnace. When the whole has been glowing hot for some time, the pieces, being now soft and at a welding heat, are by the dextrous management of the workmen brought in close contact with each other by means of an iron bar; they are then lightly hammered while still in the furnace, and thus the whole mass acquires sufficient compactness to be removed to the anvil without falling to pieces; it is now hammered with a gradually increasing force, the earthy impurities are thrown off, together with the scales of black oxide; the lump is divided into pieces of a convenient size, which by repeated heating and hammering are drawn into bars. The rich red hæmatite, as appears from an experiment of Mr. Mushet, is capable of being manufactured in the same way.

These ancient methods have fallen into disuse, not because the quality of the iron thus produced was objected to, but because the time and fuel consumed were enormous, and the iron that remained in the scoriæ amounted at least to one-half of the original metallic contents of the ore.

When iron-stones are said to contain good or bad iron, the expression ought to be understood as a comparative assertion, confined to local rules, and judged by certain fixed local standards; into the account of which many things must be taken, which are frequently overlooked. At every iron-work, a certain portion of fuel, coke or charcoal, by weight, is understood to be sufficient to smelt and manufacture a determinate weight and quality of iron-stones combined together, in order that a certain quality of crude iron may be produced. In this case, should a new iron-stone be substituted for one whose quality and effects are already known, and should its application be productive of iron less carbonated than formerly, it would instantly be denominated a bad iron-stone, or an iron-stone containing bad iron; an assertion only true comparatively so far as it would affect the interest of the manufacturer, unless corrected by an addition of fuel, a change of the mixture of ores, or a varied application of the lime-stone used as a solvent or flux. But this is no proof that the quality of iron, as it exists in the ore, is bad, since a larger proportion of coke, or a change of mixture, which incurs no additional expense, can correct the evil. It rather furnishes a demonstration that the iron in all ores is the same; but that, in calling it into a metallic form, the quality is affected chiefly by the reduction of those mixtures originally united with it.

Taking as a general principle that the crude iron contained in all iron-stones is the same, and that it can be called into existence as a metal of all the various degrees of carbonation, by regulating the proportion of fuel and of the solvent, we shall proceed to mention those mixtures which determine the future quality of the crude iron.

1. Argillaceous iron-stone having fine clay as its chief component earth, lime in the next proportion, and both these nearly destitute of sand; which, when properly torrefied, exhibits fibres on its internal surface, of a brown, dark brown, or claret color, running either in streaks or ra-

diated, and adhering tenaciously to the tongue, will afford, with a moderate proportion of cokes and lime-stone, iron of the finest quality, possessing strength conjoined with an intimate degree of fusibility.

2. Calcareous iron-stone, that which contains lime as its principal earthy mixture; holding clay in the next proportion, and both these comparatively unalloyed (totally they never are) with sand; which, when regularly torrefied, assumes a variety of shades generally lighter in the color than the former class, which sometimes, and sometimes not, presents internal fibres, and which adheres less tenaciously to the tongue; always contains iron which can be revived, richly carbonated with a comparatively small quantity of cokes, and with a trifling addition of lime. Under this class of iron-stones are found those which produce iron of a fusible nature, seldom connected with strength, but valuable for its utility in fine castings, which require ornament more than durability.

3. Those iron-stones whose component parts are nearly an equalised mixture of clay, lime, and sand, which torrefy with a slight degree of adhesion to the tongue, assuming a darkened or brownish color, void of every internal fibre, always afford, with the local proportion of fuel, iron of an intermediate quality for fusibility and softness, but generally possessing strength in an eminent degree. Such iron is excellently adapted for the manufacture of great guns, mortars, and the large species of machinery. Its application to the purpose of bar-iron making would also be attended with the most beneficial effects, possessing neither the extreme of fusibility nor of infusibility: it would greatly prevent, in the manufacturing, a tendency, which iron possessed of these extremes has, to become red or cold short.

4. Iron-stones which unite a large proportion of sand with sparing portions of clay and lime, which, upon being slightly exposed to heat, exhibit masses of semivitrification, neither obedient to the magnet, nor adhesive to the tongue, having a refractory disposition to part, and possessing a dark blue or blue color, always afford, with the usual proportion of fuel, crude iron of the worst quality, either as to strength or fusibility. Such metal is commonly highly oxygenated and brittle; incapable of being used alone for any melting purpose; and, when applied to the use of the forge, affords malleable iron, which possesses the cold short quality.

These are the four principal classes under which Mr. Mushet has arranged his iron-stones, with regard to their tendency to afford their iron carbonated, possessing strength, or otherwise, when smelted in the brass furnace with a determinate quantity of fuel. As this classification is exactly analogous to the results obtained in the large way, it may serve as a groundwork to those who may wish to attain a practical knowledge of these ores, so far as it relates to their manufacture.

It is, however, easy to counteract the natural tendency which every iron-stone has in this case, to afford its iron of a certain quality, and to make each of them yield crude iron of all the different degrees of fusibility and strength. Is it not obvious, since the qualities of crude iron depend upon the mixtures and their kinds composing the stones, that, if nature be assisted by adding or subtracting from them in the blast-furnace, every quality of crude iron may be produced from the same iron-stone?

The usual criterions by which iron-stone is judged, whether it be sufficiently rich in iron for the purpose of smelting, are the following:—

1. The degree of tenacity with which it adheres to the tongue after torrefaction. 2. Its color. 3. The obedience to the magnet when pulverised. 4. By depriving of its iron a given weight of the ore, in contact with charcoal and fusible earths in the assay furnace.

The first and third of these methods are liable to great error. The adhesion to the tongue will be more in proportion to the quantity of clay and its kind contained in the stone, than to its real contents in iron. Iron-stone may also be torrefied in such a manner as to deprive its internal surface of this property; as it is only peculiar to the stone at a certain stage of torrefaction.

The influence which the magnet possesses over some ores of iron is no direct proof of the quantity of iron contained, as some ores which contain fifteen parts in 100 are completely magnetic, while others again that contain sixty to seventy parts of iron in 100 are not in the smallest degree affected with this property. The magnetic test is more used to ascertain the existent state of the metal, whether mineralised with an acid, combined with sulphur or with oxygen, or existing in a disengaged state more or less metallic. No iron-stones, which in their native state contain their iron mineralised with oxygen, or in the state of an oxide, completely dispersed through an intimate combination of clay, lime, and silex, containing water, carbonic acid, and sometimes concrete sulphur, are obedient to the magnet till such time as torrefaction has passed upon them, either exposed to open air, or in contact with charcoal in close vessels. If this process is continued for a short time, the whole mass will become obedient; but this affection will still depend upon the relative quantity of concrete oxygen fixed with the iron. Individually, however, iron-stones are affected by the proportion of heat conveyed to them while torrefying. If the quantity communicated has been sparing, so as not to have carried off all the water, carbonic acid, &c., the magnetic virtue will also be proportionally absent; if the dissipation of these substances has been complete, the magnet will possess an influence in the exact ratio of the quantity of oxygen which remains combined with the metal. Should it happen that a degree of heat, capable of exciting fusion, is applied, the mass will then rapidly lose its magnetic obedience by an extra-fixation of oxygen; if driven so far as to make it exhibit a semi-vitrified appearance, this principle would be found to be entirely annihilated.

Although the color which iron-stones assume in torrefying intimately depends upon the degree of heat presented to them in the operation of burning, yet, by regulating this agent in a

proper manner, an accurate knowledge may be formed, not only of the probable quantity of iron, but even of its tendency to become carbonated in smelting. The expulsion of the water and acid leaves the combined earths more exposed to determination. The small specula of silex are distinctly discerned; adhesion to the tongue developes the presence of clay; and lime is indicated by its assuming a whitish color, either striated or disseminated, approaching towards the surface of the stone.

The last method mentioned, namely, that of depriving a given portion of ore of its iron, is the most consonant to truth and to the ideas of the manufacturer. Acids may be used as a check upon the assay by fusion; but this intricate, or rather this slow process, is chiefly resorted to by chemists, and seldom goes beyond the bounds of the laboratory. In assaying by fusion, not only the quantity of iron may with precision be ascertained, but also the quality of crude iron likely to be produced from the ore, with the local proportions of fuel in the large way. The earths formerly united with the iron now become fused with those added for solvents. These float upon the surface of the extracted metal, and, when cold, may afford information, from their color and transparency, concerning the regulation of future proportions upon a more extended scale.

The art of roasting iron-stone (technically called its calcination) has by some been considered as an operation in which, for the first time, the iron-stone unites with a portion of oxygen, and in so far as this requires to be again removed in the smelting furnace, previous to separation, it has been deprecated or thought unnecessary. Practice, however, has more clearly in this, than in any other metallurgical operation, determined the utility and necessity of roasting the ores, previous to their being smelted.

Iron-stones in general, in roasting, lose from thirty to thirty-five per cent. of their weight. Torrefaction commences with a change of color upon the surface, which keeps penetrating as the process advances. When the iron-stone is of one uniform color throughout, the operation may then be considered as perfect; if a mass of the iron-stone be broken in the interim, the unroasted part will be found occupying the centre, and of a blackish color. Some hours are necessary to roast thoroughly, even a small piece of iron-stone; the same effects however may be produced in two minutes, by exposing iron-stone, finely pounded, upon a red-hot plate. The change of color in this case is rapid; it almost instantly becomes brown, then black, though in cooling it usually returns to a brownish-red, or dirty-purple color.

An iron-stone, that had lost thirty-two per cent. in roasting, was pounded very small, fused, and yielded as follows:—

400 grains of iron-stone, 50 grains of finely-pulverised coke,	139 grains of iron = $33\frac{1}{4}$ per cent.
300 grains of iron-stone, 60 grains of finely-pulverised coke,	123 grains of iron = $41\frac{1}{4}$ per cent
300 grains of iron-stone, 75 grains of finely-pulverised coke,	132 grains of iron = 44 per cent.

The last reduction may be considered as nearly a perfect assay of the ore, which in many cases, where the earthy matters are nearly in equal proportions, may be accurately performed without the addition of any flux.

Some masses of the same substance not previously roasted, weighing 6024 grains, were put into a crucible along with coke-dust, and a pyrometer roll filled at 1°. After an exposure of ten hours to a bright heat, the pyrometer was found to indicate 28°, and the iron-stone had lost in weight forty-two per cent., or ten per cent. more than when roasted in the common way. This may be attributed to the loss of oxygen, in consequence of the metallic particles being exposed in contact with carbonaceous matter. The iron-stone, when washed, and perfectly freed from this substance, was of a grayish-blue color, adhesive to the tongue, possessed of a metallic taste, and, when pulverised, deflagrated in flame.

400 grains of the common roasted iron-stone, for the sake of comparison, were fused alone, and afforded a dense, shining, opaque glass, without any metallic separation.

400 grains of the cemented deoxidated ore were reduced to the same size, and fused under the same circumstances, from which resulted a prismatic colored button of iron, weighing 120 grains, or thirty per cent.

In another experiment 4281 grains of the same iron-stone, in pieces, were exposed for twenty-four hours, in contact with coke-dust, to a heat that, by the pyrometer, indicated 69° of Wedgewood; loss in weight equal to forty-three per cent., so that fourteen hours of longer exposure, and double the temperature, had only produced a further deoxidation of one per cent. beyond that obtained in the first cementation. The pieces of iron-stone were now completely metallic, compact, and brightened under the file.

300 grains of this deoxidated iron-stone yielded by fusion, per se, a mass of soft malleable iron, weighing 113 grains, or thirty-seven and two-thirds per cent.

300 grains, to which were added fifteen of coke-dust, yielded by fusion 163 of iron, or fifty-four and one-third per cent.; five grains of coke were found in the crucible unacted upon, so that ten grains of coke were employed in reviving the additional fifty grains of iron.

200 grains of roasted iron-stone were fused, per se, in a black-lead crucible: forty-nine grains of iron, or twenty-four and a half per cent., was the result.

200 grains of iron-stone, deoxidated at 69°, were similarly exposed and fused, from which resulted ninety-two grains of iron, or forty-six per cent.

The iron-stone subjected to the foregoing experiments, when roasted, yielded forty-four per cent. of iron, and lost in roasting thirty-two per cent.; so that the ore in its native state contained thirty-three per cent. of iron. After the rate of forty per cent. this would furnish us with a quantity of oxygen equal to 13·2 per cent., united originally with the iron. Now the ponderable matter got rid of by the cementation, in the experiments at 28° of Wedgewood, was the difference between thirty-two and forty-two, or ten, and in that of 69° the difference was equal to 11°; a coincidence sufficiently near to warrant the conclusion, that the iron of our iron-stone is not only in the state of an oxide, but that the dose amounts to forty per cent. at least; for it cannot for a moment be supposed that any process of cementation, confined to an inferior range of temperature, could separate from the ore the last portions of oxygen, which it is even probable resist the higher temperature, and more perfect operation of the smelting furnace.

In the process of smelting, two things are absolutely essential to the separation of the iron. First, the metal itself must be rendered fluid, which will then, by its great specific gravity, descend to the lowest parts of the furnace, and some other compound must, at the same time, be separated in a liquid form, so as to float upon its surface, and defend itself from the influence of the blast. If the ore consisted of iron and oxygen alone, the carbon of the coke would combine with the oxygen; and an excess of carbon would also unite with the iron to render it liquid at that temperature; but here would be a deficiency of the fluid vitreous matter necessary to the defence of the iron from the oxygen of the blast. Hence it will be necessary to employ some substance, with such iron ore, which shall be capable of forming a liquid scoria, or cinder, for the preservation of the carbonated iron when once obtained. So far as observation has dictated, it would seem that the cinder cannot be too perfectly fluid. The principles on which the fusibility of the cinder depends are not simply confined to the materials used in the smelting of iron, but refer to all compound fusible matter with which we are acquainted. It may be observed in general, and indeed almost without exception, that an alloy of two metals is fusible at a temperature much less than the arithmetical mean between the fusing points of the metals. For instance, an alloy of lead and tin is more fusible than either of the metals composing it, and a similar mixture of copper and silver may be used as a solder for either silver or copper separately. This property is not less conspicuous in the earths; none of them in their pure state can be fused in our hottest furnaces, nor scarcely with a stream of oxygen gas; although certain proportions of them are, together, fusible at the heat of a moderate air-furnace. Lime and clay, when separately taken, may be considered as incapable of fusion at any degree of heat yet produced in furnaces; and still, in certain proportions, they are too fusible to be made into even bricks or crucibles. It will appear, from these facts, that the iron-master cannot pay too much attention to the subject of the relative fusibility of the earths in different proportions. Most of the iron ores of this country are argillaceous; that is, consist, besides oxide of iron, of a small quantity of silex or flint, and a large proportion of clay. Limestome has always been employed for such ores, and by combining with the clay and flint, as well as with a small portion of oxide of iron, forms a scoria or cinder easily capable of fusion.

Lancashire ore, when reduced to a small size, and heated on an iron-plate till it becomes of a black color, loses only from four to five per cent. of its weight; iron-stone, in the same time, would lose from twenty-five to thirty-five per cent.; as the ore cools, the black passes off, and the native red color returns. In this state it has acquired a slight, though perceptible, obedience to the magnet. If the ore is heated for two hours, it loses in all from six to seven per cent., and is then strongly magnetic, rendering it probable that the magnetic force in this case is more the result of a new arrangement of the metallic particles, than of the expulsion of so small a quantity of water.

If the exposure of this ore be still further continued, and particularly with an increase of temperature, it will regain its lost weight, assume a vitreous sort of fracture, and lose its obedience to the magnet; such increase of weight being undoubtedly owing to a farther dose of oxygen uniting with the iron, which is never found to exceed that of the water expelled in the more moderate temperature; and it may sometimes happen, in experiments of this nature, that the ore, after being roasted for eight or ten hours, will weigh as much as when first introduced into the furnace; though, had it retired at an earlier stage of the operation, the deficiency of weight would have been as before stated.

In general, when Lancashire ores (according to the sorts) are cemented in contact with carbonaceous matter, a loss of weight is sustained of from twenty-five to thirty-five per cent.; from which is to be deducted that weight, consisting of water, which the ore would have lost by being exposed to a low red heat, leaving the difference to express the quantity of oxygen removed from the ore during the operation. The following may be considered as a near approach to the constituent parts of the richest and densest species of the Lancashire hematites:—

Iron	64·0
Oxygen united with iron	24·5
Earthy matter	5·0
Water	6·5
	100·

The proportion of oxygen united in this analysis is under forty per cent.

When the ore has been roasted it is taken to the smelting or blast furnace, the lower part of which is filled with either charcoal or coke; the coke is always a fixed quantity, and the proportion of limestone added to the ore is according to the quantity of heterogeneous matter with which the metal is combined.

A section of the *blast furnace* is represented in fig. 1, plate Iron Manufacture. A, at the top

of the furnace, is an opening for the introduction of the materials; B the body of the furnace; C the place where the blast is introduced; and D a cavity to receive the metal when released from the earthy matter. The materials in the furnace are, previously to the introduction of the blast, heated simply by the draught of the atmosphere; the coke and limestone to a bright red or white heat, and the iron ore to a melting heat. When the blast is introduced, the metal immediately above it is brought into a state of fusion, and penetrates through the fuel into the cavity D. The ore and fuel that were above it sink down to fill up the space left by the ore melted and the fuel consumed. This next comes under the operation of the blast, and is similarly reduced. The men who attend the furnace keep adding fuel, ore, and limestone, through the opening A, at the top, and the operation of smelting goes on, until the melted iron, in the cavity D, rises nearly to a level with the tuyere irons, or blast pipes. The melted iron is then tapped, by driving a round-pointed bar into a sort of loam, with which the hole is stopped, and runs into moulds made in sand; in this state it is called pig or cast iron. When the slag, in smelting, has a greenish-gray appearance, it is a certain sign that the furnace is in excellent order.

Many methods have been adopted to obtain a regular and uniform blast. The first of these has already been noticed under the article BLOWING MACHINE; but, as this method of regulating the blast has been found to be far from perfect, other means have been resorted to with a view of obtaining the desired end. The one called the water-regulator consists of a large cistern, in which another of less area and capacity is inverted. Through the bottom of the smaller cylinder, which is, from its being inverted, uppermost, a pipe communicates with the blowing cylinder. This inner cistern is filled with water, as is also the space between the inner and the outer cistern to the same level. Now, supposing the air to be forced from the blowing cylinders through the above-mentioned pipe into the inner cistern, the water, being displaced by the air, will descend in the inner cistern, and rise up between the two vessels till the column of water on the outside is equal to the required force of the blast; this column would be about four pounds upon a square inch, and about nine feet. Another pipe proceeds from the same cavity in the inner vessel to the furnace, and communicates nearly a uniform blast, varying only with the outer column of water, which will be less as the outer surface of the water is greater. This contrivance, though for some time considered an important discovery, has, in many instances, been abandoned, owing to its carrying water, both in a state of spray, produced by the agitation, and in a state of vapor, into the furnace, by which both the quantity and the quality of the iron was materially affected.

Another mode has been attempted to equalise the blast, called the air vault. The first experiment of this nature was tried at the Clyde iron-works, by excavating a large cavity in a rock; but the trial was unattended by success, partly from the vault not being air-tight, and partly from the moisture which exuded from the rock mixing with the air.

A more successful experiment was made at the Carron works. An air-vault of wrought iron plate has been employed in one of the furnaces at Bradley, in Staffordshire, which appears to answer very well. Its form is a cylinder, about ten or twelve feet diameter, and fifty or sixty feet long.

According to an average deduced from a series of experiments made by Mr. Mushett, it appears, that, when the outer air was from 63° to 68°, the air, immediately after its escape from the blowing cylinders into a receiving vessel, was increased from 63° to 90°, and from 68° to 99½°. In an average of thirty experiments the air in the act of condensing was raised 30°. This would have the effect of increasing its volume not less than one thirty-eighth of the whole, and the increased pressure of the blast, by this cause alone, would be nearly half a pound upon an inch. Or, in other words, if the air were introduced into the furnace at 60°, the same quantity would be admitted with half a pound less pressure upon an inch than if it were 90°. Hence any means of cooling the air after its condensation, in all seasons of the year, must be attended with beneficial consequences. If the air-vault were made of wrought iron, and its surface constantly kept wet, the evaporation from so great a surface, if freely exposed on all sides to the air, would cool the air very considerably. Indeed, without the aid of the moisture, the effect would be such as to recommend its adoption. It was supposed, that in the summer season there would be some advantage in bringing the air under ground for a considerable distance before it entered the blowing machine; but the resistance arising from the friction on the sides of the channels through which it must pass has been found an insurmountable obstacle.

The *puddling furnace* was originally invented by Mr. Cort, and is a most important appendage to the iron works. In its general form it nearly resembles the ordinary air furnace. It is heated by means of pit-coal, on a grate; and has a chimney of considerable height, in which there is a damper to regulate the degree of heat while puddling. A considerable portion of the space between the grates and the chimney is formed flat, and covered with a peculiar sand, possessing the properties, when heated, of becoming very hard and infusible. On this space is placed three or three and a half hundred weight of finers' metal, and the flame allowed to pass over it with the full force of the fire. In twenty minutes the iron assumes a yellowish-white color, and marks of fusion appear on the angles of the pieces; the puddler then turns up new surfaces to the flame, and keeps breaking those which have reached a softened state. This he continues, at intervals, till the charge has subsided into a thick clotted sort of fusion. The furnace, at this period, is reduced to its lowest temperature; part of the furnace bars and fire are withdrawn, and the damper nearly shut; the puddler keeps stirring and moving the iron backwards and forwards, which now begins to ferment and emit flashes of a bluish colored flame. This operation is conti-

nued till these appearances fall off, and till the iron becomes less clotted, and begins, in the language of the workman, to dry. His exertions are redoubled, and soon the whole charge is reduced to the state of the finest saw-dust; it is now said to be dry, and so totally free from cohesion that it may be moved about like as much sand.

At this stage of the operation the grate bars are replaced, the fire repaired, the damper elevated, and the heat is in consequence increased, though gradually. The grains of iron become tipt with a snowy whiteness, resembling the welding of iron; they no longer repel each other, but begin to adhere in small masses; these increase in size as the temperature of the furnace is raised. When the charge begins to work heavy, the puddler selects a nucleus, and rolls it over and over upon the coalescing masses, till he has got it of the weight of sixty or seventy pounds; he then places this on the flame side of the furnace, and begins anew the operation of balling; repeating this till the whole charge is balled up.

A heavy iron instrument, called a *dolly*, is then introduced into the furnace, and with this the balls are in succession beaten to give them more cohesion in rolling. When properly heated, they are removed by tongs from the furnace, and slid along iron plates to the rolling machine. Here the lumps or balls are each, in succession, passed through rollers, grooved diagonally, acquiring as they pass additional cohesion and firmness, and assuming the form of a bloom. This is then presented to another pair of rollers, with flat openings or grooves, and rolled into a bar of three or four inches in breadth, and from half an inch to three-fourths of an inch in thickness.

The whole operation of rolling one of the balls is performed in a minute and a half, and pleases while it astonishes the observer, by the rapid change which is thus passed upon matter the most unshapely and refractory. The whole time taken up to complete a charge from the puddling furnace is only from two to two and half hours; the loss sustained is from ten to twelve per cent. One furnace will discharge five or six heats in twelve hours, and make in one week from ten to twelve tons of rough bars. A set of rollers, moved by a thirty horse power engine, will rough down in a week 200 tons of such iron, and keep twenty puddling furnaces at work, for which three or four refineries or running out fires will be necessary. The material thus produced is called mill-bars, which require another operation before they are finished. For this purpose they are carried to a pair of large steel shears, and cut into regular lengths, proportionate to the bar ultimately intended to be made. These pieces are then piled on each other in reference to the required thickness, as the cutting was to the requisite lengths, and are introduced into the reheating furnace. A welding heat by the flame of pit coal is here made to operate for the space of twenty minutes; they are then, one by one, taken to another set of rollers similar to the first, and each pile is brought down in the diagonal grooves to a certain size, they are then put into the finishing rollers and rapidly formed into bars of the most perfect form and accurate dimensions.

The *tilt-hammer* is a most important appendage to the iron manufacturer. It differs from the common forge, however, by being poised on a centre of motion, about the middle, or two-thirds of the length of the helve from the head, and from receiving its motion from cogs acting upon the tail of the helve. In some few cases the ash spring is placed over the head of the hammer, but in general, the tail of the helve is made to strike against a fixed floor, and the hammer, from the force it has received, continuing to rise after the tail strikes the floor, the helve bends, and by its elasticity causes the hammer to descend with greater force upon the anvil.

The tilt-hammer is represented in figure 2. It is taken from a tilt-mill made at the Carron iron-works in Scotland, after designs of the celebrated Mr. Smeaton. It is adapted for forging iron into bars. In this apparatus *e* represents the iron head of the hammer, *f* its centre of motion, and *d* the tail or extreme end, upon which the cogs of the wheel act, and which is plated with iron on the upper side, to prevent it from wearing. P is the anvil-block, which must be placed on a very firm foundation, to resist the incessant shocks to which it is subjected: the centre *f*, or axis of the hammer, is supported in a cast-iron frame *gh*, called the hirst. When the cogs of the wheel strike the tail of the hammer suddenly down, and raise the head, the lower side of the tail of the hammer strikes upon a support *n*, which acts to stop the ascent of the head of the hammer *e*, when it arrives at the desired height; but, as the hammer is thrown up with a considerable velocity as well as force, the effort of the head to continue its motion, after the tail strikes the top *n*, acts to bend the helve L of the hammer, and the elasticity of the helve recoils the hammer down upon the anvil with a redoubled force and velocity to that which it would acquire from the action of gravity alone.

To obtain this action of recoil, the hirst *gh* must be held down as firmly as possible; and, for this purpose, four strong iron bolts are carried down from the four angles of the bottom plate *h*, and made fast to the solid basis of stone RR, upon which the whole rests; upon this base are placed four layers of timber *i*, *k*, *l*, *m*, which are laid one upon another, and the timbers of each layer are laid cross-ways over the others. Each layer consists of several pieces laid side by side, and they are slightly tree-nailed together, to form a platform. Each platform is rather less than that upon which it rests, so as to form a pillar of solid timber; on the top of which the hirst-frame *gh* is placed, and firmly held down by the four bolts, which descend through all the platforms, and have secure fastenings in the solid masonry beneath.

The stop *n* is supported by a similar pillar, but smaller, and composed of three layers: the upper-piece *n*, which is seen cross-ways, is about three feet long, and the under side is hollowed, so that the piece bears only upon the two ends, leaving a vacancy beneath it, which occasions it to bend or spring every time the tail *d* of the hammer strikes upon it, and this aids the recoiling action very much.

The axis on which the hammer moves is formed by a ring of cast iron, through which the helve of the hammer is put, and held fast by wedging round it. The ring has a projecting trunnion on each side, ending in an obtuse conical point, which is received in a socket firmly fixed in the hirst-frame *g h*, by screws and wedges, one of which is seen at *r*. These two sockets are thus capable of adjustment, so as to make the hammer-face fall flat upon the anvil.

In the Carron iron-works three hammers are worked from the same shaft. In such case it is necessary to have the three wheels that communicate motion to their respective hammers of different sizes and numbers of cogs, to produce that velocity in each hammer which is best adapted for the work it is to perform; thus the wheel for the hammer, which is represented in fig. 3, has eight cogs, and therefore produces eight blows of the hammer for each revolution of the fly-wheel; the wheel for the middle hammer has twelve cogs; and the wheel for the smaller hammer sixteen; the latter will therefore make two strokes for every one of the great hammers. In fixing the three wheels upon the great shaft, care is taken that they shall produce the blows of the different hammers in regular succession, and equalise as much as possible the force which the water-wheel must exert. The wheels are fixed on the shaft by means of a wedging of hard wood, driven in all round; the wood being capable of yielding a little to the shocks occasioned by the cogs meeting the tails of the hammers, renders the concussions less violent.

The following are the principal dimensions:— The head of the great hammer weighs 3½ cwt., and it is intended to make 150 blows per minute; it is lifted seventeen inches from the anvil at every blow.

The middle hammer is 2 cwt., and makes 225 blows per minute; it is lifted fourteen inches each time.

The small hammer weighs 1½ cwt., and makes 300 blows per minute; it is lifted only twelve inches.

To produce these velocities, the great axis upon which the cog-wheels are fixed must make 18¾ turns per minute and the pinion upon this axis being in proportion with the cog-wheel upon the shaft of the water-wheel as 1 is to 3, the water-wheel must make 6¼ revolutions per minute; the water-wheel being 18 feet diameter, its circumference will be $18 \times 3{\cdot}1416 = 56{\cdot}54$, or 56½ feet; this multiplied by 6·25 is about 353 feet motion per minute, or divided by $60 = 5{\cdot}9$ feet motion per second for the circumference of the water-wheel.

In making the most highly carbonised iron, or what is called No. 1, it sometimes happens that a portion of the iron unites with a great excess of carbon, forming a substance which, when cold, appears in bright shining scales. It is found to possess most of the properties of plumbago, differing from that substance only in containing less carbon. This carburet is no doubt in the liquid form in the furnace, and, being of much less specific gravity than the iron, floats upon its surface. It is so much more infusible than the metal, that, before the iron enters the moulds of the pig-bed, it is seen swimming at the top in the scaly form as before-mentioned.

This substance is called by the workmen *kish*; and, whenever it appears, it is a certain sign that the furnace is working on the best sort of iron. So surely, indeed, is it the case, that No. 1, or the most highly carbureted metal, has received the epithet of *kishy*, because *kish* is the common attendant on its production.

Heated air has been very successfully applied to blast furnaces at the Clyde iron works. It is now completely ascertained that iron may be smelted by heated air with three-fourths of the quantity of coals required with cold air, that is, air not artificially heated; while the produce of the furnace in iron is at the same time greatly increased. All the furnaces at the Clyde iron works are now blown with it. At these works the air, before it is thrown into the blast furnaces, is heated to 220° Fahrenheit, in cast iron vessels placed on furnaces, similar to those of steam-engine boilers. It is expected that a higher temperature than 220° will be productive of a proportionally increased effect; but this is still the subject of experiment. It is calculated that this improvement will accomplish a saving in the cost of the iron smelted in Great Britain to the amount of at least £200,000 a-year. The fact that heated air is better adapted than cold air to promote combustion is now incontestably established by experiment. No argument to the contrary is afforded by what is also a fact, that a fire burns better in cold than in warm weather. The fire burns better in the former than in the latter case, not because the air is cold, but because it is dry. Let cold air be artificially heated, and its superiority in promoting combustion, over air naturally of the same temperature, but not artificially heated, will be apparent. It has been attempted to account for this fact in various ways. The most simple theory seems to be, that air is not fitted to promote combustion, till it reach a high temperature, and that a quantity of fuel is expended in raising it to this temperature, before it can be of any use in promoting combustion. The question, therefore, resolves itself into this: whether it is more economical, in respect of fuel, to heat the air in the smelting furnace, where it comes into contact with the coke, and carries it off in the form of carbonic acid gas, or to heat it previously in a separate furnace. The experiments at the Clyde iron works show that it is heated in the separate furnace with one-eleventh part of the fuel that is required to heat it in the smelting furnace, when allowed to come into contact with the coke. One reason why that should be the case is very obvious: in the smelting furnace the air is heated with coke, in the separate furnace with coals. These observations do not apply to the mode of heating the air in a close vessel, by means of the smelting furnace itself, before it is allowed to come into contact with the coke. The experiments with respect to this mode of heating air are still in progress.

Pig-iron, when divested of its carbon, becomes malleable, and we have in this country many extensive manufactories for the express pur-

pose of converting articles made of cast-iron, such as nails, cutlery, &c., into iron perfectly malleable, without altering in the slightest degree the figure given to them in the casting. We have even seen nails made in this way welded together, and when cold bent at right-angles in a vice

The method of releasing the pig-iron of its carbon, or of converting it into what is called wrought or malleable iron, is by placing it in an open furnace, termed a refinery, and by some a run-out furnace, heated by cokes, and subjected to the operation of a very powerful blast. The pig-iron is laid upon the cokes, and is soon melted, leaving much of its impurity behind. This is termed refining it. The metal when melted is run into plates, about four inches thick, and, as soon as it becomes set, is thrown into water, which makes it mor frangible, and easier to be broken.

The refining furnace is represented in figs. 4, and 5. A is a recess or trough, made of cast metal, having a bottom of fire-stone or brick. This recess is surrounded on three sides by a cavity, through which water is constantly passing from the cistern C; *p, p*, are two pipes connected with the blowing machine, and entering into conical openings in the refining furnace. These pipes are kept cool by water from the pipe *d*, which runs off at the pipe *b c c*. B is a shallow recess, about four inches deep, to receive the melted mass.

We may now furnish a table of the average weight of iron bars, each bar being ten feet in length:—

Inches.		Cwt.	qr.	lb.	Inches.		Cwt.	qr.	lb.	Inches.		Cwt.	qr.	lb.
6 ×	¾	1	1	15	3¾ ×	¾	0	3	12	2¼ ×	⅝	0	1	23
	⅝	1	0	13		⅝	0	2	24		½	0	1	10
	½	0	3	19		½	0	2	8		⅜	0	1	1
5½ ×	¾	1	1	1		⅜	0	1	20	2⅛ ×	¾	0	2	2
	⅝	1	0	6	3½ ×	¾	0	3	5		⅝	0	1	18
	½	0	3	10		⅝	0	2	18		9/16	0	1	14
5 ×	¾	1	0	13		½	0	2	4		½	0	1	9
	⅝	0	3	23		⅜	0	1	16		⅜	0	1	0
	½	0	3	2	3¼ ×	¾	0	2	27	2 ×	¾	0	1	24
4¾ ×	¾	1	0	10		⅝	0	2	14		⅝	0	1	15
	⅝	0	3	19		½	0	1	27		9/16	0	1	11
	½	0	2	25		⅜	0	1	14		½	0	1	6
	⅜	0	2	5	3 ×	¾	0	2	22		⅜	0	0	26
4½ ×	¾	1	0	4		⅝	0	2	8	1⅞ ×	¾	0	1	20
	⅝	0	3	13		½	0	1	23		⅝	0	1	12
	½	0	2	21		⅜	0	1	10		9/16	0	1	9
	⅜	0	2	11	2¾ ×	¾	0	2	14		½	0	1	5
4¼ ×	¾	0	3	25		⅝	0	2	2		⅜	0	0	24
	⅝	0	3	7		½	0	1	20	1¾ ×	¾	0	1	17
	½	0	2	17		⅜	0	1	7		⅝	0	1	10
	⅜	0	2	0	2½ ×	¾	0	2	8		9/16	0	1	5
4 ×	¾	0	3	19		⅝	0	1	25		½	0	1	2
	⅝	0	3	1		½	0	1	15		⅜	0	0	23
	½	0	2	12		⅜	0	1	4	1½ ×	¾	0	1	11
	⅜	0	1	24	2¼ ×	¾	0	2	5		⅝	0	1	3

Iron-Moulds, and spots of ink in linen, may be taken out by dipping the stained part in water, sprinkling it with a little of the powdered essential salt of wood-sorrel, then rubbing on a plate, and washing the spot out with warm water.

Iron Mountains, The Great, in the territory of the United States, extend from the river Tennessee to that of the French Broad, from south-west to north-east; farther to the north-east, the range has the name of Bald Mountains; and beyond the Nolachucky, that of Iron Mountains. This range constitutes the boundary between the state of Tennessee and North Carolina, and extends from near the lead mines on the Kanhaway, through the Cherokee country, to the south of Chota, and terminates near the sources of the Mobile. The caverns and cascades are innumerable.

Iron-Sick, in the sea language, is applied to a ship or boat, when her bolts or nails are so eaten with rust, and so worn away, that they occasion hollows in the planks, whereby the vessel is rendered leaky.

Iron-Wood, in botany. See Sideroxylon.

Iron-Wort, in botany. See Sideritis.

I'RONY, *n. s.* } Gr. *ειρωνεια*; Fr. *ironie*.
Iron'ical, *adj.* } A mode of speech in
Iron'ically, *adv.* } which the meaning is contrary to the words, used in joke or derision: ironical, sarcastic; playful; speaking by contraries: ironically, by the use of irony. The address of Elijah to the worshippers of Baal is a fine example of this mode of address, wherein he says, 'Cry aloud, for he is a god,' &c.

Socrates was pronounced by the oracle of Delphos to be the wisest man of Greece, which he would turn from himself *ironically*, saying, There could be

nothing in him to verify the oracle, except this, that he was not wise, and knew it; and others were not wise, and knew it not. *Bacon.*

In this fallacy may be comprised all *ironical* mistakes, or expressions receiving inverted significations. *Browne.*

The dean, *ironically* grave,
Still shunned the fool, and lashed the knave. *Swift.*

So grave a body upon so solemn an occasion, should deal in *irony*, or explain their meaning by contraries. *Id.*

IRONY, in rhetoric, is when a person speaks contrary to his thoughts, in order to add force to his discourse; whence Quintilian calls it diversiloquium. Thus, when a notorious villain is scornfully complimented with the titles of a very honest and excellent person; the character of the person commended, the air of contempt that appears in the speaker, and the exorbitancy of the commendations, sufficiently discover the irony. Ironical exhortation is a very agreeable kind of trope; which, after having set the inconveniences of a thing in the clearest light, concludes with a feigned encouragement to pursue it. Such is that of Horace, when, having beautifully described the noise and tumults of Rome, he adds ironically,

'Go now, and study tuneful verse at Rome!'

IROQUOIS, the name of six nations in North America, in alliance with the British colonies. Their country is bounded by Canada on the north, by New York and Pennsylvania on the east and south, and by lake Ontario on the west. In the American war they were allies of Great Britain; and had all their towns destroyed. They have since lived on grounds called the State Reservations, which are settled on all sides by white people, by whose industry the boundaries of the desert are continually encroached upon. The number of inhabitants in all the six nations was, in 1796, 4058. The Stockbridge and Brotherton Indians, who now live among them, added, make the number 4508, of whom 760 live in Canada, the rest in the United States.

IRRA'DIANCE, *n. s.* } Lat. *irradio.* From
IRRA'DIANCY, *n. s.* } *in* and *radius.* Emis-
IRRA'DIATE, *v. a.* } sion of rays or beams
IRRADIA'TION, *n. s.* } of light: to adorn by
the streaming forth of rays of light; to enlighten; to animate; to decorate by shining ornaments: irradiation, the act of emitting rays of light, material or intellectual.

If light were a body, it should drive away the air, which is likewise a body, wherever it is admitted; for, within the whole sphere of the *irradiation* of it, there is no point but light is found. *Digby on Bodies.*

Celestial light
Shine inward, and the mind through all her powers
Irradiate; there plant eyes; all mist from thence
Purge and disperse. *Milton's Paradise Lost.*

Love not the heav'nly spirits? Or do they mix
irradiance virtual, or immediate touch? *Milton.*

Ethereal or solar heat must digest, influence, *irradiate*, and put those more simple parts of matter into motion *Hale.*

The means of immediate union of these intelligible objects to the understanding, are sometimes divine and supernatural as by immediate *irradiation* or revelation. *Id.*

The principal affection is its translucency: the *irradiancy* and sparkling, found in many gems, is not discoverable in this. *Browne's Vulgar Errours.*

It is not a converting but a crowning grace; such an one as *irradiates* and puts a circle of glory about the head of him upon whom it descends. *South.*

No weeping orphan saw his father's store
Our shrines *irradiate*, or imblaze the floor. *Pope.*

IRRA'TIONAL, *adj.* } Lat. *in* and *ratio.*
IRRA'TIONALITY, *n. s.* } Void of reason or un-
IRRA'TIONALLY, *adv.* } derstanding; absurd;
contrary to reason.

Since the brain is only a transmittent, and that humours oft are precipitated to the lungs before they arrive to the brain, no kind of benefit can be effected from so *irrational* an application. *Harvey on Consumptions.*

Thus began
Outrage from lifeless things; but discord first,
Daughter of sin, among the *irrational*
Death introduced. *Milton's Paradise Lost.*

IRRAWADDY, or IRAVATI, a large river in the Burmhan empire, having its source in the eastern part of Thibet. It is not navigable even for flat-bottomed boats farther than the mountains which divide Ava from China. It enters the Burmhan dominions in or about 25° N. lat. At old Ava, in the rainy season, it may be a mile broad, and very deep; but during the remainder of the year it is not more than half a mile in breadth and eight feet deep. In lat. 17° 50′ it divides into two branches; one of which, running to the south-west, passes the town of Persaim or Bassien; the other, running to the south-east, passes Rangoon; but these branches again subdivide into many streams which are met by the tide. The intermediate space is formed into a Delta, covered with trees and long grass, and chiefly inhabited by buffaloes, deer, and tigers. The teak timber does not grow on the banks of this river, but in the mountains, from thirty to sixty miles inland. During the rainy season it is floated down the rivulets, then formed into rafts, and thus conveyed to Rangoon. This river formed the principal theatre for naval hostilities during the late Burmhan war. It may be estimated at 600 miles in length, and is of incalculable advantage to the country.

IRRECLAIM'ABLE, *adj.* In, re, and claimable. Not to be reclaimed; not to be changed to the better; shameless; incorrigible.

As for obstinate, *irreclaimable*, professed enemies, we must expect their calumnies will continue. *Addison's Freeholder.*

IRRECONCIL'ABLE, *adj.* } Lat *in* and
IRRECONCIL'ABLENESS, *n. s.* } *reconcilior.* Not
IRRECONCIL'ABLY, *adv.* } to be appeased
IRREC'ONCILED, *adj.* } by kindness;
not to be set at one again; not to be made consistent: irreconciled, still at variance; not atoned; which two words appear exactly to express the meaning of irreconciled.

A servant dies in many *irreconciled* iniquities. *Shakspeare.*

Wage eternal war,
Irreconcilable to our grand foe. *Milton.*

A weak unequal faction may animate a government; but when it grows equal in strength, and ir-

reconcilable by animosity, it cannot end without some crisis. *Temple.*

There are no factions, though *irreconcilable* to one another, that are not united in their affection to you. *Dryden.*

Since the sense I oppose is attended with such gross *irreconcilable* absurdities, I presume I need not offer any thing farther in support of the one, or in disproof of the other. *Rogers.*

This essential power of gravitation or attraction is *irreconcilable with* the Atheist's own doctrine of a chaos. *Bentley.*

IRRECOV'ERABLE, *adj.* } Lat. *in* and
IRRECOV'ERABLY, *adv.* } *recupero.* Not to be regained, restored, or remedied; hopeless, and helpless, as to condition.

The *irrecoverable* loss of so many livings of principal value. *Hooker.*

O dark, dark, dark amid' the blaze of noon;
Irrecoverably dark, total eclipse,
Without all hope of day. *Milton's Agonistes.*

It concerns every man, that would not trifle away his soul, and fool himself into *irrecoverable* misery, with the greatest seriousness to enquire. *Tillotson.*

The credit of the Exchequer is *irrecoverably* lost by the last breach with the bankers. *Temple.*

Time, in a natural sense, is *irrecoverable:* the moment just fled by us, it is impossible to recall. *Rogers.*

He loathes the world,—or with reflection sad
Concludes it *irrecoverably* mad.
Canning's New Morality.

IRREDU'CIBLE, *adj.* In and reducible. Lat. *in* and *reduco.* Not to be brought or reduced.

These observations seem to argue the corpuscles of air to be *irreducible* into water. *Boyle.*

IRREFRAGABIL'ITY, *n. s.* } Lat. *in, re,*
IRREF'RAGABLE, *adj.* } *frango.* Not
IRREF'RAGABLY, *adv.* } to be confuted or overthrown by argument.

Strong and *irrefragable* the evidences of Christianity must be: they who resisted them would resist every thing. *Atterbury's Sermons.*

That they denied a future state is evident from St. Paul's reasonings, which are of no force but only on that supposition, as Origen largely and *irrefragably* proves. *Atterbury.*

The danger of introducing unexperienced men was urged as an *irrefragable* reason for working by slow degrees. *Swift.*

IRREG'ULAR, *adj.* } Lat. *in* and *regula.*
IRREGULAR'ITY, *n. s.* } Deviating from rule,
IRREG'ULARLY, *adv.* } custom, or nature; im-
IRREG'ULATE, *v. a.* } methodical: a soft word for vice: irregulate, to make irregular or disorderly: verbs are called irregular which deviate from general rules.

This motion seems excentrique and *irregular*, yet not well to be resisted or quieted. *King Charles.*

The numbers of pindariques are wild and *irregular*, and sometimes seem harsh and uncouth. *Cowley.*

Regular
Then most, when most *irregular* they seem.
Milton.

This *irregularity* of its unruly and tumultuous motion might afford a beginning unto the common opinion. *Browne.*

Its fluctuations are but motions subservient, which winds, shelves, and every interjacency *irregulates.* *Id.*

Your's is a soul *irregularly* great,
Which, wanting temper, yet abounds with heat.
Dryden.

It may give some light to those whose concerns for their little ones makes them so *irregularly* bold as to consult their own reason in the education of their children, rather than to rely upon old custom. *Locke.*

Religion is somewhat less in danger of corruption, while the sinner acknowledges the obligations of his duty, and is ashamed of his *irregularities.* *Rogers.*

O'er the *irregulars* in lust or gore,
Who do not give professional attendance.
Byron. Don Juan.

IRREL'ATIVE, *adj.* Lat. *in* and *relativus.* Having no reference to any thing; single; unconnected.

Separated by the voice of God, things in their species came out in uncommunicated varieties, and *irrelative* seminalities. *Browne's Vulgar Errours.*

IRRELIG'IOUS, *adj.* } Fr. *irreligion;* Lat.
IRRELIG'ION, *n. s.* } *in* and *religio.* Not
IRRELIG'IOUSLY, *adv.* } acknowledging dependence upon, and obligation to, the deity; impious; profane: contempt of religion; acting in opposition to the dictates of piety: irreligiously, carelessly with respect to God; irreverently in holy services.

Religion's blot, but *irreligion's* paint;
A saint abroad, at home a fiend.
Fletcher's Purple Island.

And the priest
Was not behind, but ever at my ear,
Preaching how meritorious with the gods
It would be to ensnare an *irreligious*
Dishonorer of Dagon.
Milton. Samson Agonistes.

The weapons with which I combat *irreligion* are already consecrated. *Dryden.*

Shame and reproach is generally the portion of the impious and *irreligious.* *South.*

We behold every instance of prophaneness and *irreligion*, not only committed, but defended and gloried in. *Rogers.*

Might not the queen's domesticks be obliged to avoid swearing and *irreligious* profane discourse? *Swift.*

IRRE'MEABLE, *adj.* Latin, *irremeabilis.* Admitting no return.

The keeper charmed, the chief without delay
Passed on, and took the *irremeable* way. *Dryden.*

IRREME'DIABLE, *adj.* } Fr. *irremediable;*
IRREME'DIABLY, *adv.* } Lat. *ir* and *remedium.* Admitting no cure; not to be remedied.

They content themselves with that which was the *irremediable* error of former times, or the necessity of the present hath cast upon them. *Hooker.*

It happens to us *irremediably* and inevitably, that we may perceive these accidents are not the fruits of our labour, but gifts of God.
Taylor's Worthy Communicant.

Whatever he consults you about, unless it lead to some fatal and *irremediable* mischief, be sure you advise only as a friend. *Locke.*

IRREMIS'SIBLE, *adj.* } Lat. *in* and *remitto.*
IRREMIS'SIBLENESS, *n. s.* } Not to be pardoned; beyond the reach of forgiveness.

Thence arises the aggravation and *irremissibleness* of the sin. *Hammond on Fundamentals.*

IRREMOV'ABLE, *adj.* Lat. *in* and *removeo.* Not to be removed; not to be changed.

He is *irremoveable*,
Resolved for flight. *Shakspeare. Winter's Tale.*

IRRENOWNED', *adj.* Fr. *in* and *renommé;* Lat. *in, re, nomen.* Void of honor. We now say unrenowned.

For all he did was to deceive good knights,
And draw them from pursuit of praise and fame
To sluggish sloth and sensual delights,
And end their days with *irrenowned* shame.
Faerie Queene.

IRREP'ARABLE, *adj.* } Lat. *in* and *reparo.*
IRREP'ARABLY, *adv.* } Not to be recovered or repaired: without amends or reparation.

Irreparable is the loss, and Patience says it is not past her cure. *Shakspeare. Tempest.*

The cutting off that time, industry and gifts, whereby she should be nourished, were *irreparably* injurious to her. *Decay of Piety.*

Toiled with loss *irreparable.* *Milton.*

It is an *irreparable* injustice we are guilty of, when we are prejudiced by the looks of those whom we do not know. *Addison.*

IRREPLEV'IABLE, *adj.* Lat. *in* and *repleo.* Not to be redeemed; a law term.

IRREPREHEN'SIBLE, *adj.* } Lat. *in* and
IRREPREHEN'SIBLY, *adv.* } *reprehendo.* Not to be censured; without blame.

IRREPRESENT'ABLE, *adj.* Lat. *in, re, præsens.* Not to be figured by any representation.

God's *irrepresentable* nature doth hold against making images of God. *Stillingfleet.*

IRREPROACH'ABLE, *adj.* } Fr. *reprocher;*
IRREPROACH'ABLY, *adv.* } Lat. *in* and *opprobium.* Free from reproach: without censure.

He was a serious sincere Christian, of an innocent, *irreproachable*, nay, exemplary life. *Atterbury.*

Their prayer may be, that they may raise up and breed as *irreproachable* a young family as their parents have done. *Pope.*

IRREPROV'EABLE, *adj.* Lat. *in* and *reprobo.* Not to be blamed; irreproachable.

IRRESISTIBIL'ITY, *n. s.* } Lat. *in* and *re-*
IRRESIST'IBLE, *adj.* } *sisto.* Power
IRRESIS'TIBLY, *adv.* } above effectual
IRRESIST'LESS, *adj.* } opposition: superior to opposition: irresistless, a bad word, compounded of two negatives, meaning resistless.

Fear doth grow from an apprehension of the Deity, indued with *irresistible* power to hurt; and is of all affections, anger excepted, the unaptest to admit conference with reason. *Hooker.*

The doctrine of *irresistibility* of grace, if it be acknowledged, there is nothing to be affixt to gratitude. *Hammond.*

In mighty quadrate joined
Of union *irresistible.* *Milton.*

Those radiant eyes, whose *irresistless* flame
Strikes Envy dumb, and keeps Sedition tame,
They can to gazing multitudes give law,
Convert the factious, and the rebel awe.
Glanville.

God *irresistibly* sways all manner of events on earth. *Dryden.*

There can be no difference in the subjects, where the application is almighty and *irresistible*, as in creation. *Rogers.*

Fond of pleasing and endearing ourselves to those we esteem, we are *irresistibly* led into the same inclinations and aversions with them. *Id.*

Won by the charm
Of goodness *irresistible*, and all
In sweet disorder lost, she blushed consent.
Thomson.

IRRES'OLUBLE, *adj.* } Lat. *in* and *resol-*
IRRES'OLUBLENESS, *n. s.* } *vo;* Fr. *irresolu.*
IRRESOLV'EDLY, *adv.* } These words have
IRRES'OLUTE, *adj.* } opposite meanings:
IRRES'OLUTELY, *adv.* } the two first imply
IRRESOLU'TION, *n. s.* } a state not to be broken or dissolved, the others signify inconstancy; want of courage or determination; without firmness of mind or determined purpose.

Were he evil-used, he would outgo
His father, by as much as a performance
Does an *irresolute* purpose. *Shakspeare. Henry VIII.*

It hath most force upon things that have the lightest motion, and therefore upon the spirits of men, and in them upon such affections as move lightest; as upon men in fear, or men in *irresolution.*
Bacon's Natural History.

Divers of my friends have thought it strange to hear me speak so *irresolvedly* concerning those things, which some take to be the elements, and others the principles of all mixed bodies. *Boyle.*

In factitious sal ammoniac the common and urinous salts are so well mingled, that both in the open fire and in subliming vessels they rise together as one salt, which seems in such vessels *irresoluble* by fire alone. *Id.*

Quercetanus has this confession of the *irresolubleness* of diamonds. *Id.*

So Myrrha's mind, impelled on either side,
Takes every bent but cannot long abide;
Irresolute on which she should rely,
At last, unfixed in all, is only fixed to die.
Dryden.

Irresolution on the schemes of life, which offer themselves to our choice, and inconstancy in pursuing them, are the greatest causes of all our unhappiness. *Addison.*

IRRESPEC'TIVE, *adj.* } Lat. *in respecto.*
IRRESPEC'TIVELY, *adv.* } Having no regard to circumstances.

He is convinced, that all the promises belong to him absolutely and *irrespectively.* *Hammond.*

Thus did the Jew, by persuading himself of his particular *irrespective* election, think it safe to run into all sins! *Id.*

According to this doctrine, it must be resolved wholly into the absolute *irrespective* will of God.
Rogers.

IRRETRIEV'ABLE, *adj.* } Fr. *in retrouver*
IRRETRIEV'ABLY, *adv.* } Not to be regained or recovered.

It would not defray the charge of the extraction, and therefore must have been all *irretrievably* lost, and useless to mankind, was it not by this means collected. *Woodward.*

IRREV'ERENCE, *n. s.* } Lat. *in revereor.*
IRREV'ERENT, *adj.* } Want of due ve-
IRREV'ERENTLY, *adv.* } neration or respect; state of being disregarded: these words are generally applied to the demeanor as irreverent; or language or manner, as not yielding due homage.

Irreverence is, whan man doth not honour ther as him ought to do and waitheth to be reverenced.
Chaucer. The Persones Tale.

As our fear excludeth not that boldness which becometh saints, so, if our familiarity with God do not savour of fear, it draweth too near that *irreverent* confidence wherewith true humility can never stand.
Hooker.

Having seen our scandalous *irreverence* towards God's worship in general, 'tis easy to make application to the several parts of it. *Decay of Piety.*

The concurrence of the house of peers in that fury can be imputed to no one thing more than to the *irreverence* and scorn the judges were justly in, who had been always looked upon there as the oracles of the law. *Clarendon.*

Witness the *irreverent* son
Of him who built the ark; who, for the shame
Done to his father, heard his heavy curse,
Servant of servants, on his vicious race. *Milton.*

If an *irreverent* expression or thought too wanton are crept into my verses, through my inadvertency, let their authors be answerable for them. *Dryden.*

They were a sort of attributes, with which it was a matter of religion to salute them on all occasions, and which it was an *irreverence* to omit. *Pope.*

IRREVER'SIBLE, *adj.* } Lat. *in reverto.* IRREVER'SIBLY, *adv.* } Not to be recalled or changed.

The title of fundamentals, being ordinarily confined to the doctrines of faith, hath occasioned that great scandal in the church, at which so many myriads of solifidians have stumbled, and fallen *irreversibly*, by conceiving heaven a reward of true opinions. *Hammond on Fundamentals.*

The sins of his chamber and his closet shall be produced before men and angels, and an eternal *irreversible* sentence be pronounced. *Rogers.*

IRREV'OCABLE, *adj.* } Fr. *irrevocable;* IRREV'OCABLY, *adv.* } Lat. *in revoco.* Not to be recalled; not to be brought back; not to be reversed.

But sith that he his gone *irrevocable*,
Please it you, Ladie, to us to aread
What cause could make him so dishonourable
To drive you on foot, unfit to tread,
And lackey by him, gainst all woman head.
Spenser's Faerie Queene.

Give thy hand to Warwick,
And, with thy hand, thy faith *irrevocable*,
That only Warwick's daughter shall be thine.
Shakspeare.

Firm and *irrevocable* is my doom.
Id. As You Like It.

That which is past is gone and *irrevocable*, therefore they do but trifle, that labour in past matters.
Bacon's Essays

The second, both for piety renowned,
And puissant deeds, a promise shall receive
Irrevocable, that his regal throne
For ever shall endure. *Milton's Paradise Lost.*

If air were kept out four or five minutes, the fire would be *irrevocably* extinguished. *Boyle.*

By her *irrevocable* fate,
War shall the country waste, and change the state,
Dryden.

IR'RIGATE, *v. a.* } Lat. *irrigo.* To wet; IRRIGA'TION, *n. s.* } to moisten with water: IRRIG'UOUS, *adj.* } the act of watering or moistening. Irriguous, watery; dewy; moist.

Help of ground is by watering and *irrigation*.
Bacon.

The flowery lap
Of some *irriguous* valley spread her store
Flowers of all hue, and without thorns the rose.
Milton.

The heart, which is one of the principal parts of the body, doth continually *irrigate*, nourish, keep hot, and supple all the members.
Ray on the Creation.

Rash Elpenor
Dried an immeasurable bowl, and thought
To' exhale his surfeit by *irriguous* sleep:
Imprudent! him death's iron sleep opprest.
Phillips.

IRRIGATION, as a mode of agriculture, has been slightly adverted to under the article or the latter name. See AGRICULTURE, Index. Its early use, its great importance in the east, and the strong partiality of some modern European agriculturists, will justify some further observations upon the subject.

The Romans applied watering on a large scale, both to arable and grass lands, particularly the latter. 'As much as in your power,' says Cato, 'make watered meadows.' Virgil (Georg. 1, c. 104—118) advises to

Call the floods from high, to rush amain
With pregnant streams, to swell the turning grain.
Then, when the fiery suns too fiercely play,
And shrivelled herbs on withering stems decay,
The wary ploughman on the mountain's brow
Undams his watery stores—huge torrents flow,
And rattling down the rocks large moisture yield,
Tempering the thirsty fever of the field.

'Neither a low field,' says Columella, 'with hollows, nor a field broken with steep rising grounds, is proper for water meadows. The first because it contains too long the water collected in the hollows; the last, because it makes the water to run too quickly over it. A field, however, that has a moderate descent, may be made a meadow, whether it is rich or poor, if so situated as to be watered. But the best situation is, where the surface is smooth, and the descent so gentle as to prevent either showers, or the rivers that overflow it, from remaining long; and, on the other hand, to allow the water that comes over it gently to glide off. Therefore, if, in any part of a field intended for a meadow, a pool of water should stand, it must be let off by drains; for the loss is equal, either from too much water or too little grass.' (Col. lib. ii. cap. 17). Watering, Pliny states, was commenced immediately after the equinox, and restrained when the grass sent up flower stalks; it was recommenced in mowing grounds, after the hay season, and in pasture lands at intervals.

In Hindostan to this day the operation of conveying water to and from the fields is one of the most expensive and troublesome in their agricultural system; particularly in the higher districts. In the Monghere district of Bengal a deep well is dug in the highest part of the field, which, being ploughed, is divided into little square plots, resembling the chequers of a chess board. Each square is surrounded with a border, four inches high, capable of containing water: while, between the chequers thus constructed, small dykes are formed for conveying a rivulet over the whole field. As soon as the water has stood a sufficient time in one square for it to imbibe moisture, it is let off into the next by opening a small outlet through the dyke. Thus one square after another is irrigated, till the whole field is gone over. The water is raised in leathern bags by two bullocks, yoked to a rope the cattle retiring from the well, and returning

to its mouth, according as the bag is meant to be raised, or to descend. The rope is kept perpendicular in the pit by a pulley, over which it runs; and, from the mouth of the well thus placed the rivulets are formed. In Patna the leathern bags are raised by long bamboo levers, as buckets are in this country.

Dr. Davy gives an interesting account of the prevalence of this practice at Ceylon. The cultivation in the interior of that country, he says, is of two kinds, the dry and the wet. The former consists in cutting down and grubbing up the wood on the sides of hills, where particular varieties of rice and Indian corn are afterwards sown: the latter, by far the most general mode, is carried on wherever water can be obtained for irrigation. 'Most of the operations in the cultivation of *paddy*,' he states, 'are connected with or have some relation to the element on which its success depends. The farmer commences with repairing the banks of the paddy-field. He then admits water in sufficient quantity to be an inch or two deep over the whole surface. After the ground has been well macerated and softened, he ploughs it, still under water. After farther maceration it is ploughed again, or merely trampled over by buffaloes, till reduced to the state of mud. Its surface is now levelled and smoothed. The water is drawn off, and the paddy, having been previously steeped in water till it has begun to germinate, is sown with the hand, and is scattered as equally as possible over the moist surface of mud. When the seed has taken root, and before the mud has had time to dry, the openings through which the water was drawn off are closed, and the field is again inundated. When the paddy is two or three inches high, it is weeded; and, where the seed has failed, the vacant spots are planted from those parts which are too thick and require thinning. The irrigation is continued till the paddy is nearly full-grown and about to ripen, when the openings are made in the banks and the field is drained. As soon as ripe, the paddy is cut with reaping-hooks, and immediately carried to the threshing-floor, where the grain is trampled out by buffaloes. From the moment the seed is sown, till the period of harvest, the paddy-field, like the chenas, requires constant nightly watching to protect it from the depredations of its wild enemies. In the low country, where the cultivation of paddy is in a great measure dependent on the rainy reason and on artificial reservoirs for a farther supply of water, only one crop is procured annually; but amongst the mountains, in situations where perpetual irrigation is at command, the seasons are less concerned; the farmer can sow when he pleases, and from good ground annually obtain two, and I have heard even three crops. The hilly and mountainous districts, in consequence of being well supplied with water, are thus particularly favorable for the cultivation of this important grain: and it is a most fortunate circumstance that they are so; otherwise the coolest, most salubrious, and most beautiful parts of the interior would, instead of being cultivated to a certain extent, be quite neglected and deserted. In the low country the paddy-fields are generally of a large size, and apparently quite flat; and every crop being in the same stage of vegetation, or nearly so, the whole exhibits very little variety of surface. Amongst the mountains it is quite different;—paddy-fields there are a succession of terraces or flights of steps; and in each field the crop may be in different stages of growth,—in some just vegetating, in others full-grown, ripening, or ripe; there at the same time you may see the laborers at all their different operations,—banking, ploughing, sowing, weeding, reaping, and treading out the grain. I do not know any scene more interesting than a highland valley thus cultivated, or more beautiful, when (as it generally is) it is surrounded by the bold, wild, and frequently savage scenery of untamed nature. In the low lands the labor and skill required to cultivate paddy are less than are necessary in the high lands. In cutting terraces in the sides of hills, the perseverance and industry of the mountaineer are often in a striking manner displayed. Many of his beds are actually walled up, and many of them are not four feet wide, and though generally long, occasionally they are so short, from the nature of the ground, as well as narrow, that one would not suppose they were worth the labor of keeping in repair and much less of making. In bringing water to his fields, and insuring them a constant supply, the judgment and skill of the cultivator are most exercised. Sometimes it is conducted two or three miles along the side of a hill, and occasionally it is even carried from one side of a mountain to another by means of wooden pipes.'

'In *surface* irrigation,' says Mr. Loudon, 'the water is conveyed in a system of open channels, which require to be most numerous in such grounds as are under drilled annual crops, and least so in such as are sown in breadths, beds, or ridges, under perennial crops. This mode of watering has existed from time immemorial. The children of Israel are represented as sowing their seed and watering it with their foot; that is, as Calmet explains it, raising the water from the Nile by a machine worked by the feet, from which it was conducted in such channels as we have been describing. It is general in the south of France and Italy; but less required in Britain.

'*Subterraneous* irrigation may be effected by a system of drains or covered gutters in the subsoil, which, proceeding from a main conduit, or other supply, can be charged with water at pleasure. For grounds under the culture of annual plants, this mode would be more convenient, and for all others more economical as to the use of water, than surface irrigation. Where the under stratum is gravelly, and rests on a retentive stratum, this mode of watering may take place without drains, as it may also on perfectly flat lands, by filling to the brim, and keeping full for several days, surrounding trenches; but the beds or fields between the trenches must not be of great extent. This practice is used in Lombardy on the alluvial lands near the embouchures of the Po. In Lincolnshire the same mode is practised by shutting up the flood gates of the mouths of the great drains in the dry seasons, and thus damming up the water through all the ramifications of the drainage from the sea

to their source. This was first suggested by G. Rennie and Sir Joseph Banks, after the drainage round Boston, completed about 1810. A similar plan, on a smaller scale, had been practised in Scotland, where deep mosses had been drained and cultivated on the surface, but where, in summer, vegetation failed from deficiency of moisture. It was first adopted by J. Smith (see Essay on the Improvement of Peat-Moss, 1795), on a farm in Ayrshire, and has subsequently been brought into notice by J. Johnston, the first delineator and professor of Elkinton's system of draining.

'Irrigation with a view to conveying additions to the soil (or for manuring it in fact), has long been practised, and is an evident imitation of the overflowing of alluvial lands, whether in meadow or aration. In the former case it is called irrigation or flooding, and in the latter warping. Warping is used chiefly as a mode of enriching the soil by an increase of the alluvial depositions, or warp of rivers, during winter, where the surface is not under crop, and is common on the banks of the Ouse.

'Subterraneous irrigation appears to have been first practised in Lombardy, and first treated of by professor Thouin. (Annales de Museé, &c.) It consists in saturating a soil with water from below, instead of from the surface, and is effected by surrounding a piece of ground by an open drain or main, and intersecting it by covered drains communicating with this main. If the field is on a level, as in most cases where the practice is adopted in Lombardy, all that is necessary is to fill the main and keep it full till the lands have been sufficiently soaked. But, if it lies on a slope, then the lower ends of the drains must be closely stopped, and the water admitted only into the main on the upper side: this main must be kept full till the land is soaked, when the mouths of the lower drains may be opened to carry off the superfluous water. The practice is applicable either to pasture or arable lands. In Britain, subterraneous irrigation has been applied in a very simple manner to drained bogs and morasses, and to fen lands. All that is necessary is to build a sluice in the lower part of the main drain where it quits the drained grounds, and in dry weather to shut down this sluice, so as to dam up the water and throw it back into all the minor open drains, and also the covered drains. This plan has been adopted with success, first, as we believe, by Smith, of Swineridge Muir, in Ayrshire, and subsequently by Johnson, in the case of several bog drainages executed by him in Scotland. It is also practised in Lincolnshire, where it was introduced by the advice of the late engineer Rennie, after the completion of a public drainage at Boston.'

'In general in nature the operation of water,' says Sir H. Davy, 'is to bring earthy substances into an extreme state of division. But, in the artificial watering of meadows, the beneficial effects depend upon many different causes, some chemical, some mechanical. Water is absolutely essential to vegetation; and when land has been covered by water in the winter, or in the beginning of spring, the moisture that has penetrated deep into the soil, and even the subsoil, becomes a source of nourishment to the roots of the plants in the summer, and prevents those bad effects that often happen in lands in their natural state, from a long continuance of dry weather. When the water used in irrigation has flowed over a calcareous country, it is generally found impregnated with carbonate of lime; and in this state it tends, in many instances, to ameliorate the soil. Common river water also generally contains a certain portion of organisable matter, which is much greater after rains that at other times; or which exists in the largest quantity when the stream rises in a cultivated country. Even in cases when the water used for flooding is pure, and free from animal or vegetable substances, it acts by causing a more equable diffusion of nutritive matter existing in the land; and in very cold seasons it preserves the tender roots and leaves of the grass from being affected by frost. Water is of greater specific gravity at 42° Fahrenheit than at 32°, the freezing point; and hence, in a meadow irrigated in winter, the water immediately in contact with the grass is rarely below 40°, a degree of temperature not at all prejudicial to the living organs of plants. In 1804, in the month of March, the temperature in a water meadow near Hungerford was examined by a very delicate thermometer. The temperature of the air at seven in the morning was 29°. The water was frozen above the grass. The temperature of the soil below the water, in which the roots of the grass were fixed, was 43°. Water may also operate usefully in warm seasons by moderating temperature, and thus retarding the over-rapid progress of vegetation. The consequence of this retardation will be greater magnitude and improved texture of the grosser parts of plants, a more perfect and ample development of their finer parts, and, above all, an increase in the size of their fruits and seeds. We apprehend this to be one of the principal uses of flooding rice-grounds in the east; for it is ascertained that the rice-plant will perfect its seeds in Europe, and even in this country, without any water beyond what is furnished by the weather, and the natural moisture of a well constituted soil. It is a general principle, that waters containing ferruginous impregnation, though possessed of fertilising effects when applied to a calcareous soil, are injurious on soils that do not effervesce with acids; and that calcareous waters, which are known by the earthy deposit they afford when boiled, are of most use on siliceous soils, or other soils containing no remarkable quantity of carbonate of lime.'

IRRISION, *n. s.* Fr. *irrision; Lat. irrisio.* The act of laughing at another.

Ham, by his indiscreet and unnatural *irrision*, and exposing of his father, incurs his curse. *Woodward.*

IR'RITATE, *v. a.* } Fr. *irriter;* Lat. *irrito.*
IRRITA'TION, *n. s.* } To provoke, teaze, or exasperate; to fret, stimulate, or vesicate: the original meaning appears to be, to rub against. Irritation, provocation; stimulation; vesication.

Air, if very cold, *irritateth* the flame, and maketh it burn more fiercely, as fire scorcheth in frosty weather. *Bacon.*

When they are collected, the heat becometh more violent and *irritate*, and thereby expelleth sweat. *Bacon's Natural History.*

Violent affections and *irritations* of the nerves, in any part of the body are caused by something acrimonious. *Arbuthnot.*

Roused
By dash of clouds, or *irritating* war
Of fighting winds, while all is calm below,
They furious spring. *Thomson's Summer.*

IRRITABILITY, in anatomy and medicine, a term first invented by Glisson, and adopted by Dr. Haller, to denote an essential property of all animal bodies; which, he says, exists independently of and in contradistinction to sensibility. This ingenious author calls that part of the human body irritable which becomes shorter upon being touched; very irritable, if it contracts upon a slight touch; and the contrary, if by a violent touch it contracts but little. He calls that a sensible part of the human body which upon being touched transmits the impression of it to the soul; and in brutes, he calls those parts sensible, the irritation of which occasions evident signs of pain and disquiet in the animal. On the contrary, he calls that insensible which being burnt, torn, pricked, or cut till it is quite destroyed, occasions no sign of pain nor convulsion, nor any sort of change in the situation of the body. From the result of many cruel experiments he concludes, that the epidermis is insensible; that the skin is sensible in a greater degree than any other part of the body; that the fat and cellular membrane are insensible; and the muscular flesh sensible, the sensibility of which he ascribes rather to the nerves than to the flesh itself. The tendons, he says, having no nerves distributed to them, are insensible. The ligaments and capsulæ of the articulations are also concluded to be insensible; whence Dr. Haller infers, that the sharp pains of the gout are not seated in the capsulæ of the joint, but in the skin, and in the nerves which creep upon its external surface. The bones are all insensible, says Dr. Haller, except the teeth; and likewise the marrow. The arteries and veins are held susceptible of little or no sensation, except the carotid, the lingual, temporal, pharyngal, labial, thyroidal, and the aorta near the heart; the sensibility of which is ascribed to the nerves that accompany them. Sensibility is allowed to the internal membranes of the stomach, intestines, bladder, ureters, vagina, and womb, on account of their being of the same nature with the skin: the heart is also admitted to be sensible; but the lungs, liver, spleen, and kidneys, are possessed of a very imperfect, if any sensation. The glands, having few nerves, are endowed with only an obtuse sensation. Some sensibility is allowed to the tunica choroidis and the iris, though in a less degree than the retina; but none to the cornea. Dr. Haller concludes, in general, that the nerves alone are sensible of themselves; and that, in proportion to the number of nerves apparently distributed to particular parts, such parts possess a greater or less degree of sensibility. Irritability, he says, is so different from sensibility, that the most irritable parts are not at all sensible, and vice versâ. He alleges facts to prove this position, and also to demonstrate, that irritability does not depend upon the nerves, which are not irritable, but upon the original formation of the parts which are susceptible of it. Irritability, he says, is not proportioned to sensibility; in proof of which, he observes, that the intestines, though rather less sensible than the stomach, are more irritable; and that the heart is very irritable, though it has but a small degree of sensation. Irritability, according to Dr. Haller, is the distinguishing characteristic between the muscular and cellular fibres; whence he determines the ligaments, periosteum, meninges of the brain, and all the membranes composed of the cellular substance, to be void of irritability. The tendons are unirritable; and, though he does not absolutely deny irritability to the arteries, yet his experiments on the aorta produced no contraction. The veins and excretory ducts are in a small degree irritable, and the gall bladder, the ductus chole-dochus, the ureters and urethra, are only affected by a very acrid corrosive; but the lacteal vessels are considerably irritable. The glands and mucous sinuses, the uterus in quadrupeds, the humatrix, and the genitals, are all irritable; as are also the muscles, particularly the diaphragm. The œsophagus, stomach, and intestines, are irritable: but of all the animal organs the heart is endued with the greatest irritability. In general, there is nothing irritable in the animal body but the muscular fibres; and the vital parts are the most irritable. This power of motion, arising from irritations, is supposed to be different from all other properties of bodies, and probably resides in the glutinous mucus of the muscular fibres, altogether independent of the influence of the soul. The irritability of the muscles is said to be destroyed by drying of the fibres, congealing of the fat, and more especially by the use of opium in living animals. The physiological system, of which an abstract has been now given, has been adopted and confirmed by Castell and Zimmermann, and also by Dr. Brocklesby, who suggests, that irritability, as distinguished from sensibility, may depend upon a series of nerves different from such as serve either for voluntary motion or sensation. This doctrine, however, has been controverted by M. le Cat; by Dr. Whytt in his Physiological Essays; and by Dr. Monro. See Anatomy.

IRROGATIO, a law term amongst the Romans, signifying the instrument, in which were put down the punishments which the law provided against such offences as any person was accused of by a magistrate before the people. These punishments were first proclaimed vivâ voce by the accuser, and this was called Inquisitio: the same being immediately after expressed in writing, took the name of Rogatio, in respect of the people. who were to be consulted or asked about it; and was called Irrogatio, in respect of the criminal, as it imported the mulct of punishment assigned him by the accuser.

IRROMANGO, or Erramango, one of the New Hebrides, is about twenty-four or twenty-five leagues in circuit; the inhabitants are middle-sized, and have a good shape and tolerable features. Their color is very dark; and they paint their faces, some of them with black, and others with red pigment: their hair is curly

crisp, and somewhat woolly. Few women were seen, and those very ugly: they wore a petticoat made of the leaves of some plant. The men were quite naked, excepting a belt tied about the waist, and a piece of cloth, or a leaf, used for a wrapper. They live in houses covered with thatch: and their plantations are laid out by line, and fenced round. An unluckly scuffle between the British sailors and these people, in which four of the latter were desperately wounded, prevented captain Cook from procuring any particular information concerning the produce, &c. See COOK. The middle of this island lies in long. 169° 19' E., lat. 18° 54' S.

IRRUPTION, *n. s.* Fr. *irruption;* Lat. *irruptio.* The act of forcing an entrance; the burst of invaders into any place.

A full and sudden *irruption* of thick melancholick blood into the heart puts a stop to its pulsation. *Harvey.*

I refrain, too suddenly,
To utter what will come at last too soon;
Lest evil tidings, with too rude *irruption*,
Hitting thy aged ear, should pierce too deep. *Milton.*

There are frequent inundations made in maritime countries by the *irruption* of the sea. *Burnet.*

Notwithstanding the *irruptious* of the barbarous nations, one can scarce imagine how so plentiful a soil should become so miserably unpeopled. *Addison.*

IRTIS, or IRTISCH, a large river of Asia, in Siberia, which rises among the hills of the country of the Kalmucks, and, running north-east falls into the Oby near Tobolsk. It abounds with fish, particularly sturgeon, and delicate salmon.

IRVINE, a river of Scotland in Ayrshire, which rises in the parish of Louden on the east of Louden Hill, and passing by Derval, Newmills, Glaston, and Riccarton, falls into the Frith of Clyde below Irvine.

IRVINE, or IRWINE, a sea-port and royal burgh, in Ayrshire, and bailiwic of Cunningham, seated at the mouth of the river of the same name. This port had formerly several busses in the herring fishery. At present the inhabitants employ a number of brigs in the coal trade to Ireland. Irvine has a dock-yard for ship-building, a tan-work, ropery, and bleachfield. Its commerce had greatly increased before the war. About 24,000 tons of coals are exported annually; besides great quantities of carpets, muslins, linens, silk, lawns, gauzes, &c. The imports are hemp, iron, wood, hides, and corn. Irvine lies fifteen miles east of the isle of Arran, and sixty west by south of Edinburgh.

IS. Sax. ıꞅ. See TO BE. The third person singular of *to be*: I am, thou art, he *is*: it is sometimes expressed thus *'s*.

Be not afraid of them, for they cannot do evil; neither *is* it in them to do good. *Jer.* x. 5.

He that *is* of God, heareth God's words. *John* viii. 47.

Here *is* the Quene of Faerie,
With harpe, and pipe, and simpnonie,
Dwelling in this place! *Chaucer. The Rime of Sire Thopas.*

Yon *is* (thought I) some spirite or some elfe,
His sote. image *is* so curious. *Id. The Court of Love.*

Such *is* the state of men! thus enter we
Into this life with woe and end in miseree. *Spenser. Faerie Queene.*

There's some among you have beheld me fighting. *Shakspeare.*

My thought, whose murther yet *is* but fantastical,
Shakes so my single state of man, that function
Is smothered in surmise; and nothing *is*,
But what *is* not. *Id. Macbeth.*

That our condition *is* the worst
And with such misfortunes curst
As all comparison defy
Was late the universal cry. *Beattie.*

And should the ceaseless vultures cease to prey
On self condemning bosoms, it were here,
Where Nature, nor too sombre or too gay,
Wild but not rude, awful yet not austere,
Is to the mellow Earth as Autumn to the year. *Byron. Childe Harold.*

ISAAC, in sacred history, the only son of Abraham and Sarah; the progenitor of the Edomites by his eldest son, and of the Israelites by his youngest. His history is recorded in Genesis xxi—xxx. He died A. A. C. 1716, aged 180.

ISABELLA, POINT, a port and cape of Hispaniola, on the north side of the island, the place where Columbus established the first settlement, which he named after his patroness queen Isabella. It is about eighty-seven miles east by north of Cape François. Lat. 19° 59' 10' N.

ISÆUS, a Greek orator born at Colchis, in Syria, was the disciple of Lysias, and the master of Demosthenes; and taught eloquence at Athens, about 344 A. A. C. Sixty-four orations are attributed to him; but he composed no more than fifty, of which only ten are now remaining. He was the first who applied eloquence to politics, in which he was followed by his disciple Demosthenes.

ISÆUS was also the name of another celebrated orator, who lived at Rome in the time of Pliny the Younger, about A. D. 97.

ISAIAH, the first of the four greater prophets, was of the royal blood, his father Amos being brother to Uzziah king of Judah. The first five chapters of his prophecy relate to the reign of Uzziah; the vision in the sixth chapter happened in the time of Jotham: the next nine chapters, to the fifteenth, include his prophecies under Ahaz; and those that were made under Hezekiah and Manasseh are related in the next chapters to the end. Isaiah foretold the deliverance of the Jews from their captivity in Babylon by Cyrus, 100 years before it came to pass. But the most remarkable of his predictions are those concerning the Messiah, which describe not only his descent, but all the principal circumstances of his life and death, so particularly, that he is justly styled the evangelical prophet. His style is noble, nervous, and sublime. Grotius calls him the Demosthenes of the Hebrews. He also wrote a history of king Uzziah's reign (2 Chron. xxvi. 22) which is not extant. During the persecution under Manasseh he is said to have been sawn asunder, about A. M. 3180; after having prophesied ninety-six years, from the twenty-eighth of Uzziah to the twelfth of Manasseh.

ISATIS, in botany, woad, a genus of the siliquosa order, tetradynamia class of plants; na-

tural order thirty-ninth, siliquosæ. The siliqua is lanceolated, unilocular, monospermous, bivalved, and deciduous; the valves navicular or canoe-shaped. There are five species; but the only one worthy of notice is

I. tinctoria, or common woad, which is cultivated in several parts of Britain for dyeing; being used as a foundation for many of the dark colors. The plant is biennial; the lower leaves are of an oblong oval figure, and pretty thick consistence, ending in obtuse roundish points; they are entire on their hedges, and of a lucid green. The stalks rise four feet high, dividing into several branches, garnished with arrow-shaped leaves sitting close to the stalks; the branches are terminated by small yellow flowers, in very close clusters, composed of four small petals in form of a cross, which are succeeded by pods shaped like a bird's tongue, which, when ripe, turn black, and open with two valves, having one cell, in which is situated a single seed. This plant is never cultivated long in the some spot: for the best ground will not admit of being sown with woad more than twice; if oftener repeated, the crop seldom pays the charges. As the goodness of woad consists in the size and fatness or thickness of the leaves, the only method to obtain this, is by sowing the seed upon ground at a proper season; allowing the plants proper room to grow; and keeping them clean from weeds, which, if permitted to grow, rob the plants of their nourishment. After having chosen a proper spot of land, which should not be too light and sandy, nor over stiff and moist, but rather a gentle hazel loam, whose parts easily separate, plough this up just before winter, laying it in narrow high ridges, that the frost may penetrate through the ridges to mellow and soften the clods; then in spring plough it again crosswise, laying it in narrow ridges. After it has lain for some time, and the weeds begin to grow, it should be well harrowed to destroy them: this should be repeated twice while the weeds are young; and, if there be any roots of large perennial weeds, they must be harrowed out, and carried off the ground. In June the ground should be ploughed a third time, when the furrows should be narrow, and the ground stirred as deep as the plough will go, that the parts may be as well separated as possible; and, when the weeds appear again, the ground should be well harrowed to destroy them. Toward the end of July, or the beginning of August, it should be ploughed the last time, when the land should be laid smooth; and when there is a prospect of showers the ground must be harrowed to receive the seeds, which should be sown in rows with the drill-plough, or in broad-cast after the common method; but it will be proper to steep the seeds one night in water before they are sown, which will prepare them for vegetation: if the seeds are sown in drills they will be covered with an instrument fixed to the plough for that purpose, but those which are sown broad cast in the common way must be well harrowed in. If the seeds are good, and the season favorable, the plants will appear in a fortnight, and in four or five weeks will be fit to hoe; for the sooner this is performed, when the plants are distinguishable, the better they will thrive, and the weeds being then young will be soon destroyed. The method of hoeing these plants is the same as for turnips, with this difference only, that these plants need not be thinned so much; for at the first hoeing, if they are separated four inches, and at the last six inches, it will be space enough for growth; and if this be carefully performed, in dry weather, most of the weeds will be destroyed. If the land, in which this seed is sown, should have been in culture before for other crops, it will require dressing before it is sown, in which case rotten stable dung is preferable to any other; but this should not be laid on till the last ploughing, just before the seeds are sown, and not spread till the land is ploughed, that the sun may not exhale the goodness of it, which in summer is soon lost when spread on the ground. The quantity should not be less than twenty loads to each acre, which will keep the ground good till the crop of woad is entirely spent. The time for gathering the crop is according to the season; but it should be performed as soon as the leaves are fully grown, while they are perfectly green; for, when they begin to grow pale, great part of their goodness is over, for the quantity will be less, and the quality greatly diminished. If the land is good, and the crop well husbanded, it will produce three or four gatherings; but the first two are the best. These are commonly mixed together in the manufacturing; but the after crops are always kept separate; for, if these are mixed with the other, the whole will be of little value. An acre of land will produce a ton of woad, and in good seasons nearly a ton and a half. When the planters intend to save the seeds, they cut three crops of the leaves, and then let the plants stand till the next year for seed; but if only one crop is cut, and that only of the outer leaves, letting all the middle leaves stand to nourish the stalks, the plants will grow stronger, and produce a much greater quantity of seeds. These seeds are often kept two years, but it is best to sow new seeds when they can be obtained. The seeds ripen in August; and, when the pods turn to a dark color, the seeds should be gathered. It is best done by reaping the stalks in the same manner as wheat, spreading them in rows upon the ground: in four or five days the seeds will be fit to thresh out, if the weather is dry; for if it lies long the pods will open and let out the seeds.

Isatis, in zoology. See Canis.

ISAURA, or Isaurus, in ancient geography, a strong city at Mount Taurus, in Isauria, twice demolished; first by Perdiccas, or rather by the inhabitants, who, through despair, burned the city and themselves, rather than fall into the hands of the enemy; again by Servilius, who thence took the surname Isauricus.

ISAURIA, a country bordering on Pamphylia and Cilicia on the north, and rugged and mountainous, situated almost in Mount Taurus, and taking its name from Isaura; according to some, extending to the Mediterranean by a narrow slip.

ISCA Dumniorum, an ancient town of Britain, now named Exeter, capital of Devonshire; and called Caer Isk in British.

Isca Silurum, the station of the Legio II., Augusta, in Britain, now called Caerleon, a town of Monmouthshire.

ISCHÆMUM, in botany, a genus of the monœcia order, and polygamia class of plants: natural order fourth, gramina; hermaphrodite CAL. a biflorous glume: COR. bivalved; there are three stamina, two styles, and one seed. Male CAL. and COR. as in the former, with three stamina. Species eight, all natives of the East Indies.

ISCHIA, an island of Naples, thirteen miles in circumference, and three from the coast of Terra di Lavoro; full of agreeable valleys and mountains, which produce excellent fruits and vines; and abounding with fountains, rivulets, and fine gardens. This island was taken by the British troops under Sir John Stuart in 1809, but soon after evacuated.

ISCHIA, the capital of the above island, with a bishop's see and a strong fort. Both the city and fort stand upon a rock, which is joined to the island by a strong bridge; the rock is about seven furlongs in circumference. The city is like a pyramid of houses piled upon one another, which makes a very singular and striking appearance. At the end of the bridge next the city are iron grates, which open into a subterraneous passage through which they enter the city. They are always guarded by soldiers who are natives of the island. Long. 13° 55′ E., lat. 40° 30′ N.

ISCHIA'DIC, *adj.* Fr. *ischiadique;* Gr. ισχιον, ισχιαδικος. In anatomy, an epithet given to the crural vein; in pathology, the ischiadic passion is the gout in the hip, or the sciatica.

ISCHIM, a river and circle of Siberia, in the government of Tobolsk. The river rises in the country of the Kirghises, and flowing north-east, after a course of some length, falls into the Irtysch. Many ancient graves are found along its banks. The circle extends about 250 miles from east to west, and 140 from north to south, on the left of the Irtysch, and along the Ischim. The western part composes the Steppe of Ischim, consisting of a vast barren plain, filled with small lakes and marshes, salt and fresh. Cattle are here the only product; and these, from the bad quality of the air and water, thrive very poorly. The eastern part is fertile, abounding in wood, water, and pasturage. The capital is also called Ischim; it is situated on the left bank of the Ischim, and contains about 1000 inhabitants.

ISCHIUM, in anatomy, one of the bones of the pelvis. See ANATOMY.

ISCHURIA (ισχουρια, from ισχω, I stop, and ουρον, urine), in physic, a disease consisting in an entire suppression of urine. See MEDICINE. It is occasioned by some obstruction in the passages of the reins, ureters, or the neck of the bladder, as sand, stone, mucus, &c. It may also arise from an obstruction of the nerves which pass to the reins or bladder, as it does in a palsy of the parts below the diaphragm. The too great distension of the bladder may also produce the same effect; whence it is that persons who have retained their urine for a long time, find great difficulty in discharging it.

IS'CHURY, *n. s.* } Fr. *ischurie;* Lat. *ischu-*
IS'CHURETIC, *n. s.* } *ria;* Gr. ισχουρια, ισχω, and ουρον, urine. A stoppage of urine, whether by gravel or other cause. Ischuretics are medicines given to remove obstructions of this nature.

ISELASTICS, a kind of games, or combats, celebrated in Greece and Asia, under the Roman emperors. The victor had very considerable privileges conferred on him, after the example of Augustus and the Athenians, who had thus honored conquerors at the Olympic, Pythian, and Isthmian games. They were crowned on the spot immediately after their victory, had pensions allowed them, were furnished with provisions at the public cost, and were carried in triumph to their own country.

ISER, or ISAR, a river of Bavaria, which has its source in the Tyrolese Alps, near little Seefeld, and flowing in a curved direction, nearly N. N. E., passes by Munich. After crossing the whole of the circle to which it gives name, and part of that of the Lower Danube, it joins the Danube at Deckendorf. Gold in small quantities is found in its sands.

ISER, or ISAR, is one of the largest circles of the kingdom of Bavaria. It lies between 10° 46′ and 12° 21′ of E. long., and 47° 29′ and 49° 46′ of N. lat., and is bounded partly by the Bavarian circles of the Regen and the Upper Danube, partly by the Austrian states. In the course of the political events which took place between 1808 and 1816, its area was finally settled at about 5900 square miles, with a population of 503,000. It comprises most of the southern part of the old duchy of Bavaria, and is divided into twenty-six districts; its chief town, Munich, being the capital of the kingdom. The Tyrolese Alps penetrate into the south, which is consequently cold: the north of the circle forms a large plain, with few elevations, possessing great fertility. The rivers are numerous; comprising the Inn, the Iser, and the Lech.

ISERE, an important department of France, and part of the former province of Dauphiné, derives its name from the river Isère, which flows through it from east to west. The principal place of this prefecture is Grenoble, and it consists of four arrondissements or subprefectures; Grenoble, containing 187,417 inhabitants; Saint Marcellin, 78,030; Latour Duphin, 115,645; and Vienne, 124,493: its total population being 505,585 souls. It has forty-four justiciaries of the peace, 558 communes, and extends over a surface of 2374 square miles, yielding a revenue of 24,134,000 francs, and is included in the seventh military division. It is divided into four electoral arrondissements, sending six members to the chamber of deputies, and has a royal court and bishopric at Grenoble.

The department of the Isere is bounded on the north by the department of Ain; on the east by Piedmont; on the south by the department of the Upper Alps; on the south-west by that of the Drome, and on the west by that of the Rhone. It is bordered by a chain of mountains, which joins the Alps of Savoy and Piedmont. In the more elevated regions, where the ground is chiefly rocky, a little corn and a few vegetables only are cultivated; the earth is covered with snow during a long winter, and on the summits of the mountains there are even glaciers and perpetual snows. Vast forests of fir cover the sides of these mountains, interspersed with villages surrounded with fine pastures, feeding numerous herds of horned cattle and sheep: a great quantity of cheese is also

made here. This country abounds in game of all kinds; great multitudes of chamois bound from rock to rock, and the eagle and the vulture hover over the frightful precipices, which are to be met with in every direction. The hills are covered with fruit trees and vines; the valleys are fruitful in wheat, different sorts of grain, hemp, and fruits of all kinds; there are also to be found some dry and sandy plains, and some rather extensive marshes. Picturesque scenes are multiplied almost to infinity in this mountainous country; on all sides are to be seen rocks, valleys, passes and defiles, dark forests, torrents and water-falls, grottoes, and fertile and barren plots, separated sometimes by a space of 1000 feet. That part known by the name of the Grand Chartreuse particularly deserves attention for its magnificent woods, its romantic situations, and its wild mountains, furrowed with numerous torrents that dash with impetuosity from fall to fall, and with thundering sound bury their waters in the depths of horrible abysses. One cannot view without emotion the savage beauties presented by this vast and dreary solitude, which is singularly contrasted with the delightful valley of Gesivauddau, one of the finest in the world.

The inhabitants make the greatest advantage of so diversified a territory; in the hilly parts their industry is above all praise; they raise terraces on the mountains, one above another, supported by walls of loose stones; convey thither the soil, and open little canals to conduct the water into these naturally barren fields. There are many lakes, which are generally very deep and abound with fish, but none of them are very considerable in size. Great numbers of plants grow on the mountains, which are much used in medicine. The air of this department is very healthy, but the climate in general is rather cold than temperate, which is no doubt owing to its extremely mountainous situation. Although the winters are long, the fruits come to perfect maturity, because the heats are commonly very intense. Being a mountainous country, it is cultivated mostly by oxen and mules, and yields a considerable harvest; it contains 130,700 hectars of forests, consisting of oaks, beech and fir-trees, and 22,000 hectars of vineyards; producing on an average twenty-four francs forty-five centimes, from each hectar of cultivated land. Its productions are wheat, rye, barley, maize, buck-wheat, vegetables, potatoes, fruits of all kinds, walnuts, chestnuts, almonds, wines of excellent quality, wood, medicinal plants, good pasturage in the mountains, feeding flocks of wild animals, and numerous artificial meadows. They have a fine race of mules, and numbers of black cattle, great and small game, such as wild goats, chamois, bears, red and white partridges, ortolans, &c., with fish in the rivers and lakes, otters, beavers, and tortoises. Watering canals are made in all places, where the waters can be thus conveyed. There is a botanic garden at Grenoble, and also a royal depôt of standard measures. Mines of iron, lead, and silver, are worked; and the earth yields some gold, copper, antimony, cobalt, rock crystal, pit-coal, vitriol, and sulphur; there are also quarries of granite, porphyry, gypsum, white and brown freestone, slate, and plaster, which last serves to manure the land. At Uriage there is an establishment of mineral waters.

Important manufactures are carried on in this department, of cloths for cloaks and packing cloths; its leather gloves, known by the name of Grenoble gloves, are held in great estimation; cloths for soldiers' and negroes' dresses are also manufactured here, as well as mineral acids, fine liqueurs, cannons, iron, steel, paper, and nails. There are likewise extensive factories for dyeing, glass-blowing, the making of earthenware, the forging of copper, and the sawing of marble. The inhabitants have a considerable trade in grain, wines, chestnuts, liqueurs, leather, cloths, skins, gloves, organzine silk, turpentine, wool, hemp, Oysan and Sassenage cheese, walnut oil, lead, and sheet copper.

The chief rivers which water the country are the Rhone and the Isère navigable, the Drac, the Romanche, the Bourbre, and the Veronne. It is crossed by the great roads of Gap, Valence, Lyons, and Chambery.

ISERTIA, in botany, a genus of the hexandria class, and monogynia order: CAL. superior six-toothed: COR. funnel-formed, six-cleft, monospermous. Species two, one a Cayenne tree that yields beautiful wood.

ISH. Sax. ıſc. A termination added to an adjective to express diminution; a small degree, or incipient state of any quality: as, bluish, tending to blue; brightish, somewhat bright. It is likewise sometimes the termination of a genitive or possessive adjective: as, Swedish, Danish; the Danish territories, or territories of the Danes. It likewise notes participation of the qualities of the substantive to which it is added; as, fool, foolish; man, mannish; rogue, roguish.

ISHMAEL, from Heb. ישמע, and אל i. e. God hath heard. The son of Abraham by Hagar, the progenitor of the Arabs, Hagarenes, Ishmaelites, &c.

ISHMAELITES, the descendants of Ishmael, who dwelt from Havila to the wilderness of Sur, towards Egypt, and thus overspread Arabia Petræa. All ancient authors, as well as Josephus, agree that Ishmael was the father of the Arabs. The Ishmaelites, as well as the Jews, afford a living and striking evidence of the truth of divine revelation. The prophecies of the innumerable multitudes, the wild and roving manner of living, and the free, independent, and unconquered state of the Ishmaelites (Gen. xvi. 10, 12; xvii. 20; xxi. 18), have been, and still are, literally and visibly fulfilled in their posterity, the Arabs. See ARABIANS and BEDOUINS.

ISIA, Gr. Ισια, feasts and sacrifices anciently solemnised in honor of the goddess Isis. They were full of the most abominable impurities, and therefore those who were initiated into them were obliged to take an oath of secrecy. They were held for nine days successively, but became so scandalous, that the senate abolished them at Rome, under the consulate of Piso and Gabinius. They were re-established by Augustus, and the emperor Commodus assisted at them, appearing among the priests of that goddess with his head shaven, and carrying the anubis. Dioscorides

tells us, that priests of the goddess, called Isiaci, bore a branch of sea-wormwood in their hands instead of olives. They sung the praises of the goddess twice a-day, viz. at the rising of the sun, when they opened her temple, and at night, when they repeated their orisons, and shut up the temple. They begged alms all day. They never covered their feet with any thing but the thin bark of the plant papyrus, and wore no garments but linen, because Isis was the first who taught the culture of this commodity. They were obliged to observe perpetual chastity, and their heads were closely shaved. They were forbidden to eat onions, salt, or the flesh of sheep and hogs.

ISIAC TABLE, one of the most considerable monuments of antiquity, being a plate of copper or brass discovered at Rome in 1525, and supposed, by the various figures in bass relief upon it, to represent the feasts of Isis, and other Egyptian deities. When, in the year 1525, the constable de Bourbon took the city of Rome, a locksmith bought it of a soldier, and afterward sold it to cardinal Bembo, upon whose death it came into the hands of the duke of Mantua, and was kept in that family till the taking of that city by the imperialists in the year 1630, since which it has never been heard of. It had, however, been engraved with all possible exactness by Æneas Vico of Parma. It was divided into three horizontal compartments, in each of which were different scenes, containing different actions. Those compartments are, as it were, different cartouches, distinguished sometimes by single strokes only, but oftener by a very large fascia, which is full of hieroglyphics. The four sides of the table were enclosed with a border, filled up, like the ground, with several figures of the Egyptian gods, and with a great number of hieroglyphics. There have been various opinions as to the antiquity of this monument: some have supposed that it was engraved long before the time when the Egyptians worshipped the figures of men and women. Others, among whom is bishop Warburton, apprehend that it was made at Rome, by persons attached to the worship of Isis. Dr. Warburton considers it as one of the most modern of the Egyptian monuments, on account of the great mixture of hieroglyphic characters which it bears.

I'SICLE, *n. s.* Sax. ıꞅꞅ. More properly icicle, from ice; but ice should rather be written ise. A pendent shoot of ice.

> Do you know this lady?
> — The moon of Rome; chaste as the *isicle*
> That's curdled by the frost from purest snow
> Hanging on Dian's temple. *Shakspeare.*

> The frosts and snows her tender body spare;
> Those are not limbs for *isicles* to tear. *Dryden.*

ISIDORUS (St.), named Damiatensis, or Pelusiota, from his living in a solitude near Pelusium, was the most famous of all St. Chrysostom's disciples, and flourished in the time of the general council held in 421. There are extant 2012 of his epistles in five books. They are short, but well written in Greek. The best edition is that of Paris, in Greek and Latin, printed in 1638, in fol.

I'SINGLASS *n. s.* Lat. *ichthyocolla.* From ice, or ise, and glass.

> Some make it clear by reiterated fermentations, and others by additions, as *isinglass.* *Mortimer.*

> The cure of putrefaction requires an incrassating diet, as all viscid broths, hartshorn, ivory, and *isinglass.* *Floyer.*

> *Isinglass* is a tough, firm, and light substance, of a whitish colour, and in some degree transparent, much resembling glue. The fish from which *isinglass* is prepared is one of the cartilaginous kind: it grows to eighteen and twenty feet in length, and greatly resembles the sturgeon. It is frequent in the Danube, the Boristhenes, the Volga, and the larger rivers of Europe. From the intestines of this fish the *isinglass* is prepared by boiling. *Hill.*

ISINGLASS. See ICHTHYOCOLLA.

I'SINGLASS STONE, *n. s.* A fossil which is one of the purest and simplest of the natural bodies

ISIS, a celebrated deity of the Egyptians, daughter of Saturn and Rhea, according to Diodorus of Sicily. Some suppose her to be the same with Io. See Io. Plutarch says Isis married her brother Osiris, and mentions some other absurd traditions respecting her. Isis was the Venus of Cyprus, the Minerva of Athens, the Cybele of the Phrygians, the Ceres of Eleusis, the Proserpine of Sicily, the Diana of Crete, the Bellona of the Romans, &c. Osiris and Isis reigned jointly in Egypt, but Typhon, the brother of Osiris, rebelled and murdered him. The ox and the cow were the symbols of Osiris and Isis; because, while on earth, they had diligently applied themselves to agriculture. Isis was supposed to be the moon, and Osiris the sun; she was represented as holding a globe in her hand, with a vessel full of ears of corn. The Egyptians believed that the inundations of the Nile proceeded from the tears which Isis shed for the murder of Osiris. Notwithstanding the attempts of the Greeks to identify Isis with their Io, Plutarch and Diodorus Siculus assert that this princess was born in Egypt, and married to Osiris, that they lived together in harmony, and concurred in their endeavours to civilise their subjects, teaching them agriculture. Diodorus adds, that Osiris, determining on an expedition to India, made Isis regent of his kingdom. On his return, he found that his brother Typhon had formed a formidable party against the government, and, under a pretence of hospitality, he confined Osiris in a chest exquisitely wrought, and threw it into the Nile. When Isis heard of her husband's death, she made diligent search for the corpse, and, having found it in Phœnicia, returned with it to Egypt, where she caused it to be interred at Abydos. In the mean time, Typhon was endeavouring to secure his new empire, but Isis, being at length recovered from her distress, collected her troops, and placed them under the conduct of Orus, her son, who pursued the tyrant, and vanquished him in two pitched battles. Isis having died some time after her son's victory over Typhon, the Egyptians paid adoration to her, together with her husband Osiris, as to divinities; and, because they had applied themselves to agriculture, the ox and the cow became their symbols. Diodorus Siculus has recorded the following inscription on an ancient monument, by which Isis was characterised:—'I, Isis, am the queen of this country,

And I had Mercury for my prime minister. None had power to hinder the execution of my orders. I am the eldest daughter of Saturn, the youngest of the gods. I am the sister and the wife of king Osiris. I am the mother of king Orus. I am she who resides in the dog-star. The city of Bubastis was built in honor to me. Rejoice, O Egypt, thou that hast been to me instead of a nurse and mother.' We have a statue of Isis habited like a Roman matron, having a half moon on the top of her head, her right hand turned towards heaven, and her left towards the earth, to inform us, that she receives the influence of heaven. We have also a medal of the emperor Commodus, where Isis is represented with a half moon, holding a sphere with her right hand, and a vessel full of fruits with her left. The sphere denotes astrology, wherein the Egyptians excelled, and the fruits, the fecundity of Egypt. Her worship was universal in Egypt.

Isis, a river that rises in Gloucestershire, and flows through a part of Wiltshire. It begins to be navigable for boats at Cricklade, and, after running a serpentine course of about four miles, it leaves Gloucestershire, at a village called Castle Eaton, and falls into the Thame. See Thame.

ISLA (Joseph Francis de), a learned Spanish Jesuit, who, on the suppression of the order, retired to Bologna, where he died in 1781. He was the author of Historia del Fra Gerundio de Campazas, alias Zotes, Madrid, 1758, tome I. the history of which work is curious. It appeared under the assumed name of Francisco Loben de Salazer, minister of the parish of St. Peter, in Villagarcia, and was a severe satire upon the fanaticism and ignorance of the Spanish monks: but, in the first instance, it was approved by the inquisition, until the jealousy of the Dominicans and mendicant orders induced the council of Castile to suppress it, and forbade the publication of the second part. The author now presented it to Mr. Baretti, by whose means it was printed entire in English in 1771, and afterwards in German. Isla is said to be regarded by his countrymen as a second Cervantes.

Isla de la Gente Hermoga, or Island of the Handsome People, called also Isla de Monterey, from the name of a viceroy of Mexico, an island in the Pacific Ocean, discovered by Mendana. It is about six leagues in circumference; and, when the boats with difficulty landed, the Spaniards found the island inhabited by a people that opposed them in every enterprise; so that after some unsuccessful attempts they were obliged to abandon this island without obtaining refreshments. The Spaniards, they say, had never seen men so handsome, or met with enemies so formidable; they speak with enthusiasm of the beauty, fairness, and studied dress of the females, who, according to their accounts, surpassed even the fairest ladies of their own country, both in grace and beauty. Long. 175° 10′ W., lat. 10° S.

ISLAM, the true Mahommedan faith. See Mahommedanism.

ISLAMABAD, an old town of Bengal, the capital of the district of Chittagong, stands on the western bank of the river Currumpooly, at the distance of about ten miles from the sea. It is the residence of the judge and civil establishment; and has a cantonment for a battalion of native infantry. Ships are built here, and sent to Calcutta for sale: the commerce is also considerable. This town was called by the Portuguese Porto Grando, and alternately belonged to the Afghaun kings of Bengal, and the rajah of Arracan. It was taken from the latter by the Moguls in the year 1666, and was at that period well fortified, mounting 1223 cannon. The Delhi emperor changed its name from Chittagong to Islamabad. In 1689 the English failed in an attack on it; but in 1760 it was ceded to us, with the district, by Jaffeir Ali Khan. The entrance to the river is dangerous without a pilot.

I'SLAND, *n. s.*
I'SLANDER, *n. s.*
ISLE, *n. s.*
Lat. *insula*; Ital. *isola*; Fr. *isle*; Erse. *ealand*; Sp. *ysla*. A tract of land surrounded by water: an islander is an inhabitant of an island: isle is synonymous with island, written, perhaps, corruptly for *aile*, from Fr. *aile*, from Lat. *ala*: the *aile* being probably at first only a wing or side walk. Or it may come from Fr. *allée*, a walk. A long walk in a church, or public building.

To see you here, us thinke marvaile,
And how withouten bote or saile,
By any subtilty or wyle,
Ye, get, have, entre in this *yle*.
Chaucer's Dreame.

Within a wandering *island*, that doth ronne
And stray in perilous gulfe her dwelling is:
Fayre Sir if ever there ye travell, shonne
The cursed land where many wend amis,
And know it by the name, it hight the Bowre of Blis.
Spenser. Faerie Queene.

He will carry this *island* home in his pocket, and give it his son for an apple. And, sowing the kernels of it in the sea, bring forth more *islands*.
Shakspeare. Tempest.

Your dinner, and the generous *islanders*
By you invited, do attend your presence.
Shakspeare.

The instalment of this noble duke
In the seat royal of this famous *isle*. *Id.*

We, as all *islanders*, are lunares, or the moon's men. *Camden.*

Hark then, ah, hark! ye gentle shepherd crew;
An *isle* I fain would sing an *island* fair;
A place too seldom viewed yet still in view
Near as ourselves, yet farthest from our care.
Fletcher's Purple Island.

What the ocean binds is by the bishops rent,
As seas make *islands* in the continent;
One king, one faith, one language, and one *isle*,
English and Scotch 'tis all but cross and pile.
Marvell.

There are many bitter sayings against *islanders* in general, representing them as fierce, treacherous, and unhospitable: those who live on the continent have such frequent intercourse with men of different religions and languages, that they become more kind than those who are the inhabitants of an *island*.
Addison's Freeholder.

O'er the twilight groves and dusky caves,
Long sounding *isles* and intermingled graves,
Black Melancholy sits. *Pope.*

Island of bliss! amid' the subject seas.
Thomson.

I've seen thee smile,
When the clear sky shewed Ariadne's *isle*,
Which I have pointed from these cliffs.
Byron. Corsair.

ISLAND, or ICELAND CRYSTAL. See ICELAND CRYSTAL.

ISLANDS from their situation derive many advantages, among which one of the most considerable is that the climate is generally mild and salubrious from the vapors of the surrounding sea, which, according to the latitude, abates the violence of heat, and moderates the rigor of cold, both of which are sensibly and constantly less than on continents under the same elevation of the pole. We have a remarkable instance of this in the islands called anciently Stoehades, by us the Hieres. They are three in number, lying in lat. 43° N. before Toulon. In them the fruits of France and Italy arrive at the highest perfection, and all the medical herbs of Italy, Greece, and Egypt, grow wild. Yet the climate is temperate and pleasant in all seasons. A considerable advantage arises from accessibility on every side, by which islands are open to receive supplies from other countries, and have the conveniency of exporting their commodities and manufactures to all markets, and, in comparison of the continent, at all seasons. The opposite sides of an island may, in regard to commerce, be considered as two countries; each has its ports, its proper commodities, its proper correspondences; in consequence of which it promotes the cultivation, and procures vent for the manufactures, of a large district behind it; while the intermediate midland space finds a profit in that inland trade which these two districts supply. The winds contrary on one side are favorable on the other; and the sea, the common road to both coasts, is continually ploughed by vessels outward and homeward bound, which keeps up that active and enterprising spirit which characterises islanders. An island has the most extensive and the most effectual frontier on all sides, subsisting for ever, without repairs, and without expense: and, which is still more, derives from this very frontier a great part of the subsistence of its inhabitants, and a valuable article in its commerce, from its fisheries. It is commonly said the sea is a mine, but its treasures are more lasting and more certain, procured by labor solely, and fit for use or for sale as soon as procured, quickly consumed, and thereby the source of continual employment to a stout, hardy, laborious race of men, who likewise find employment for numbers, and are in various respects otherwise beneficial members of the community.

Respecting the *formation* of islands while some naturalists are of opinion, that the islands were formed at the deluge; others observe that there have been new islands formed by the casting up of vast heaps of clay, mud, sand, &c.; others think they have been separated from the continent by violent storms, inundations, and earthquakes. These last have observed that the East Indies, which abound in islands more than any other part of the world, are likewise more annoyed with earthquakes, tempests, lightnings, volcanoes, &c., than any other part. Others again conclude that islands are as ancient as the world, and that there were some at the beginning; and, among other arguments, support their opinion from Gen. x. 5, and other passages of Scripture. Varenius thinks that there have been islands produced each of these ways. St. Helena, Ascension, and other steep rocky islands, he supposes to have become so by the sea overflowing their neighbouring champaigns: by the heaping up huge quantities of sand, and other terrestrial matter, he thinks the islands of Zealand, Japan, &c., were formed. Sumatra and Ceylon, and most of the East India islands, he supposes were rent off from the main land; and concludes that the islands of the Archipelago were formed in the same way, imagining it probable that Deucalion's flood might contribute towards it. The ancients had a notion that Delos, and a few other islands, rose from the bottom of the sea; which, how fabulous soever it may appear, agrees with later observations. Seneca takes notice that the islands Therasia rose thus out of the Ægean Sea in his time, of which the mariners were eye-witnesses. It is indeed very probable that many islands have existed not only from the deluge, but from the creation of the world; and we have undoubted proofs of the formation of islands in all the different ways above mentioned. Another way, however, in which islands are frequently formed in the South Sea, is by the coralline insects. 'These islands are generally long and narrow; they are formed by a narrow bar of land, enclosing the sea within it; generally, perhaps always, with some ingress at least to the tide; commonly with an opening capable of receiving a canoe, and frequently sufficient to admit even larger vessels. The origin of these islands will explain their nature. These islands being covered to the west by Borneo, the winds from that quarter do not attack them with violenee. But the north-east winds, tumbling in the billows from a wide ocean, heap up the coral with which those seas are filled. This, obvious after storms, is perhaps at all other times imperceptibly effected. The coral banks, raised in the same manner, become dry. These banks are found of all depths, at all distances from shore, entirely unconnected with the land, and detached from each other: although it often happens that they are divided by a narrow gut without bottom. Coral banks also grow, by a quick progression, towards the surface: but the winds, heaping up the coral from deeper water, chiefly accelerate the formation of these into islands. They become gradually shallower; and, when once the sea meets with resistance, the coral is quickly thrown up by the force of the waves breaking against the bank; and hence, in the open sea, there is scarcely an instance of a coral bank having so little water that a large ship cannot pass over, but it is also so shallow that a boat would ground on it. These coral banks may be seen in all the stages; some in deep water, others with few rocks appearing above the surface; some just formed into islands, without the least appearance of vegetation; and others from such as have a few weeds on the highest part, to those which are covered with large timber, with a bottomless sea at a pistol-shot distance. The loose coral,

rolled inward by the billows in large pieces, will ground; and, the reflux being unable to carry them away, they become a bar to coagulate the sand, always found intermixed with coral; which sand, being easiest raised, will be lodged at top. When the sand-bank is raised by violent storms beyond the reach of common waves, it becomes a resting place to vagrant birds, whom the search of prey draws thither. The dung, feathers, &c., increase the soil, and prepare it for the reception of accidental roots, branches, and seed, cast up by the waves, or brought thither by birds. Thus islands are formed; the leaves and rotten branches, intermixing with the sand, form in time a black mould, of which in general these islands consist; more sandy and less woody; and, when full of large trees, with a greater proportion of mould. Cocoa nuts, continuing long in the sea without losing their vegetative powers, are commonly to be found in such islands; particularly as they are adapted to all soils, whether sandy, rich, or rocky. The violence of the waves within the tropics must generally be directed to two points, according to the monsoons. Hence the island formed from coral banks must be long and narrow, and lie nearly in a meridional direction. For even supposing the banks to be round, as they seldom are when large, the sea, meeting most resistance in the middle, must heave up the matter in greater quantities there than towards the extremities; and, by the same rule, the ends will generally be open, or at least lowest. They will also commonly have soundings there, as the remains of the bank, not accumulated, will be under water. Where the coral banks are not exposed to the common monsoon, they will alter their direction; and be either round, extending the parallel, or be of irregular forms, according to accidental circumstances. The interior parts of these islands being sea, sometimes form harbours capable of receiving vessels of some burden, and always abound greatly with fish. It need not be repeated, that the ends of those islands only are the places to expect soundings; and they commonly have a shallow spit running out from each point. Abdul Roobin's observation points out another circumstance, which may be useful to navigators; by consideration of the winds to which any islands are most exposed to form a probable conjecture which side has deepest water; and from a view which side has the shoals an idea may be formed which winds rage with most violence. See Coral.

To the above we have only to add, that the common foundation of all those clusters of islands which modern navigators have discovered in the Pacific Ocean, and to which the name of Polynesia has been given, as well as of those which belong to Australasia or New South Wales and perhaps of New South Wales itself, is evidently of coral structure; immense reefs of which shoot out in every direction. And it is a circumstance peculiarly worth notice, that, notwithstanding this prodigious quantity of lime in the form of coral, not a single bed, and scarcely a particle of chalk, has hitherto been met with either in the islands or on the continent.

There are other islands which are occasionally raised by the violent agency of the subterraneous volcanoes. These, however, are comparatively but few in number, and in mass of matter bear no proportion to those which we have reason to believe are perpetually forming by the silent but persevering efforts of the sea-worms we are now more immediately adverting to; and, as we have already given instances of such occasional disruptions from the bowels of the earth, we need not enlarge upon them in the present place.

The island of Acroteri, of no mean fame in ancient history, appears to have its surface composed of pumice-stone, encrusted with a surface of fertile earth, and the ancients represent it as rising, in a violent earthquake, out of the sea. Four neighbouring islands have had a similar origin, and yet the sea is here of such a depth as to be unfathomable by any sounding line. These arose at different times; the first long before the commencement of the Christian era, the second in the first century, the third in the eighth, and the fourth in 1573. Similar eruptions of islands have occurred in the group of the Azores. Thus, in December 1720, a violent earthquake was felt on the island of Tercera. In the night and the next morning the top of a new island appeared, which ejected a huge column of smoke. The pilot of a ship, who attempted to approach it, sounded on one side of the new formed island, with a line of sixty fathoms, but could find no bottom. On the opposite side, the sea was deeply tinged with various colors, white, blue, and green, and was very shallow. This island was larger on its first appearance than at some distance of time afterwards; it at length sunk below the level of the sea, and now is no more to be found.

The following is a more detailed description of a similar phenomenon occurring in the same quarter, though of much later date. We copy it from captain Tillard's narrative, communicated to the Royal Society. 'Approaching,' says he, 'the island of St. Michael's, on Sunday, June 12th, 1811, in his majesty's sloop Sabrina under my command, we occasionally observed, rising in the horizon, two or three columns of smoke, such as would have been occasioned by an action between two ships, to which cause we universally attributed its origin. This opinion was, however, in a very short time changed, from the smoke increasing and ascending in much larger bodies than could possibly have been produced by such an event; and having heard an account, prior to our sailing from Lisbon, that in the preceding January or February a volcano had burst out within the sea near St. Michael's, we immediately concluded that the smoke we saw proceeded from that cause, and, on our anchoring next morning in the road of Ponta del Gada, we found this conjecture correct as to the cause, but not to the time; the eruption of January having totally subsided, and the present one having only burst forth two days prior to our approach, and about three miles distant from the one before alluded to.

'Desirous of examining as minutely as possible a contention so extraordinary between two such powerful elements, I set off from the city of Ponta del Gada on the morning of the 14th, in company with Mr. Read, the consul general of the

Azores, and two other gentlemen. After riding about twenty miles across the north-west end of the island of St. Michael's, we came to the edge of a cliff whence the volcano burst suddenly upon our view in the most terrific and awful grandeur. It was only a short mile from the base of the cliff, which was nearly perpendicular and formed the margin of the sea: this cliff being as nearly as I could judge from 300 to 400 feet high. To give you an adequate idea of the scene by description is far beyond my powers; but for your satisfaction I shall attempt it.

'Imagine an immense body of smoke rising from the sea, the surface of which was marked by the silvery rippling of the waves, occasioned by the light and steady breezes incidental to those climates in summer. In a quiescent state it had the appearance of a circular cloud revolving on the water like an horizontal wheel, in various and irregular involutions, expanding itself gradually on the lee side, when suddenly a column of the blackest cinders, ashes, and stones would shoot up in form of a spire at an angle of from 10° to 20° from a perpendicular line, the angle of inclination being universally to windward: this was rapidly succeeded by a second, third, and fourth, each acquiring greater velocity, and overtopping the other till they had attained an altitude as much above the level of our eye, as the sea was below it. As the impetus with which the columns were severally propelled diminished, and their ascending motion had nearly ceased, they broke into various branches resembling a group of pines, these again forming themselves into festoons of white feathery smoke in the most fanciful manner imaginable, intermixed with the finest particles of falling ashes, which at one time assumed the appearance of innumerable plumes of black and white ostrich feathers surmounting each other; at another, that of the light wavy branches of a weeping willow. During these bursts the most vivid flashes of lightning continually issued from the densest part of the volcano; and the cloud of smoke, now ascending to an altitude much above the highest point to which the ashes were projected, rolled off in large masses of fleecy clouds, gradually expanding themselves before the wind in a direction nearly horizontal, and drawing up to them a quantity of water-spouts, which formed a most beautiful and striking addition to the general appearance of the scene.

'That part of the sea where the volcano was situated was upwards of thirty fathoms deep, and at the time of our viewing it the volcano was only four days old. Soon after our arrival on the cliff, a peasant observed he could discern a peak above the water: we looked, but could not see it; however, in less than half an hour it was plainly visible, and before we quitted the place, which was about three hours from the time of our arrival, a complete crater was formed above the water, not less than twenty feet high on the side where the greatest quantity of ashes fell; the diameter of the crater being apparently about 400 or 500 feet.

'The great eruptions were generally attended with a noise like the continued firing of cannon and musquetry intermixed, as also with slight shocks of earthquakes, several of which having been felt by my companions, but none by myself, I had become half sceptical and thought their opinion rose merely from the force of imagination; but while we were sitting within five or six yards of the edge of the cliff, partaking of a slight repast which had been brought with us, and were all busily engaged, one of the most magnificent bursts took place which we had yet witnessed, accompanied by a very severe shock of an earthquake. The instantaneous and involuntary movement of each was to spring upon his feet, and I said, 'This admits of no doubt.' The words had scarcely passed my lips, before we observed a large portion of the face of the cliff, about fifty yards on our left, falling, which it did with a violent crash. So soon as our first consternation had a little subsided, we removed about ten or a dozen yards further from the edge of the cliff, and finished our dinner.

'On opening the volcano clear of the north-west part of the island, after dark on the 16th, we witnessed one or two eruptions that, had the ship been near enough, would have been awfully grand. It appeared one continued blaze of lightning; but the distance which it was at from the ship, upwards of twenty miles, prevented our seeing it with effect. Returning again towards St. Michael's on the 4th of July, I was obliged, by the state of the wind, to pass with the ship very close to the island, which was now completely formed by the volcano, being nearly the height of Matlock High Tor, about eighty yards above the sea. At this time it was perfectly tranquil; which circumstance determined me to land, and explore it more narrowly.

'I left the ship in one of the boats, accompanied by some of the officers. As we approached, we perceived that it was still smoking in many parts, and upon our reaching the island found the surf on the beach very high. Rowing round to the lee side, with some little difficulty, by the aid of an oar, as a pole, I jumped on shore, and was followed by the other officers. We found a narrow beach of black ashes, from which the side of the island rose in general too steep to admit of our ascending; and, where we could have clambered up, the mass of matter was much too hot to allow our proceeding more than a few yards in the ascent. The declivity below the surface of the sea was equally steep, having seven fathoms water scarce the boat's length from the shore, and at the distance of twenty or thirty yards we sounded twenty-five fathoms.

'From walking round it in about twelve minutes, I should judge that it was something less than a mile in circumference; but the most extraordinary part was the crater, the mouth of which, on the side facing St Michael's, was nearly level with the sea. It was filled with water, at that time boiling, and was emptying itself into the sea by a small stream about six yards over, and by which I should suppose it was continually filled again at high water. This stream, close to the edge of the sea, was so hot, as only to admit the finger to be dipped suddenly in, and taken out again immediately. It appeared evident, by the formation of this part of the island, that the

sea had, during the eruptions, broken into the crater in two places, as the east side of the small stream was bounded by a precipice, a cliff between twenty and thirty feet high forming a peninsula of about the same dimensions in width and from fifty to sixty feet long, connected with the other part of the island by a narrow ridge of cinders and lava, as an isthmus of from forty to fifty feet in length, from which the crater rose in the form of an amphitheatre.'

Islands, Floating. History abounds with accounts of floating islands; but the greatest part of them are either false or exaggerated. What we generally see of this kind is no more than the concretion of the lighter matter floating on the surface of the water in cakes; and, with the roots of the plants, forming congeries of different sizes, which, not being fixed to the shore in any part, are blown about by the winds and float on the surface. These are generally found in lakes, where they are confined, and, in process of time, some of them acquire a considerable size. Seneca tells us of many of these floating islands in Italy; and some later writers have described not a few of them in other places. But however true these accounts might have been, at the time when they were written, very few proofs of their authenticity are now to be found; the floating islands having either disappeared, or been so fixed to the sides as to make a part of the shore. Pliny tells us of a great island which at one time floated about in the lake Cutilia in the country of Reatinum, which was discovered to the old Romans by a miracle; and Pomponius tells us, that in Lydia there were several islands so loose in their foundations that every little accident shook and removed them.

Isle of Dogs. See Dogs.

Isle of France, one of the twelve ci-devant governments of France. It was bounded on the north by Picardy, west by Normandy, south by the Orleannois, and east by Champagne. It was about ninety miles in length and breadth. The air is temperate, and the soil fertile; and it abounds in wine, corn, and fruits.

Isle of France. See Mauritius.

Isle of Wight. It has been conjectured that this island was originally connected with the main land, but that the violence of the sea has gradually disjoined it from the neighbouring shore. This conjecture is strengthened by the circumstance of its having been called by the British Guith or Guich, signifying the divorced or separated; hence arose the appellation of Vectis, or the separated region. It belongs to the county of Southampton or Hants, already described; and the general outline of its early history will apply to both districts.

This isle is separated from the beautiful coast of Hampshire by a channel, varying in breadth from two to seven miles. It is nearly surrounded on the south by the English Channel, having Hampshire on the north. Its form is that of an irregular lozenge. The face of the country is richly diversified: hill and dale, the swelling promontory, and the lowly glen, appear in quick succession to animate and give interest to the prospects. The land is in some parts very high, particularly on the south, or back of the island, as it is commonly termed. Here the cliffs are very steep, and vast fragments of rock, which the waves have undermined, lie scattered along the shore. On the northern side the ground slopes to the water in easy declivities, excepting towards the Needles, or western point, where the rocks are bare, broken, and precipitous. The height of the cliffs, of which the Needles form the extreme point, is in some places 600 feet above the level of the sea; and, when viewed from the distance of about a quarter of a mile, has a very sublime and stupendous effect. These cliffs are in some places perpendicular, in others they project and hang over in a tremendous manner. Here are many caverns and deep chasms that seem to enter a great way into the rocks; and in many places the issuing of springs forms small cascades of rippling water down to the sea.

The rocks called the Needles obtained their name from a lofty pointed one, resembling a needle in shape, which had been disjoined with the others from the main land by the force of the waves. This was 120 feet above low water mark; but about fifty years ago it fell, and totally disappeared, its base having been undermined by the sea. All the higher parts of the isle are composed of an immense mass of calcareous matter, of a chalky nature, incumbent on schistus, which runs under the whole isle, and appears at low water mark on the coast near Mattison. This becomes so indurated, by exposure to the air, as to make very good whetstones. The lime-stone is burnt for manure; and in the pits where it is dug for that purpose are found numerous echini, sharks' teeth, and ammoniæ. These fossils are particularly abundant in the range of cliffs which forms the southern shore, together with bivalve and turbinated shells of various descriptions. The cornua ammonis are of all sizes, from one inch to a foot and a halt in diameter.—This isle extends from the eastern to the western angle nearly twenty-three miles; and from the northern to the southern about thirteen. There are two hundreds, East and West Medina, containing thirty parishes, and three market and borough towns. Its superficies is supposed to include 105,000 acres.

The southern division of this island is much exposed to the fury of the westerly winds, whilst that looking to the north, though in a great measure exempt from this turbulence of weather, is still not so forward in its seasons by ten days or a fortnight. In the absence of the south-westerly gales nothing can exceed the mildness and salubrity of the climate on the south side. The northerly winds seem little to affect this situation, as their force and height are much abated by the elevated ridge of down and forest land, which extends nearly east and west through the middle of the island. The north-easterly winds prove extremely hurtful in the northern parts, by retarding vegetation in the spring of the year, and by the mischief they produce among the early fruit and apples. Mr. Vancouver describes the soil of the north and south borders as a rough, strong clay, of argillaceous and calcareous marle. On the western quarter of the northern division the soil appears much varied, which in

some places may be more aptly referred to the treatment it may have undergone, than to any specific difference in its native quality. From Yarmouth, extending easterly along the northern coast of the island towards Cowes, bounded southwardly by the King's, or Carisbrook Forest, and returning thence westwardly, at an average distance of about a mile from the coast, the soil of the country is composed of a strong gravelly loam, upon a brown and yellow clay, which is generally found to terminate in a deep bed of gray and a bluish argillaceous marle. A strong, brown, tough clay, without stones, and lying on a purple, red, blue, and yellow clay, forms the other character of soil and substrata composing this district; but in which, and in addition to the argillaceous marle, a pure white shell marle is found to occur, in veins of various thickness, through the parishes of Thorley, Shalfleet, Swainston, and under the western parts of Carisbrook Forest. The western part of the southern division of this isle comprises parts of the parishes of Brook, Molteston, Brixton, Kingston, Chale, and the west side of St. Catherine's Hill. These all bind upon the southern coast of the island, and the stony land extends to an average width of about half a mile northwardly from the cliffs, and is composed of all the variety of soil and substrata above mentioned. Although the north-east quarter of the isle contains a greater variety of soil than can possibly be traced in its preceding sections, still the greater prevalence of stony land requires that it should be included within this district of the county to which the Isle of Wight belongs. Proceeding, therefore, through the northern parts of the parish of St. Helen's, and continuing our examination westwardly, between the foot of the Chalk-down and the north-east shore of the island, after leaving the sand and gravelly loams which compose the soil in the eastern extremity of the island, we enter a country abounding with much variety of soil and substrata, but which may be generally characterised as oaktree or sour woodland clay. The sand and gravelly veins, which intersect the clay lands in various directions, seem only remarkable for affording in their vicinity slight modifications of the stronger clay. A strong clay loam forms the upper covering of the northern extremity of the island. This is frequently found to cover a stratum of argillaceous marle, below which is generally found a body of free-stone rock. A sand and gravelly loam very frequently occurs to break the continuation of the stronger lands in the parishes of East and West Cowes, Northwood, and Whippingham; but these often occasion springs, and on the sides of the hills much wet and weeping land.

The principal rivers are the Medina, the Yar, and the Wootom. The Medina, anciently called the Mede, rises near the bottom of St. Catherine's Down, and, flowing directly northward, divides the island into two equal parts: gradually widening in its course, it passes to the east of Newport, and in Cowes harbour unites its waters with the ocean. Numerous smaller streams also exist, and various creeks and bays run up from the sea. Several chalybeate springs have been found in different parts of the island; one of them, at Black Gang, under Chale Cliff, is very strong. About half a mile from this, at Pitland, is a spring impregnated with sulphur; and at Shanklin is a spring whose waters are slightly tinctured with alum. The springs of clear water are very numerous, and in general extremely pure and transparent, from the natural percolation which they undergo through the lime-stone strata. Cowes is a favorite watering place, and it is delightfully situated. The aluminous chalybeate waters discovered at Sand Rocks, in the parish of Chale, have been recommended in all asthenic cases arising from a lax fibre and languid circulation. Some of the fossil productions of this highly-favored isle have been already mentioned.

A stratum of coal discovers itself at the foot of Brimbridge Cliff, and runs through the southern parts of the isle, appearing again at Warden Lodge, in Freshwater parish. On the north side of this lies a vein of white sand, and another of fullers' earth; and on the south side is another of red ochre. Freestones of several descriptions are found here, but none of superior quality. Copperas-stones and pipe-clay are also very plentiful in this isle.

Fish are abundant on the coast; those of the crustaceous kind are particularly numerous on the southern shores. The lobster and crab are of uncommon size, and extremely fine. Some of the former are upwards of six pounds in weight; the latter is so abundant on a particular part of the coast, that a neighbouring village has obtained the name of Crab-Niton from this circumstance. The Isle of Wight cockles are very celebrated; the sand-eel is also very plentiful; the cuttle-fish is occasionally taken.

The agricultural produce of this isle has nothing peculiar, except the breed of hogs may be so termed, which are very tall and large, and make excellent bacon. This island, however, has been styled the garden of England: an appellation well justified by the innumerable plants and flowers which grow every where in wild luxuriance; among which are the ophrys apifera, or bee-orchis, the digitalis, or fox-glove, and the crithmum maritimum, or rock-samphire. Domestic fowls and poultry are very numerous; and game is still pretty plentiful, notwithstanding the ravages which war, that bane of all comfort and enjoyment, has made here, by the numerous soldiers which have almost at all times been stationed on the island.

This island sends six members to parliament: viz. two for Newport; (this borough had the honor of being represented in the year 1807 by the duke of Wellington, then Sir Arthur Wellesley;) two for Yarmouth; and two for Newton. Dr. Thomas James, a learned divine and antiquary, was born at Newport, about the year 1571. He was so celebrated for his erudition as to be termed a living library. He died in 1629.—Admiral Hobson, a gallant commander in the reign of queen Anne, was born at Bonchurch in this isle.—Dr. Robert Hooke, a learned philosopher, and author of Micrographia, or Philosophical Descriptions of Minute Bodies, &c., was born at Freshwater in 1635. He died in

1702.—Sir R. Worsley, an ingenious antiquary, and author of a History of the Isle of Wight was also a native of the island.

The trade of this island is flourishing. The harbour of Cowes is particularly convenient for shipping and unshipping merchandise. The chief imports are coals, timber, deals, iron, wine, hemp, and fruits; the principal exports wheat, flour, barley, malt, and salt. The chief manufactures are those of starch, hair-powder, and salt; and the making of woollens, sacks, &c. These are chiefly carried on in the House of Industry near Newport.

ISLEBIANS, in ecclesiastical history, a name given to those who adopted the sentiments of a Lutheran divine of Saxony, called John Agricola, a disciple and companion of Luther, a native of Isleb, whence the name; who, interpreting literally some of the precepts of St. Paul with regard to the Jewish law, declaimed against the law and the necessity of good works.

ISLEIF, an Islandic historian, who flourished early in the eleventh century. He was sent into Germany by his father Gysser, who had assisted in converting Iceland to Christianity; and, having finished his studies there, he went to Rome, and was ordained in 1056. In his journey he visited the emperor, and conciliated his patronage by making him a present of a bear. Returning in 1057, he founded the see and school of Scalholt, where several prelates of Iceland received their education. Our bishop afterwards wrote Annals of that country, a History of Norway, and the Lives of Harold Fairfax and his successors, including an account of all the Norwegian families who had arrived in Iceland in that prince's reign. Isleif was married, and had a son named Gysser, who published some historical translations. His father died in 1080.

ISLEWORTH, a large parish and village in Middlesex, nine miles west of London, on the Thames. Sion House, the magnificent seat of the duke of Northumberland, and several handsome villas, are in this parish.

ISLINGTON, a village of Middlesex, on the north side of London, to which it is almost contiguous. It appears to be of Saxon origin; and in the Conqueror's time was written Isledon, or Isendon. The church is one of the prebends of St. Paul's; to the dean and chapter of which a certain precinct belongs, for the probate of wills, and granting administrations. The church was a Gothic structure, erected in 1503, and stood till 1751, when the inhabitants applied to parliament for leave to rebuild it, and soon after erected the present structure, which is a very substantial brick edifice. The White Conduit House has handsome gardens with good walks, and two large rooms for the entertainment of company. In the south-west part of this village is that noble reservoir, improperly called New-river Head; though they are only two basins which receive that river from Hertfordshire, and whence the water is thrown by an engine into the company's pipes for the supply of London. In this parish are two charity-schools; one founded in 1613 by dame Alice Owen, for educating thirty children. This foundation, with a row of alms-houses, is under the care of the brewers' company. Here is an hospital with its chapel, and a work-house for the poor. There is a spring of chalybeate water, in a very pleasant garden, which for some years was constantly attended by the princess Amelia. Near this is Sadler's Wells, where, during the summer season, people are amused with rope-dancing, tumbling, pantomimes, &c.

ISLIP, a town of Oxfordshire, fifty-six miles from London, noted for the birth and baptism of Edward the Confessor. By the inland navigation, it has communication with the rivers Mersey, Dee, Ribble, Ouse, Trent, Derwent, Severn, Humber, Thames, Avon, &c., and the counties of Lincoln, Nottingham, York, Lancaster, Westmoreland, Chester, Stafford, Warwick, Leicester, Oxford, Worcester, &c. It has a good market for sheep, and some remains of an ancient palace, said to have been king Ethelred's. Here is a charity-school. The chapel wherein Edward was baptised standing at a small distance north from the church, and still called the king's chapel, was entirely desecrated during Cromwell's usurpation, and converted to the meanest uses of a farm-yard. It is built of stone, fifteen yards long and seven broad, and retains traces of the arches of an oblong window at the east end. This manor was given by Edward the Confessor to Westminster Abbey, to which it still belongs.

ISMAEL, or ISMAIL, a strong town of Turkey in Europe, in Bessarabia. It was taken by storm, by the Russians, on the 22d of December, 1790; and it is said that the long siege, and the capture, did not cost them less than 10,000 men. The most shocking part of the transaction is, that the garrison, whose bravery merited, and would have received from a generous foe, the highest honors, were massacred in cold blood by the merciless Russians, to the amount, by their own account, of 30,000 men: and the place was abandoned to the fury of the brutal soldiery. Ismail is seated on the north side of the Danube, 140 miles south by west of Bender. Long. 29° 30′ E., lat. 45° 11′ N.

ISMARUS, a town of the Cicones, in Thrace, giving name to a lake. By Virgil it is called Ismara. Servius supposes it to be the mountain of Thrace, on which Orpheus dwelt.

ISMID, the ancient Nicomedia, a town of Asia Minor, capital of Bithynia. There are no traces remaining of its former greatness, except an inferior church. It stands on the side of a hill overlooking the gulf of Nicomedia, and contains 750 families. Long. 29° 34′ E., lat. 40° 39′ N.

ISNARDIA, in botany, a genus of the monogynia order, and tetrandria class of plants; natural order seventeenth, calycanthemæ: COR. none: CAL. quadrifid: CAPS. quadrilocular, and girt with the calyx. Species one only, an aquatic annual plant common in Europe and America.

ISNIK, the ancient Nice, a town of Asia Minor, and for a short time the capital of Bithynia, is famous in ecclesiastical history as the seat of the two councils of 325 and 787. See NICE. It contains at present scarcely 300 houses, yet has many monuments of its former grandeur. The walls may still be traced over a circumference of four miles; and the palace of Theodore

Lascaris forms a most stupendous mass of masonry. The town is situated on a lake communicating with the sea of Marmora, and has a trade in silk. Long. 29° 50′ E., lat. 40° 16′ N.

ISOCHRONAL, is applied to such vibrations of a pendulum as are performed in the same space of time; as all the vibrations or swings of the same pendulum are, whether the arches it describes are shorter or longer.

ISOCHRONAL LINE, that in which a heavy body is supposed to descend without any acceleration.

ISOCRATES one of the greatest orators of Greece, was born at Athens, A. A. C 436. He was the son of Theodorus, who had enriched himself by making musical instruments, and who gave his son a liberal education. He was the disciple of Prodicus Gorgias, and other great orators. He endeavoured at first to declaim in public, but without success; he therefore contented himself with instructing his scholars, and making private orations; and, being informed of the loss of the battle of Cheronea, he abstained four days from eating, and died in consequence at the age of ninety-eight. There are still extant twenty-one orations, which are much admired, and have been translated from the Greek into Latin by Wolfius. It is recorded, to his praise, that he never, by writing or accusation, injured a single individual. A statue of bronze was raised to his memory by Timotheus, and another by his adopted son Aphareus. The style of Isocrates is pure, sweet and flowing: he was extremely attentive to the harmony of his periods, and he is reckoned by Cicero as the first who introduced into Greek prose that melody of which it is susceptible. He spent much time in polishing his compositions: his panegyric on Athens is said to have cost him ten years' labor. There are also nine letters attributed to him.

ISOETES, in botany, a genus of the natural order of filices, and the cryptogamia class of plants. The antheræ of the male flower are within the base of the frons or leaf. The CAPS. of the female flower is bilocular, and within the base of the leaf There are but two species, of which one, I. lacastrix, is common to England.

ISOPERIMETRICAL, *n. s.* Gr. ισος, περι, and μετρον. In geometry, are such figures as have equal perimeters or circumferences, of which the circle is the greatest.

ISOPYRUM, in botany, a genus of the polygynia order, and polyandria class of plants; and in the natural method ranking under the twenty-sixth order, multisiliquæ: CAL. none: petals five: the nectaria trifid and tubular: CAPS. recurved and polyspermous. Species three; one of Siberia, the other two of the Alps.

ISOS'CELES, *n. s.* Fr. *isoscele*, or equiangular triangle. That which has only two sides equal.

ISPAHAN, an elevated district of the province of Irak, in Persia, consisting principally of clusters of villages connected with each other by narrow valleys and defiles of the mountains. One of these valleys, however, is forty miles in breadth, and from sixty-five to seventy miles long. It is called the Hallouk of Sinjan, and contains several distinct villages: the Zenderout or its canals watering the whole. There is not perhaps a more fertile spot in Persia: but the Afghauns have ravaged it in modern times, and the whole district will be long ere it recovers entirely from the effects of their depredations. Pigeons are kept here in large quantities for the sake of their dung, to which, used as a manure, the fineness of the melons of this neighbourhood has been attributed. The chief towns besides Ispahan are Isfeijan and Yezdikhaust.

ISPAHAN, SEPAHAN, or SPANHAUN (i. e. a rendezvous), a city of Persia, in the above district, and long the capital of the Persian monarchy. It stands on the river Zeinderood, which is afterwards lost in the desert. It is supposed to be the Aspadana of Ptolemy; but it was then, as indeed now, a place of not much consequence. Previously to the days of Timour it had risen into considerable notice, and was taken by that conqueror in 1387, when 70,000 of its inhabitants are said to have been massacred, and their heads piled in heaps upon the walls. The early Sophis made it the seat of their empire; and Shah Abbas employed all his power and wealth to beautify it as his capital. His palace and gardens extended five miles in circuit. Many of its walls remain entire. When visited by Chardin, in the early part of the eighteenth century, it was at the height of its splendor, and, according to his estimate, was twenty-four miles in circuit, and included nearly 1,000,000 of inhabitants, 172 mosques, forty-eight colleges, 1800 caravanseras, and 273 public baths. The Afghauns ravaged and almost reduced it to ruins in 1722, and in this state much of it remains. Modern travellers say that a person may ride for miles amidst the ruins of this immense capital, and that yet it boasts a population of more than 200,000 inhabitants. To Hajee Mahomed Hussein Khan, second minister to the king of Persia, who was a great while governor of Ispahan, and born here, it is said to owe much of its late revival. He informed Mr. Morier that it contained 80,000 families, or 400,000 individuals. According to Mr. Kinnier, the first view which the traveller has, on coming from Shiraz, of this great metropolis, is from an eminence about five miles from the city, when it bursts at once upon his sight, and is, perhaps, one of the grandest prospects in the universe. Its ruinous condition is not observable at a distance, all defects being hid by high trees and lofty buildings; and palaces, colleges, mosques, minarets, and shady groves, are the only objects that meet the eye. Ispahan he still regards as the first commercial city in Persia, being the emporium of the foreign trade between India and Persia, Turkey and Cabul. Its manufactures are various; but in that of gold brocade it has attained unrivalled excellence. The Meydan, or great square, is one-third of a mile in length, and about half that breadth. It was once encircled by a canal, bordered by fine plane trees; but no vestiges of either remain. Here Shah Abbas displayed the horsemanship and military exercises of his court; but it is now devoted to commercial purposes; being surrounded by the finest shops of the city. In the middle is held the market for horses and cattle. There are some fine mosques in the whole circuit of it; but the

palace, forming one of the sides, is the chief ornament. Another object worth notice is the Chaur Baug (or Four Gardens): a name given to an avenue of more than a mile, reaching from the Meydan to the mountains east of Ispahan. It is composed of four rows of very large plane-trees; and is about 300 feet broad: the alleys on both sides are raised, and covered with fruits and flowers. Fountains and canals, communicating with the Zeinderood, abound throughout its whole extent. In the garden of the Huzar Jareeb, a noble edifice destroyed by the Afghauns, the finest fruits of Persia are to be found. It is at the east end of this avenue.

Ispahan has also several handsome bridges over the Zeinderood and its canals: that which joins the Chaur Baug with the suburb of Julfa is upwards of 1000 feet long, with thirty-four very large arches.

ISRAEL, from Heb. שרה, and אל, i.e. prevailing in the Lord. The name which the angel gave Jacob after having wrestled with him all night at Mahanaim or Penuel. Gen. xxxii. 1, 2, and 28, 29, 30, and Hosea xii. 3.

ISRAEL is also used for the people of Israel, or the whole descendants of Jacob, as well as for the kingdom of Israel, or of the ten tribes distinct from the kingdom of Judah. In both these senses it is used in the following brief chronological lists of the judges and kings of Israel. The Israelites had no king of their nation till Saul, except the short lived usurper Abimelech. Before that they were governed, at first by elders, as in Egypt; then by princes of God's appointment, as Moses and Joshua; then by judges, and last of all by kings.

A CHRONOLOGICAL LIST OF THE JUDGES AND SERVITUDES OF ISRAEL.

A. M.
2453. Moses led the Israelites out of Egypt.
2493. Moses died, aged 120.
2510. Joshua died, after judging Israel seventeen years, aged 110.
2525. The elders governed for about fifteen years.
2532. An anarchy of about seven years, during which the history of Micah, the conquest of Laish, by the Danites, and the civil war between the eleven tribes and Benjamin took place.
2531. The first servitude under Cushan-rishathaim, king of Mesopotamia, which lasted eight years.
2539. Othniel delivered Israel in the fortieth year after peace was established by Joshua.
2579. A peace of about forty years, from the deliverance of Othniel.
2597. The second servitude, under Eglon king of the Moabites, lasted eighteen years.
2597. Ehud delivers Israel, and governs sixty years.
2657. Shamgar governed Israel, and the land had peace till the eightieth year after the deliverance by Ehud.
2677. The third servitude, under the Canaanites, began, and lasted twenty years.
2697. Deborah and Barak deliver the Israelites, and govern forty years.

A. M.
2737. The fourth servitude under the Midianites, which lasted seven years.
2744. Gideon delivers Israel, and governs forty years.
2784. Abimelech made king by the Shechemites.
2787. He is killed at the siege of Thebez.
2788. Tola governs twenty-three years.
2811. Jair governs twenty-two years.
2815. The fifth servitude under the Philistines and Ammonites, which lasted eighteen years.
2833. The death of Jair.
2833. Jephthah chosen head of the Israelites, defeats the Ammonites, and governs six years.
2839. Jephthah dies.
2839. Ibzan of Bethelem, by the Rabbies reckoned the same with Boaz, governs seven years.
2846. Elon governs ten years.
2856. Abdon judges Israel eight years.
2864. The sixth servitude, under the Philistines, began, which lasted forty years.
2864. Eli the high priest governed twenty-four years, during the time of the servitude under the Philistines.
2867. Sampson defends and judges Israel twenty years.
2887. The death of Sampson, who judged Israel during the judicature of Eli the high priest, according to some; but Alstedius and others make Eli the successor of Sampson.
2888. The death of Eli, and beginning of Samuel's government.
2909. Saul elected king.

A CHRONOLOGICAL LIST OF THE KINGS OF ISRAEL.

2909. Saul, the first king of the Israelites, reigned forty years.
2949. Ishbosheth, his son, succeeded, and reigned seven years over part of Israel.
2934. David was anointed king by Samuel, but did not enjoy the regal power till the death of Saul in 2949, and was not acknowledged king of all Israel till after the death of Ishbosheth, in 2956.
2990. David died, aged seventy.
2990. Solomon succeeded. He had received the royal unction in 2989.
3029. Solomon died, after reigning forty years. After his death the kingdom was divided, and, the ten tribes having chosen Jeroboam for their king, Rehoboam reigned only over the tribes of Judah and Benjamin. See JUDAH.
3051. Jeroboam I. died, after reigning twenty-two years.
3051. Nadab reigned two years.
3053. Baasha twenty-four years.
3077. Elah two years.
Zimri seven days.
3079. Omri reigned twelve years. He had a competitor, Tibni, whom he defeated and killed.
3091. Ahab reigned twenty-two years.
3113. Ahaziah, his son, two years.

A. M.

3115. Jehoram succeeded his brother, reigned twelve years, and was killed in 3127.
3127. Jehu reigned twenty-eight years.
3155. Jehoahaz reigned seventeen years.
3172. Joash reigned sixteen years.
3188. Jeroboam II. forty-one years.
3229. Zachariah six months.
3229. Shallum reigned one month.
3229. Menahem ten years.
3239. Pekahiah two years.
3241. Pekah twenty years, from 3241 to 3261.
3261. Hoshea reigned nine years, after which the kings of Assyria carried Israel away captive, from 3261 to 3270. See Kings xvii. 6.

ISRAELITES, the descendants of Israel, who were at first called Hebrews, from Heber, one of their ancestors (see HEBER), or from Abraham, who came from the other side of the Euphrates; afterwards Israelites, from Israel the patriarch; and lastly Jews, after their return from the captivity of Babylon, because the tribe of Judah was then much stronger and more numerous than the other tribes. See JEWS.

ISSACHAR, from Heb. שכר, i. e. he hired, or wages, the fifth son of Jacob by Leah, and the progenitor of the tribe so named from him. Tolah, one of the judges, and Baasha, one of the kings of Israel, were of this tribe.

ISSACHAR, one of the divisions of Palestine by tribes, lying south of Zabulon, so as by a narrow slip to reach the Jordan, between Zabulon and Manasseh, Joshua xix. But whether it reached the sea is a question: some holding that it did. But Joshua makes no mention of the sea in this, tribe, nor does Josephus extend it farther than to Mount Carmel; and, in Joshua xvii. 10, Asher is said to touch Manasseh on the north, which could not be if Issachar extended to the sea.

ISSOIRE, a fortified town in the department of the Puy de Dôme, France, on the small river Couze. A large street surrounds it, occupying the ground of the old ramparts. Population upwards of 5000. Nineteen miles south by east of Clermont, and 300 S. S. E of Paris.

ISSOUDUN, a considerable town and arrondissement of France, in the department of Indre, and late province of Berry. It carries on a great trade in wood, cattle, cloth, hats, and stockings, and is seated partly on a plane, and partly on an eminence. Inhabitants 10,000. It is eighteen miles south-west of Bourges.

IS'SUE, *n. s.*, *v. n.* & *v. a.* } Fr. *issue*. Is-
IS'SUELESS, *adj.* } sueless is without offspring or descendants: the substantive and the verbs have a great variety of meanings as under. In law. Issue has divers applications in the common law: sometimes used for the children begotten between a man and his wife; sometimes for profits growing from an amercement, fine, or expenses of suit; sometimes for profits of lands or tenements; sometimes for that point of matter depending in suit, whereupon the parties join and put their cause to the trial of the jury. Issue is either general or special: general issue seemeth to be that whereby it is referred to the jury to bring in their verdict, whether the defendant have done any such thing as the plaintiff layeth to his charge. The special issue then must be that, where special matter being alleged by the defendant for his defence, both the parties join thereupon, and so grow rather to a demurrer, if it be quæstio juris, or to trial by the jury, if it be quæstio facti.

IS'SUE. The act of passing out; exit; egress; or passage out.

Unto the Lord belong the *issues* of death.
Psalms.

Let us examine what bodies touch a moveable whilst in motion, as the only means to find an *issue* out of this difficulty. *Digby on Bodies.*

We might have easily prevented those great returns of money to France; and, if it be true the French are so impoverished, in what condition must they have been, if that *issue* of wealth had been stopped? *Swift.*

Event; consequence.

Spirits are not finely touched,
But to fine *issues*.
Shakspeare. Measure for Measure.

If I were ever fearful
To do a thing, where I the *issue* doubted,
Whereof the execution did cry out
Against the non-performance, 'twas a fear
Which oft infects the wisest.
Id. Winter's Tale.

But let the *issue* correspondent prove
To good beginnings of each enterprize.
Fairfax.

If things were cast upon this *issue*, that God should never prevent sin till man deserved it, the best would sin, and sin for ever. *South.*

The wittiest sayings and sentences will be found the *issues* of chance, and nothing else but so many lucky hits of a roving fancy. *Id.*

Our present condition is better for us in the *issue*, than that uninterrupted health and security that the Atheist desires. *Bentley.*

Termination; conclusion.

He hath preserved Argalus alive, under pretence of having him publickly executed after these wars, of which they hope for a soon and prosperous *issue*.
Sidney.

What *issue* of my love remains for me!
How wild a passion works within my breast!
With what prodigious flames am I possest!
Dryden.

Homer, at a loss to bring difficult matters to an *issue*, lays his hero asleep, and this solves the difficulty. *Broome.*

Sequel deduced from premises.

I am to pray you not to strain my speech
To grosser *issues*, nor to larger reach,
Than to suspicion. *Shakspeare. Othello.*

A fontanel; a vent made in a muscle for the discharge of humors.

This tumour in his left arm was caused by stric binding of his *issue*. *Wiseman*

Evacuation.

A woman was diseased with an *issue* of blood.
Matt. ix. 2.

Progeny; offspring.

This good king shortly without *issue* dide,
Whereof great trouble in this kingdome grew
That did herselfe in sondry parts divide,
And with her powre her own selfe overthrew.
Spenser. Faerie Queene.

O nation miserable!
Since that the truest *issue* of thy throne,
By his own interdiction stands accurst.
Shakspeare. Macbeth.

Nor where Abassin kings their *issue* guard,
Mount Amara, though this by some supposed
True Paradise, under the Æthiop line
By Nilus' head. *Milton's Paradise Lost.*

This old peaceful prince, as Heaven decreed,
Was blessed with no male *issue* to succeed.
Dryden's Æneid.

The frequent productions of monsters, in all the species of animals, and strange *issues* of human birth, carry with them difficulties, not possible to consist with this hypothesis. *Locke.*

IS'SUE, *v. n.* From the noun; Fr. *issue*; Ital. *uscire.*

To come out; to pass out of any place.

Waters *issued* out from under the threshold of the house. *Ezek.*

From the utmost end of the head branches there *issueth* out a gummy juice. *Raleigh's History.*

Waters *issued* from a cave. *Milton.*

Wild shrieks have *issued* from the hollow tombs;
Dead men have come again and walked about.
Blair's Grave.

Ere Pallas *issued* from the thunderer's head,
Dulness o'er all possessed her ancient right.
Pope.

To make an eruption; to break out.

Three of master Ford's brothers watch the doors with pistols, that none should *issue* out, otherwise you might slip away. *Shakspeare.*

See that none hence *issue* forth a spy. *Milton.*

Haste, arm your Ardeans, *issue* to the plain;
With faith to friend, assault the Trojan train.
Dryden.

At length there *issued* from the grove behind,
A fair assembly of the female kind. *Id.*

A buzzing noise of bees his ears alarms;
Straight *issue* through the sides assembling swarms.
Id.

Full for the port the Ithacensians stand,
And furl their sails, and *issue* on the land.
Pope's Odyssey.

Then *issues* forth the storm with sudden burst,
And hurls the whole precipitated air
Down in a torrent. *Thomson.*

To proceed as an offspring.

Of thy sons that shall *issue* from thee, which thou shalt beget, shall they take away. 2 *Kings* xx. 18.

To be produced by any fund.

These alterages *issued* out of the offerings made to the altar, and were payable to the priesthood.
Ayliffe's Parergon.

To run out in lines.

Pipes made with a belly towards the lower end, and then *issuing* into a straight concave again.
Bacon.

IS'SUE, *v. a.*

To send out; to send forth.

A weak degree of heat is not able either to digest the parts or to *issue* the spirits.
Bacon's Natural History.

The commissioners should *issue* money out to no other use. *Temple.*

To send out judicially or authoritatively.

This is the more frequent sense. It is commonly followed by a particle, *out* or *forth.*

If the council *issued out* any order against them, or if the king sent a proclamation for their repair to their houses, some noblemen published a protestation.
Clarendon.

Deep in a rocky cave he makes abode,
A mansion proper for a mourning god:
Here he gives audience, *issuing out* decrees
To rivers, his dependent deities. *Dryden.*

In vain the master *issues out* commands,
In vain the trembling sailors ply their hands:
The tempest unforeseen prevents their care. *Id.*

They constantly wait in court to make a due return of what they have done, and to receive such other commands as the judge shall *issue forth.*
Ayliffe's Parergon.

ISSUES, in surgery, are small ulcers made designedly by the surgeon in various parts of the body, and kept open by the patient, for the preservation and recovery of his health.

IS'SUELESS,

I have done sin,
For which the Heavens, taking angry note,
Have left me *issueless. Shakspeare. Winter's Tale.*

Carew, by virtue of this entail, succeeded to Hugh's portion, as dying *issueless.*
Carew's Survey of Cornwall.

ISSUS, a town of Cilicia in Natolia, now called Ajazzo, with a harbour on the Levant Sea, a little north of Scanderoon. Near this place, in a difficult pass between the mountains and the sea, Alexander the Great fought his second great battle with Darius. The great cause of the defeat which the Persians here received was the bad generalship of their monarch, who led his numerous forces into a narrow place, where they had not room to act. Alexander was so much surprised when he first received the news that Darius was behind him, that he could scarcely believe it to be true; but when he was thoroughly satisfied of the fact, and that Darius had again passed the river Pinarus, he called a council of war, wherein he exhorted them to remember their former victories; and that they, who were always conquerors, were about to contend with a nation accustomed to defeat. He further observed that Darius seemed to be infatuated, since he had with such expedition quitted an open and champaign country, where his numbers might have acted with advantage, to fight in a place enclosed, where the Macedonian phalanx might be well drawn up, and where his numbers could only incommode him. He then made the necessary dispositions for repassing the mountains, posted guards where he found them necessary, and then commanded his troops to refresh themselves, and to take their rest till morning. At break of day he began to repass the mountains, obliging his forces to move in close order where the road was narrow, and to extend themselves as they had more room, the right wing keeping always close to the mountain, and the left to the sea-shore. On the right there was a battalion of heavy armed troops, besides the targeteers under the command of Nicanor the son of Parmenio. Next these, extending to the phalanx, were the corps of Cœnus and Perdiccas; and on the left the respective bodies commanded by Amyntas, Ptolemy, and Meleager. The foot appointed to support them were commanded by Craterus; but the whole left wing was committed to Parmenio, with strict orders not to decline from the sea-shore, lest the Persians should surround them. Darius ordered 20,000 foot, and 30,000 horse to retire, finding that he already wanted room to draw up the rest. His first line consisted of 30,000 Greek mercenaries, having on their right and left 60,000 heavy-armed troops,

being the utmost the ground would allow On the left, towards the mountain, he posted 20,000 men, which, from the hollow situation of the place, were brought quite behind Alexander's right wing. The rest of his troops were formed into close and useless lines behind the Greek mercenaries, to the number in all of 600,000 men. When this was done he suddenly recalled the horse who had retired, sending part of them to take post on his right against the Macedonians commanded by Parmenio; and the rest he ordered to the left towards the mountain: but, finding them unserviceable there, he sent the greatest part of them to the right; and then took upon himself, according to the custom of the Persian kings, the command of the main body. As soon as Alexander perceived that the weight of the Persian horse was disposed against his left wing, he despatched the Thessalian cavalry thither, and supplied their place on the right by some brigades of horse from the van and light-armed troops. He also made such dispositions, that, notwithstanding the advantage of the hollow mountain, the Persians could not surround him. But, as these precautions had considerably weakened the centre of his army, he ordered those advanced posts on the enemy's left, of which he was most apprehensive, to be attacked at the very beginning of the combat; and, when they were easily driven from them, he recalled as many troops as were necessary to strengthen his centre. When all things were in order, Alexander gave strict command that his army should march very slowly. As for Darius, he kept his troops fixed in their posts, and in some places threw up ramparts; whence the Macedonians rightly observed, that he thought himself already a prisoner. Alexander, at the head of the right wing, engaged first, and, without any difficulty, broke and defeated the left wing of Darius. But, endeavouring to pass the Pinarus after them, his troops in some measure losing their order, the Greek mercenaries fell upon them in flank, and Ptolemy, the son of Seleucus, and 120 Macedonians of rank, were killed on the spot. But the foot next to Alexander's right wing coming in seasonably to its relief, fell upon the mercenaries in flank, amongst whom a dreadful carnage was made; they being in a manner surrounded by the horse and light-armed troops, which at first pursued the left wing, and the foot that now passed the river. The Persian horse on the right still fought gallantly; but when they were informed of the rout of their left wing and of the destruction of the Greek mercenaries, and that Darius himself had fled, they began to break, and betake themselves to flight also. The Thessalian cavalry pursued them close at their heels; and, the narrow craggy roads incommoding them exceedingly, vast numbers perished. Darius fled, soon after the left wing was broken, in a chariot with a few of his favorites; but, the road becoming rocky and narrow, he quitted it, and, mounting a horse, rode all night: his chariot, in which were his cloak and his bow, fell into the hands of Alexander, who carried them back to his camp. Diodorus informs us, that Alexander looked every where about for Darius; and, as soon as he discovered him, with his handful of guards attacked him and the flower of the Persian army that was about him; being as desirous of obtaining this victory by his personal valor, as of subduing the Persian empire by the courage of his soldiers. But when Oxathres, the brother of Darius, saw Alexander's design, and how fiercely he fought to accomplish it, he threw himself, with the horse who were about him, between his brother's chariot and the enemy, where an obstinate fight was maintained till the dead bodies appeared like an entrenchment about the chariot of Darius. Many of the Persian nobility were slain, and Alexander himself was wounded in the thigh. At last the horses in the chariot of Darius started, and became so unruly, that the king himself was forced to take the reins; the enemy, however, pressed so hard upon him, that he was constrained to call for another chariot, and mounted it in great danger. This was the beginning of the rout, which soon after became general. According to this author, the Persians lost 200,000 foot, and 10,000 horse; the Macedonians 300 foot and 150 horse. Justin informs us that the Persian army consisted of 400,000 foot, and 100,000 horse. He says that both the kings were wounded; and that the Persians still fought gallantly when their king fled, but that they afterwards were speedily and totally routed: he is very particular as to their loss, which, he says, amounted to 61,000 foot, 10,000 horse, and 40,000 taken prisoners; of the Macedonians, he says, there fell no more than 130 foot and 150 horse. Curtius says that of the Persians there fell 100,000 foot, and 10,000 horse; that of Alexander's army 504 were wounded; thirty-two foot and 150 horse killed. He adds, Tantulo impendio ingens victoria stetit, 'So small was the cost of so great a victory.'

ISTHMIA, or the ISTHMIAN GAMES, one of the four solemn games which were celebrated every fifth year in Greece. They had their name from the isthmus of Corinth, where they were celebrated. In their first institution, according to Pausanias, they consisted only of funeral rites and ceremonies in honor of Melicertes: but Theseus afterwards, as Plutarch informs us, in emulation of Hercules, who had appointed games at Olympia in honor of Jupiter, dedicated those to Neptune, his reputed father, who was regarded as the particular protector of the isthmus and commerce of Corinth. The same trials of skill were exhibited here as at the other three sacred games; and particularly those of music and poetry. These games, in which the victors were only rewarded with garlands of pine-leaves, were celebrated with great magnificence and splendor as long as paganism continued to be the established religion of Greece; nor were they omitted even when Corinth was sacked and burnt by Mummius the Roman general; at which time the care of them was transferred to the Sicyonians, but was restored to the Corinthians when their city was rebuilt.

ISTHMUS, *n. s.* Lat. *isthmus*. A neck of land joining a peninsula to the continent.

There is a castle strongly seated on a high rock, which joineth by an *isthmus* to the land, and is impregnably fortified. *Sandys's Travels.*

The Assyrian empire stretcheth northward to that *isthmus* between the Euxine and the Caspian seas.
Brerewood on Languages.

The foremost of the base half blind appears;
And where his broad way in an *isthmus* ends,
There he examines all his passengers,
And those who ought not 'scape he backward sends.
Fletcher's Purple Island.

O life, thou nothing's younger brother!
Thou weak-built *isthmus*, that dost proudly rise
Up betwixt two eternities,
Yet can'st not wave nor wind sustain;
But broken and o'erwhelmed the ocean meets again.
Cowley.

Cleomenes thinking it more advisable to fortify, not the *isthmus*, but the mountains, put his design in execution. *Creech.*

Our church of England stands as Corinth between two seas, and there are some busy in cutting the *isthmus*, to let in both at once upon it. *Stillingfleet.*

Placed on this *isthmus* of a middle state,
A being darkly wise, and rudely great. *Pope.*

An ISTHMUS is a narrow neck which joins two continents, or separates two seas. See PENINSULA. The most celebrated isthmuses are, that of Panama or Darien, which joins North and South America; that of Suez, which connects Asia and Africa; that of Corinth, or Peloponnesus, in the Morea; that of Crim Tartary, otherwise called Taurica Chersonesus; that of the peninsula Romania, and Erisso, or the isthmus of the Thracian Chersonesus, twelve furlongs broad, being that which Xerxes undertook to cut through. The ancients had several designs of cutting the isthmus of Corinth, which is a rocky hillock, about ten miles over; but they were all in vain, the invention of sluices being not then known. There have been attempts too for cutting the isthmus of Suez, to make a communication between the Red Sea and the Mediterranean: but these also failed: and, in one of them, a king of Egypt is said to have lost 120,000 men.

ISTRIA, a peninsula of Austrian Illyria, constituting its southern division; formed by the gulfs of Trieste and Fiume, and bounded on the north by Carniola. It is situated between the forty-fifth and forty-sixth degrees of latitude, and was formerly divided into Venetian and Austrian Istria; but, at the peace of Campo Formio, the whole was given to the empire. It was afterwards indeed, during some years, in the hands of Buonaparte; but was restored to Austria in 1814. It comprises the districts of Cape d'Istria and Rovigne in the circle of Trieste, and of Istria in the circle of Fiume.

The territorial extent of Istria is about 1600 square miles, of rich fertile country. The oil is accounted superior to that of Spain and Sicily; and the fisheries of tunnies and anchovies are highly productive; but the supply of salt is inadequate, and quantities of the fish are allowed to putrefy along the coast. The marble and stone of Istria are much prized for building in the north-east of Italy. Population about 140,000. The chief town is Rovigno. See ILLYRIA.

IT, *pronoun.* Sax. hit.

The neutral demonstrative. Used in speaking of things. For it, our ancestors used he, as the neutral pronoun; and for its they used his. Thus, in the accidence, a noun adjective is that which cannot stand by *himself*, but requireth another word to be joined with *him* to show *his* signification.

Nothing can give that to another which *it* hath not itself. *Bramhall against Hobbes.*

Will our great anger learn to stoop so low?
I know *it* cannot. *Cowley.*

Tell me, O tell, what kind of thing is wit,
Thou who master art of *it*. *Id.*

His son, *it* may be, dreads no harm;
But kindly waits his father's coming home.
Flatmore.

The time will come, *it* will, when you shall know
The rage of love. *Dryden.*

How can I speak? or how, sir, can you hear?
Imagine that which you would most deplore,
And that which I would speak, is *it* or more. *Id.*

A mind so furnished, what reason has *it* to acquiesce in *its* conclusions? *Locke.*

The glory which encompassed them covered the place, and darted *its* rays with so much strength, that the whole fabrick began to melt. *Addison.*

If we find a greater good in the present constitution, than would have accrued either from the total privation of *it*, or from other frames and structures, we may then reasonably conclude, that the present constitution proceeded from an intelligent and good being, that formed *it* that particular way out of choice.
Bentley.

The design, *it* seems, is to avoid the dreadful imputation of pedantry. *Swift.*

It is used absolutely for the state of a person or affair.

I wolde have caught *it* up anone:
It fled; and fro me was ygone.
As I folowed, and *it* forth went,
Downe by a floury greene *it* went,
Ful thicke of grasse.
Chaucer. Boke of the Duchesse

How is *it* with our general?
—Even so
As with a man by his own alms impoisoned,
And with his charity slain.
Shakspeare. Coriolanus.

What say you—a pasty, *it* shall and *it* must,
And my wife little Kitty is famous for crust.
Goldsmith.

Hues which have words, and speak to ye of heaven,
Float o'er this vast and wondrous monument,
And shadow forth *its* glory. *Byron. Childe Harold.*

It is used for the thing; the matter; the affair.

It's come to pass,
That tractable obedience is a slave
To each incensed will. *Shakspeare. Henry VIII.*

It is sometimes expressed by *'t.*

He rallied, and again fell to *'t;*
For catching foe by nearer foot,
He lifted with such might and strength,
As would have hurled him thrice his length.
Hudibras.

It is used ludicrously after neutral verbs, to give an emphasis.

If Abraham brought all with him, it is not probable that he meant to walk *it* back again for his pleasure. *Raleigh.*

The Lacedemonians, at the straits of Thermopylæ, when their arms failed them, fought *it* out with their nails and teeth. *Dryden.*

I have often seen people lavish *it* profusely in tricking up their children, and yet starve their minds.
Locke.

The mole courses it not on the ground, like the rat or mouse, but lives under the earth. *Addison.*

Whether the charmer sinner *it*, or saint *it*.
If folly grows romantick, I must paint *it*. *Pope.*

Sometimes applied familiarly, ludicrously, or rudely to persons.

Let us after him,
Whose care is gone before to bid us welcome:
It is a peerless kinsman. *Shakspeare. Macbeth.*

Do, child, go to *its* grandam, child:
Give grandam kingdom, and *its* grandam will
Give *it* up to him. *Id. King John.*

It is sometimes used of the first or second person, sometimes of more. This mode of speech, though used by good authors, and supported by the *il y a* of the French, has yet an appearance of barbarism.

Who was't came by?
—'*Tis* two or three, my lord, that bring you word
Macduff is fled to England. *Shakspeare. Macbeth.*

City,
'*Tis* I, that made thy widows. *Id. Coriolanus.*

'*Tis* these that early taint the female soul. *Pope.*

ITALIAN LANGUAGE, the language spoken in Italy. See LANGUAGE. This is derived principally from the Latin; and, of all the languages formed from it, there is none which carries with it more visible marks of its original than the Italian. It is accounted one of the most perfect among the modern tongues. It is complained, indeed, that is has too many diminutives and superlatives, or rather augmentatives, but without any great reason; for if those words convey nothing farther to the mind than the just idea of things, they are no more faulty than our pleonasms and hyperboles. The language corresponds to the genius of the people, who are slow and thoughtful: accordingly, their language runs heavily, though smoothly; and many of their words are lengthened out to a great degree. They have a great taste for music; and, to gratify their passion this way, have altered many of their primitive words; leaving out consonants, taking in vowels, softening and lengthening out their terminations, for the sake of the cadence. Hence the language is rendered extremely musical, and succeeds better than any other in operas and some parts of poetry: but it fails in strength and nervousness; and a great part of its words, borrowed from the Latin, become so far disguised, that they are not easily known. The great number of states into which Italy was (till of late divided, has given rise to a great number of different dialects in the language; the Tuscan is usually preferred to the other dialects, and the Roman pronunciation to that of the other cities; whence the Italian proverb, 'Lingua Toscana in bocca Romana.' The Italian is generally pretty well understood throughout Europe; and is frequently spoken in Germany, Poland, and Hungary. At Constantinople, in Greece, and in the ports of the Levant, the Italian is used as commonly as the language of the country: indeed, in those places it is not spoken so pure as in Tuscany, but is corrupted with many of the proper words and idioms of the place; whence it takes a new name, and is called Frank Italian.

ITALIAN REPUBLIC, a name given by Buonaparte and the deputies from the Cisalpine Consulta, who met with him at Lyons in 1801, to that part of Italy which, in October 1797, was erected into a democratic state, under the title of the Cisalpine Republic, and which was acknowledged as an independent state by the emperor at the treaties of Campo Formio and Luneville, as well as by most other European powers since. Some additions of territory were afterwards made to the Cisalpine republic, particularly the Valteline, Chiavenna, and Bormio, annexed in November 1797; the four Italian bailiwics; that part of the Veronese which by the treaty of Campo Formio had been ceded to the emperor, whereby the whole of the Veronese became included in the Cisalpine republic; and the ci-devant dominions of the prince of Parma; but all these additional territories were by no means sufficient to justify the title given to it of an Italian Republic. When Buonaparte fell, this republic fell with him.

ITALICA, in ancient geography, a town of Bœtica, in Spain, built by Scipio Africanus, after finishing the Spanish war, for the reception of the wounded soldiers. At first it was a municipium; afterwards a colony. It was the birthplace of the emperors Trajan and Adrian, and of the poet Silius Italicus.

ITALUS, an Arcadian prince, who erected a kingdom in Italy to which he gave name, and was deified after his death. Æneas invokes him among the Italian deities. Virg. Æn. vii. 178.

ITALY.

ITALY, one of the finest and most celebrated countries of Europe, lying between 7° and 10° E. long., and between 37° and 46° lat. N. On the N. N. W., and north-east, it is bounded by France, Switzerland, the country of the Grisons, and Germany; on the east by the Adriatic Sea; and on the south and west by the Mediterranean; its figure bearing some resemblance to a boot. Its length from Aosta at the foot of the Alps in Savoy, to the utmost verge of Calabria, is about 600 miles; but its breadth is very unequal, being in some places nearly 400 miles, in others not above twenty-five or thirty.

1. *Of ancient Italy.*—This country, like most others, was anciently divided into a great number of petty states and kingdoms. Afterwards when the Gauls settled in the western, and many Greek colonies in the eastern parts, it was divided, with respect to its inhabitants, into three great parts, viz. Gallia Cisalpina, Italy properly so called, and Magna Græcia. The most western and northern parts of Italy were in great part possessed by the Gauls, and hence took the name of Gallia, with the epithets of Cisalpina and Citerior, because they lay on the side of the Alps next to Rome; and Togata, with relation to the Roman gown or dress which the inhabitants used; but this last epithet is of a much later

ITALY.
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TURKEY
KINGDOM OF SARDINIA
PARMA
TUSCANY
ADRIATIC SEA or G. of VENICE
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CORSICA
Basle
R. Rhine
L. of Constance
Constance
Neufchatel
Berne
Lausanne
Geneva
Martigny
Coire
Alps
Inspruck
R. Inn
R. Salza
Brixen
R. Mur
Gratz
Klagenfurt
R. Drave
Laybach
Udine
Gorizia
Trieste
Fiume
Zeng
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Zara
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Ragusa
Milan
Como
Turin
Casale
Pavia
Piacenza
Verona
Mantua
Venice
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Bologna
Lucca
Leghorn
Florence
Ancona
Antibes
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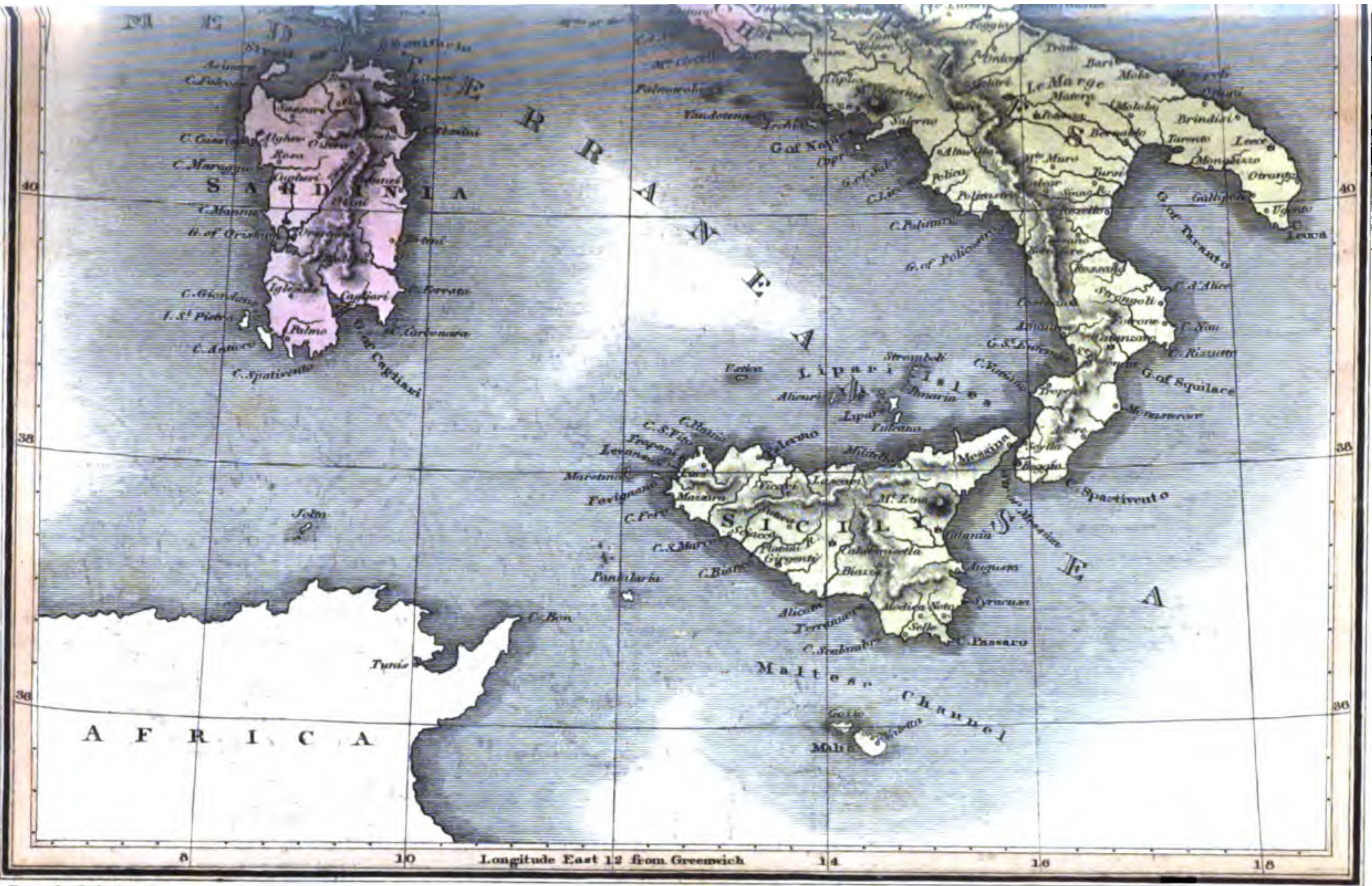

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date than the former. This appellation was antiquated in the reign of Augustus, when the division of Italy into eleven provinces, introduced by him, took place. Hence the name of Cisalpine Gaul frequently occurs in authors who flourished before, and scarce ever in those who wrote after his reign. This country extended from the Alps and the river Varus, parting it from Transalpine Gaul to the river Aesus; or, as Pliny has it, to Ancona, in the ancient Picenum. On the north it was divided from Rhætia by the Alpes Rhæticæ; and from Illyricum by the river Formio: but on this side the borders of Italy were, in Pliny's time, extended to the river Arsia in Istria. On the south it reached to the Ligustic Sea, and the Appennines parting it from Etruria; so that under the common name of Cisalpine Gaul were comprehended the countries lying at the foot of the Alps, called by Pliny and Strabo the Subalpine countries, Liguria, Gallia Cispadana, and Transpadana. Italy, properly so called, extended, on the coast of the Adriatic, from the city of Ancona to the river Trento, now the Fortore; and on the Mediterranean, from the Marca to the Silarus, now the Sele. Magna Græcia comprised Apulia, Lucania, and the country of the Brutii. It was called Greece, because most of the cities on the coast were Greek colonies. The inhabitants gave it the name of Great, not as if it was larger than Greece, but merely out of ostentation, as Pliny informs us.

All these countries were inhabited by a great number of different nations settled at different times, and from many different parts. The names of the most remarkable of them were the Aborigines, or those whose origin was utterly unknown, and consequently were thought to have none; the SABINES, HETRURIANS or TUSCANS, the UMBRI, SAMNITES, CAMPANI, APULI, CALABRI, LUCANI, the BRUTII, and the LATINS. From a colony of the latter proceeded the Romans, who gradually subdued all these nations, one after another, and held them in subjection for upwards of 700 years. See ROME, and the above articles in their order.

Italy was anciently known by the names of Saturnia, Oenotria, Hesperia, and Ausonia. It was called Saturnia from Saturn; who, being driven out of Crete by his son Jupiter, is supposed to have taken refuge here. The names of Oenotria and Ausonia are borrowed from its ancient inhabitants the Oenotrians and Ausones, and that of Hesperia, or Western, was given it by the Greeks, from its situation with respect to Greece. The name of Italia or Italy, which in process of time prevailed over all the rest, is by some derived from Italus, a king of the Siculi; by others from the Greek word Ιταλος, an ox; this country abounding, by reason of its rich pastures, with oxen of an extraordinary size and beauty. All these names were originally peculiar to particular provinces of Italy, but afterwards applied to the whole country.

2. *Italy, from the time of Odoacer until the death of Theodoric.*—The nations of Italy were originally brave, hardy, temperate, and well skilled in the art of war; and the Romans much more so than the rest. Their subjection to Rome, however, inured them to slavery; and the vast wealth which was poured into the country from all parts of the world, during the time of the Roman prosperity, corrupted their manners, and made them degenerate from their former valor. Of this degeneracy the barbarous nations of the north took advantage, and invaded the empire in innumerable multitudes. Though often repelled, they constantly returned; and it was found necessary to take great numbers of them into the Roman service, in order to defend the empire against the rest of their countrymen. In the year 476 the Heruli, presuming on the services they had done the empire, demanded a third part of the lands of Italy; and, being refused, chose Odoacer, a man of low birth, but of great valor and experience, for their king; and, having totally destroyed the remains of the Roman empire, proclaimed Odoacer king of Italy. The new monarch, however, did not think proper to alter the Roman form of government, but suffered the people to be governed by the senate, consuls, &c., as before.

Odoacer enjoyed his dignity in peace till 488, when Zeno, emperor of Constantinople, being pressed by Theodoric king of the Ostrogoths, advised him to turn his arms against Odoacer, whom he could easily overcome, and thus make himself sovereign of one of the finest countries in the world. Theodoric now, therefore, set out for Italy, attended by an immense number of people, carrying with them their wives, children, and effects, on waggons. Several Romans of great distinction attended him, while many of his countrymen chose to remain in Thrace, where they became a separate nation. The Goths, being destitute of shipping, were obliged to go round the Adriatic. This march was performed in the depth of winter; and, during the whole time, a violent famine and plague raged among them. They were also opposed by the Gepidæ and Sarmatians; but at last, having defeated these enemies, and overcome every other obstacle, they arrived in Italy in 489. Theodoric advanced to the river Sontius (now Zonzo), near Aquileia, where he halted to refresh his troops. Here he was met by Odoacer at the head of a very numerous army, but composed of many different nations commanded by their respective chiefs, and without sufficient zeal for the common cause. Theodoric, therefore, gained an easy victory, and took their camp. Odoacer on this retired to the plains of Verona, and encamped at a small distance from the city; but Theodoric pursued him closely, and soon forced him to a second engagement. The Goths obtained another victory; but it cost them dear. Odoacer's men made a much firmer resistance than before, and great numbers fell on both sides. The victory, however, was so far decisive, that Odoacer was obliged to shut himself up in Ravenna; so that Theodoric, having now no enemy to oppose him in the field, besieged and took several important places, and, among the rest, Milan and Pavia. At the same time Tufa, commander of Odoacer's forces, deserted to the enemy with the greatest part of his troops, and was immediately employed in conjunction with a Gothic officer in pursuit of his sovereign.

Odoacer had left Ravenna, and was advanced as far as Faenza, when he was closely besieged by Tufa; but the traitor, declaring again for his old master, joined him with all his troops, and delivered up several officers that had been appointed by Theodoric to serve under him. These were sent in irons to Ravenna; and Odoacer, being joined by Frederic, one of Theodoric's allies, with a considerable body of troops, once more advanced against his enemies. He recovered all Liguria, took the city of Milan, and at last besieged Theodoric himself in Pavia. The Goths, having brought all their families and effects along with them, were greatly distressed for want of room; and must have undoubtedly submitted, if their enemies had continued to agree among themselves. But the quarrels of his followers proved the ruin of Odoacer. Theodoric, finding that the enemy remitted the vigor of their operations, applied for succours to Alaric, king of the Visigoths, who had settled in Gaul. As the Visigoths and Ostrogoths were originally one nation, and the Visigoths had received among them some years before a great number of Ostrogoths under the conduct of Videmer cousin-german to Theodoric, the supplies were readily granted. The inaction of the enemy gave these succours time to arrive; upon which Theodoric instantly joined them, and marching against his enemies, gave them a total overthrow. Odoacer again took refuge at Ravenna, but was closely besieged by Theodoric in 490. The siege lasted three years, during which Odoacer defended himself with great bravery, and greatly annoyed the besiegers. Theodoric, however, impatient of delay, leaving part of his army to blockade the city, marched with the rest against the strong holds which Odoacer had garrisoned. All these he reduced with little difficulty; and in 492 returned to the siege of Ravenna. The besieged were now reduced to great straits, both by the enemy without, and a famine within, the price of wheat having risen to six pieces of gold per bushel. On the other hand the Goths were worn out with the fatigues of such a long siege; so that both parties being willing to put an end to the war, Odoacer sent John, bishop of Ravenna, to Theodoric with terms of accommodation. Jornandas informs us, that Odoacer only begged his life; which Theodoric bound himself, by a solemn oath, to grant him: but Procopius says that they agreed to live together on equal terms. This last seems very improbable: but, whatever were the terms of the agreement, it is certain that Theodoric did not keep them; for, having a few days after invited Odoacer to a banquet, he despatched him with his own hand. All his servants and relations were massacred at the same time: except his brother Arnulphus, and a few others, who had the good fortune to make their escape, and retire beyond the Danube.

By the murder of Odoacer, Theodoric, becoming master of all Italy, assumed the title of king of that country, as Odoacer had done; though, with a pretended deference to the emperor of Constantinople, he sent messengers asking liberty to assume that title, after he had actually taken it. Having secured his new kingdom, by foreign alliances, Theodoric applied himself to legislation, and enacted many salutary laws. To stop the incursions of the barbarians, he chose Ravenna for his chief residence, and the provinces were governed by the same magistrates that had presided over them in the times of the emperors, viz. the consulares, correctores, and præsides. He also sent, according to the custom of the Goths, inferior judges, distinguished by the name of counts, to each city, to administer justice, and decide disputes. Besides these officers, he also appointed not only in the principal cities, but in every small town and village, inferior magistrates of known integrity; no appeals to distant tribunals being allowed but in matters of great importance. Under Theodoric Italy enjoyed as great happiness as had been experienced under the very best emperors. He contented himself with the same tributes and taxes that had been levied by the emperors; but, on all occasions of public calamity, was much more ready to remit them than they had been. Nor did he treat the natives as those of the other Roman provinces were treated by the barbarians who conquered them. These stripped the ancient proprietors of their lands, estates, and possessions, dividing them among their chiefs; and giving to one a province with the title of duke, to another a frontier district with the title of marquis: to some a city with that of count; to others a castle or village with the title of baron. But Theodoric, who piqued himself upon governing after the Roman manner, and observing the Roman laws and institutions, left every one in the full enjoyment of his ancient property. As to religion, though himself an Arian, he allowed his subjects to profess the orthodox doctrine without molestation. In short, his many virtues, and the happiness of his subjects, are celebrated by all the historians. The end of his reign, however, was sullied by the death of the celebrated philosopher Boethius, and his father-in-law Symmachus. They were both beheaded in Pavia, on an unjust charge of treason; and scarce was the sentence executed when the king repented, and abandoned himself to the most pungent sorrow. The excess of his grief is said to have affected his brain; for not long after, the head of a large fish being served up to supper, he fancied it to be that of Symmachus threatening him in a most ghastly manner. Seized with horror and amazement, he was carried to his bedchamber, where he died in a few days, on the 2d of September, 526.

2. *Italy, from the death of Theodoric to the capture of Rome by Totila.*—After the death of Theodoric the kingdom devolved to Athalaric his grandson, who being only eight years of age, his mother Amalasuntha took upon her the regency. Her administration was equally upright with that of Theodoric; but the barbarians, of whom her court was composed, finding fault with the encouragement she gave to learning, forced her to abandon the education of her son. The latter thereupon plunged into every vice, and behaved to his mother with the greatest arrogance, until he at last commanded her to retire from court. Amalasuntha on this exerting her authority, seized three of the ringleaders of the sedition, whom she confined in the most remote parts of Italy, and wrote to the emperor Justinian, asking leave to take refuge in his dominions. The emperor

readily complied with her request, offering her a palace at Durazzo; but the queen having in the mean time caused the chiefs of the revolt to be put o death, and no new disturbances arising, she declined the emperor's offer. In 533, Athalaric having ruined his health by his debaucheries, Amalasuntha, to avoid the calamities with which Italy was threatened in case of his death, formed a design of delivering it up to Justinian: but before this scheme was ripe for execution, her grandson died; upon which the queen took for her colleague Theodotus her cousin; obliging him, however, to swear that he would suffer her to enjoy and exercise her former power. This he readily did, but soon forgot the contract; and, when she took the liberty to remind him of it, caused her to be seized and confined in an island of the lake Bolsena. Fearing, however, that this violence would be resented by Justinian, he obliged her to write to him that no injury or injustice had been done her, and sent with this letter one written by himself to the emperor, filled with heavy complaints against Amalasuntha. But Justinian, far from giving credit to what Theodotus urged against her, openly espoused her cause, and assured her of his protection. Before his letter could reach her, she was strangled in a bath; on hearing of which Justinian resolved upon an immediate war with the Goths. To facilitate the enterprise he bribed the Franks, to assist him with a large sum of money, and they promised the emperor great exertions in return. But while Justinian's arms were employed against the Goths, Thierri, the eldest son of Clovis, seized on several cities of Liguria, the Alpes Cottiæ, and great part of the late territory of Venice for himself. Justinian, however, found sufficient resources in the valor of Belisarius, notwithstanding the defection of his treacherous allies. This celebrated general was vested with supreme military command, and an absolute civil authority. His instructions were, to pretend a voyage to Carthage, but to make an attempt upon Sicily; and, if he thought he could succeed, to land there; otherwise to sail for Africa. Mundus, commander of the troops in Illyricum, was ordered to march into Dalmatia, which was subject to the Goths, and attempt the reduction of Salonæ. This he accomplished without difficulty, and Belisarius made himself master of Sicily sooner than he himself had expected. The island was reduced on the 31st of December 535; upon which Belisarius passed over to Reggio and Rome; the provinces of Abrutium, Lucania, Puglia, Calabria, and Samnium readily submitting to him. Naples stood a siege; but Belisarius entered through an aqueduct, and gave it up to be plundered.

Theodotus, having neither capacity nor inclination to carry on the war, now sent ambassadors to Justinian with proposals of peace. He agreed to renounce all pretensions to Sicily; to send the emperor yearly a crown of gold weighing 300lbs., and to supply him with 3000 men whenever he should demand them. Several other articles, contained in the proposal, amounted to the owning of Justinian for his lord, and that he held the crown of Italy through his favor. As he apprehended, however that these offers might not yet be satisfactory, his ambassadors were desired to inform Justinian, that he was willing to resign the kingdom, and content himself with a suitable pension. But he obliged them by an oath not to mention this proposal, till they found that the emperor would not accept of the other. The first proposals were accordingly rejected, as they had supposed; upon which the ambassadors produced the second, signed by Theodotus himself, who, in his letter to the emperor, told him, among other things, that being unacquainted with war, and addicted to the study of philosophy, he preferred his quiet to a kingdom. Justinian transported with joy, and imagining the war already finished, answered the king in a most obliging manner, extolling his wisdom, and giving him, besides what he demanded, the greatest honors of the empire. The agreement being confirmed by mutual oaths, lands were assigned to Theodotus, and orders were despatched to Belisarius to take possession of Italy in his name.

In the mean time a body of Goths having entered Dalmatia, with a design to recover the city of Salonæ, were encountered by an inferior army of Romans, commanded by the son of Mundus. The Goths proved victorious, the young Roman general was killed, and most of his army cut in pieces. Mundus marched against the enemy to revenge the death of his son; but met with no better success, his troops being defeated, and himself killed in the engagement. Upon this the Romans abandoned Salonæ and all Dalmatia: and Theodotus, elated with his success, refused to fulfil the articles of the treaty. Justinian despatched Constantianus, an officer of great valor and experience, into Illyricum, with orders to raise forces there, and to enter Dalmatia; at the same time he wrote to Belisarius to pursue the war with the utmost vigor. The Goths were now reduced to the greatest straits. Constantianus drove them out of Dalmatia; and Belisarius, having reduced all the provinces which compose the kingdom of Naples, advanced towards Rome. The chief men of the nation, finding their king incapable of preventing the impending ruin, assembled without his consent, and despatched ambassadors to Belisarius with proposals of peace. These proposals were rejected; and Belisarius returned for answer, that he would not hearken to terms, nor sheath his sword, till Italy was re-annexed to the empire to which it belonged. The Goths, finding Theodotus still inactive, unanimously deposed him, and chose for their leader one Vitiges, a brave man, but of mean descent. Theodotus fled to Ravenna; but the new king despatched a messenger after him, who overtook him, and cut off his head.

Vitiges commenced his government by writing a circular letter, in which he exhorted his countrymen to exert their ancient courage in defence of their lives and liberties. He then marched, with what forces he could collect towards Rome; but, thinking himself unable to defend that city, abandoned it to Belisarius, and, arriving at Ravenna, was joined by the Goths from all parts. Belisarius in the mean time entered Rome without opposition on the 10th of December 537:

the Gothic garrison retiring by the Porta Flaminia, while he entered by the Porta Asinaria. Leudaris, governor of the city, who staid behind, was sent with the keys to the emperor. Belisarius gave orders to repair the walls and fortifications; filled the granaries with corn from Sicily, and stored the place with provisions, as if he had been preparing for a siege. Mean time Benevento, with great part of the territory of Samnium, was delivered up to him; and the cities of Narnia, Spoleto, and Perusia, revolting from the Goths, received Roman garrisons; as did most of the cities of Tuscany. Vitiges, however, having collected an army of 150,000 men, now resolved to march directly to Rome, and engage Belisarius; or lay siege to the city. Apprehending, however, that the Franks might fall upon him, he sent ambassadors to them, with offers of all the Gothic possessions in Gaul, and a considerable sum of money, provided they joined him against the emperor. The Franks, with their usual treachery, consented to the proposal, received the money and the territories agreed on, and then refused to fulfil the treaty. In the mean time Vitiges began his march to Rome, leaving behind him, in a state of hostility, all the fortified towns on the road. Belisarius, whose army, reduced by the many towns he had garrisoned, did not now amount to above 5000 men, despatched messengers to Constantianus in Tuscany; and to Bessas, a Goth, of the emperor's party, in Umbria, with orders to join him with all possible expedition; writing at the same time to the emperor himself, in the most pressing manner, for supplies. Constantianus joined him pursuant to his orders; and soon after Bessas, falling in with part of the enemy's vanguard, killed a considerable number of them, and put the rest to flight. Belisarius had built a fort upon a bridge about a mile from Rome, and placed a strong garrison in it to dispute the passage with the enemy; but the garrison, seized with a panic at the approach of the Goths, abandoned their post in the night, and fled into Campania. Early in the morning Vitiges passed over great part of his army, and marched on till he was met by Belisarius, who, knowing nothing of what had happened, came with 1000 horse to view the ground about the bridge. Greatly surprised when he found himself in the presence of the enemy, he yet nobly stood his ground, exposing himself at every part of his brave line, without his usual prudence and discretion. Being known by some fugitives, and discovered to the enemy, the whole contest was for some time for the possession of his person. At last the Goths were driven back to their camp, which the Romans with great temerity attempted to force. In this attempt, however, they met with such a vigorous resistance, that they soon abandoned the enterprise, and retired to a neighbouring eminence; whence they were forced down by the enemy, put to flight, and pursued to the gates of the city. Here they had greater danger to meet still; for those within, fearing that the enemy might enter, refused to open the gates; and in vain did Belisarius exhibit himself, and demand admittance. They had been informed by those first fled, that he was slain, and could not, it is said, distinguish him on account of the blood and dust with which his face was covered. In this extremity, having encouraged his men to make a last effort, he put himself at their head, and attacked the enemy with such fury, that the Goths, imagining fresh troops had sallied out, began to give ground, and at last retired to their camp. The Roman general did not pursue them; but entered the city, where he was received with loud acclamations.

A few days after, Rome was closely invested by Vitiges, who destroyed the aqueducts by which water was conveyed into the city, and which had been built at an immense charge by the emperors. Belisarius, on his part, omitted nothing for his defence; until the cowardly citizens assembled in a tumultuous manner, and railed at his alleged temerity: Vitiges, to encourage this mutinous disposition, despatched ambassadors to the senate with proposals of peace. These ambassadors, however, were dismissed without any answer, and the siege was commenced with great vigor. Belisarius made a gallant defence; and in seven months is said to have destroyed 40,000 of the Goths. About this time he received a supply of 16,000 archers from the emperor. Elated with their successes, the Romans now became impatient for an engagement; and at last, notwithstanding the remonstrances of their general, forced him to lead them out against the enemy. The issue was as he anticipated. The Romans were defeated with the loss of some of their bravest officers and troops; after which they contented themselves with sallying out in small parties, which they commonly did with the greatest success. But, though the Romans had the satisfaction of thus cutting off their enemies, they were at this time grievously afflicted with a famine and plague; insomuch that the inhabitants, no longer able to bear their calamities, were on the point of forcing Belisarius to venture a second battle, when a seasonable supply of 3000 Isaurians, 800 Thracian horse, and 1300 horse of other nations, together with 500 Italians who joined them by the way, arrived at Rome. Belisarius immediately sallied out by the Flaminian gate, and fell upon the Goths, in order to give his allies time to enter by the opposite side of the city, which they did without the loss of a man. The Goths, hearing of the arrival of these troops, began to despair of becoming masters of the city; especially as the famine and plague raged with great violence in their camp. Ambassadors were therefore despatched to Belisarius with proposals of peace: but the only thing they could obtain was a cessation of arms for three months, during which time they might send ambassadors to the emperor. These negociations, however, proved unsuccessful; and the siege was pursued with great vigor, till Vitiges received the news of the taking of Rimini by the Romans. As this city was but a day's journey from Ravenna, the Goths were so much alarmed, that they immediately raised the siege of Rome, after it had continued a year and nine days: Belisarius attacking their rear as they passed the bridge of the Tiber, and cutting great numbers of them in pieces, while others, struck with a panic, threw

themselves into the river and were drowned. Vitiges now made an attempt upon Rimini: but, while he was employed in this siege, the Romans became masters of Milan; upon which the Gothic general Uraia, was despatched with a powerful army to retake it. In the mean time, however, a supply of 7000 Roman troops arrived from the emperor, under the command of Narses, a celebrated general. The immediate consequence of this was the raising of the siege of Rimini; for Vitiges perceiving the two Roman armies coming against him, and concluding from the many fires they made that they were much more numerous than they were, fled in such haste, that he left the greatest part of his baggage behind. The success of the Romans, however, was now retarded by some misunderstanding between the two generals; so that though Belisarius made himself master of Urbinum and Urbiventum, while Narses reduced some other places, yet the important city of Milan was suffered to fall into the hands of the enemy, who massacred all the inhabitants that were able to bear arms, to the number of 300,000, and sold the women for slaves. The city was also totally demolished. This disaster made such an impression on the mind of Justinian that he immediately recalled Narses, and gave the command of his troops to Belisarius.

Vitiges, who had expected great advantages from the disagreement of the two generals, was much disappointed by the recal of Narses; and dreading the vigor of Belisarius, at the head of a formidable army, thought of engaging in alliance with some foreign prince. He applied therefore to the Lombards; but, though tempted by the offer of a large sum of money, they continued inviolably attached to the Roman interest. At last he persuaded Chosroes king of Persia to make war upon Justinian. But the Roman general pushed on the war, while the treacherous Franks, thinking both nations sufficiently weakened by their mutual hostilities, resolved to attack both, and seize upon the country for which they contended. Accordingly, Theodobert, unmindful of the oaths he had taken both to the Goths and Romans, passed the Alps at the head of 150,000, or as some writers state at the head of 200,000 men, and entered Liguria. No hostilities being committed by them on their march, the Goths concluded that they were come to their assistance; and therefore supplied them with provisions. They thus crossed the Po without opposition; and, having secured the bridge, marched towards the place where a body of Goths were encamped; who admitted them without hesitation. But they were soon convinced of their mistake; for the Franks, falling unexpectedly upon them, drove them from their entrenchments with great slaughter, and seized on their baggage and provisions. A body of Romans that lay at a small distance from the Goths, concluding that they had been defeated by Belisarius, advanced with great joy to meet him as they imagined; but the Franks, falling unawares upon them, treated them as they had done the Goths, and became masters of their camp also. Thus they acquired a very considerable booty; but their provisions being soon consumed, and the country quite exhausted, vast numbers of them perished; so that Theodobert at last was obliged to return. In his way he destroyed Genoa and several other places, and arrived in his own dominions loaded with spoil.

In the mean time Belisarius was making great progress. He took the cities of Auximum and Fæsulæ after an obstinate siege, and invested Ravenna, the capital of the Gothic dominions in Italy. The place was defended by a numerous garrison, commanded by the king; but the siege was pushed with such vigor, that it was evident the city must at last submit; and the great successes of the Romans began to give jealousy to the neighbouring potentates. Theodobert, king of the Franks, offered to assist Vitiges with an army of 500,000 men; but Belisarius, being informed of the negociation, sent ambassadors to the latter, reminding him of the treachery of the Franks, and assuring him that the emperor was ready to grant him honorable terms. The king on this sent ambassadors to Constantinople; but in the mean time Belisarius, to bring the citizens to terms, bribed one of them to set fire to a magazine of corn, which soon straitened them for want of provisions. But, notwithstanding this disaster, they continued to hold out, till the arrival of the ambassadors from Constantinople, who brought Vitiges very favorable terms. These were, that the country beyond the Po, with respect to Rome, should remain to the Goths; but that the rest of Italy should be yielded to the emperor, and the royal treasure of the Goths be equally divided between him and the king. To these conditions, however, Belisarius positively refused to assent. He therefore pursued the siege with increased vigor, and obliged such of his officers as were of opinion that the town could not be taken, to express their opinion in writing. The Goths were as weary of the siege as the Romans; but, fearing lest Justinian should transplant them to Thrace, formed a resolution, without the consent of the king, of surrendering to Belisarius himself, and declaring him emperor of the west. To this they were encouraged by the refusal of Belisarius to agree to the terms proposed by the emperor; whence they falsely imagined that he designed to revolt, and make himself emperor of Italy. Belisarius had no such design, but thought proper to accept of the title, to accelerate the surrender of the city; and when Vitiges discovered the plot, finding himself in no condition to oppose it, he not only commended the resolution of his people, but wrote to Belisarius, advising him to take upon him the title of king, and assuring him of his assistance. On this Belisarius pressed the Goths to surrender; which, however, they refused, till he had taken an oath that he would treat them with humanity, and maintain them in the possession of all their rights and privileges. He was then admitted into the city, where he behaved with great moderation towards the Goths; but seized on the royal treasure, and secured the person of the king. The Roman army, when it entered, appeared so very inconsiderable, that the Gothic women, on beholding it, are said to have spit in

the faces of their husbands, and to have reviled them as cowards

But the captivity of Vitiges, and the taking of Ravenna, did not put an end to the war. Belisarius was soon after recalled to take the command of the army in the east. The Goths were greatly surprised that he should leave his new kingdom out of regard to the orders of the emperor; but after his departure chose Ildebald, a chief of great experienee both civil and military, for their king. He revived the drooping spirits of his countrymen, defeated the Romans, and reduced all the province of Venetia; but was in a short time murdered, and Eraric, a Rugian, succeeded to the throne. Scarcely, however, was he invested with the sovereignty, when his subjects began to think of deposing him, and offered Totila the throne, which he accepted, upon condition that they previously despatched Eraric. This was accordingly done; after which Totila was proclaimed king of Italy in the year 542. The new monarch proved a very formidable enemy to the Romans, who every where now lost ground. They made an attempt on the city of Verona; in which they miscarried through their own avarice, having disputed about the division of the plunder till the opportunity of taking the town was lost. They were next defeated in two bloody engagements, in consequence of which the Goths made themselves masters of all the strong places in Tuscany. Thence marching into Campania and Samnium, they reduced Benevento and besieged Naples. During this last siege several detachments were sent from the king's army, which took Cumæ, and recovered all Brutium, Lucania, Apulia, and Calabria, where they found considerable sums which had been gathered for the emperor's use. The Roman troops, in the mean time, disheartened by their losses, and deprived of those sums which should have paid their wages, refused to take the field. A considerable fleet was therefore sent by Justinian to relieve Naples; but Totila, having timely notice, manned, with incredible expedition, a great number of light vessels; which, falling unexpectedly on the emperor's fleet, took or sunk every ship, and made prisoners of almost all on board. A similar fate attended another fleet despatched from Sicily. It put to sea in the depth of winter; and, meeting with a violent storm, was driven ashore near the enemy's camp, who sunk the ships, and put the seamen and soldiers to the sword. Upon this second disaster, the Neapolitans, despairing of further relief, submitted to Totila; who granted them honorable terms, and treated them with humanity, particularly the garrison. He at first supplied them with ships to carry them to Constantinople; but having discovered their design to sail to Rome, to reinforce the garrison of that city (which they knew he was soon to besiege), he was so far from punishing them as they expected, that he furnished them with horses, waggons, and provisions, and ordered a body of Goths to escort them thither by land. Having thus become master of Naples, and most of the other Italian fortresses, Totila began to think of reducing Rome also. He first attempted to persuade the citizens to surrender; but, finding this ineffectual, he sent a detachment of his army to reduce Otranto, and marched with the rest of his forces against the towns in the neighbourhood of 'the eternal city.' Tiber, now Tivoli, about eighteen miles from Rome, was betrayed to him; and all the inhabitants, with their bishop, were put to the sword. Several other strong holds in the vicinity he took by storm; so that Rome was in a manner blocked up by land.

Justinian, greatly perplexed by this news, recalled Belisarius from Persia. To save Rome, however, was now impossible. As soon as Belisarius arrived in Italy, finding himself unable either to relieve the towns which were besieged, or to stop the progress of the Goths, he despatched letters to Justinian, informing him, that it was impossible for him to prosecute the war: upon which the emperor ordered new levies to be made; all the veterans being engaged in Persia In the mean time Totila pursued his good fortune; took the cities of Firmum, Asculum, Auximum, Spoletum, &c., and at length invested Rome on all sides. As he drew near the city two officers, whom Belisarius had sent into it, ventured to make a sally, thinking they should surprise the Goths; but they were themselves taken in an ambuscade, and most of their men cut in pieces. Belisarius made several unsuccessful attempts to relieve the city, and suffered so much from anxiety that he fell into a fever, and was for some time in danger of his life. The city was soon reduced to great straits; a dreadful famine ensued; and the unhappy citizens having consumed every thing that could be supposed to give them nourishment, even the grass that grew near the walls, were obliged, it is said, to feed on excrements. Many committed suicide in order to free themselves from the intolerable calamities they suffered. The rest addressed their governor Bessas, entreating him to supply them with food; or, if that was not in his power, either to give them leave to quit the city, or to terminate their miseries by putting them to death. Bessas replied, that to supply them with food was impossible; to let them go, unsafe; and to kill them impious. In the end, however, he suffered those who were so disposed to retire, upon paying him a sum of money; but most of them either died on the road, or were cut in pieces by the enemy. At last the besieged, unable to bear their accumulated miseries, began to mutiny, and four of the Isaurians, who guarded one of the gates, went privately to the camp of Totila, and offered to admit him into the city. The king received this proposal with great joy; and, sending forward four Goths of great strength and intrepidity, silently approached the gates in the night with his whole army. They were opened by the Isaurians, as they had promised; and upon the first alarm Bessas, with most of the soldiers and officers, fled. The inhabitants took sanctuary in the churches; and only sixty of them and twenty-six soldiers were killed after the city was taken. Totila, however, gave his soldiers full liberty to plunder the inhabitants, for several days together; and they left little in

the houses but naked walls. In the house of Bessas was found an immense treasure, which he had amassed during the siege, by selling to the people, at an exorbitant price, the corn which had been stored up for the garrison.

3. *Italy, from the plundering of Rome by Totila, to the overthrow of the Lombard kingdom by Charlemagne.*—Totila, thus become master of Italy, sent ambassadors to Justinian with respectful letters, desiring to live on the same terms with him that Theodoric had done with his predecessor Anastasius; promising in that case to respect him as his father, and to assist him when he pleased with all his forces. On the contrary, if the emperor rejected his offers, he threatened to level Rome with the ground, to put the whole senate to the sword, and to carry the war into Illyricum. The emperor returned no other answer than that he referred the whole to Belisarius, who had full power to negociate. Upon this Totila resolved to destroy the city; and had actually thrown down a third part of the wall, when he received a letter from Belisarius, dissuading him from his intention. Having considered this letter, Totila thought proper to alter his resolution with regard to the destruction of Rome; but sent its inhabitants into Lucania, without the exception of a single person. Belisarius hearing of this immediately returned to the capital, and undertook to re-people and repair it. He cleared the ditch which had been filled by Totila, but was for the present obliged to fill up the breaches in the walls with loose stones; and in this situation the city was again attacked by the Goths. Belisarius, however, had taken care to supply the inhabitants with provisions, so that they were now in no danger of suffering by famine; and the assaults of the enemy were vigorously repelled, so that Totila at last abandoned the enterprise. In the mean time the Persians gained great advantages over the Romans in the east, so that there was a necessity for recalling Belisarius. On this Totila renewed his efforts with greater vigor than ever; and the Franks, concluding that both Romans and Goths would be much weakened by such a destructive war, seized upon Venetia, which belonged to both, and made it a province of the French empire.

Totila did not oppose them; but, having obtained a reinforcement of 6000 Lombards, returned immediately to the neighbourhood of Rome, fully intent on making himself master of that metropolis. Having closely invested it by sea and land, he hoped again to reduce it by famine; but against this the governor had provided, by causing corn to be sown within the walls. The city, however, was again betrayed by the Isaurians, who opened one of the gates and admitted the enemy. Thus the empire of the Goths was a third time established in Italy; and Totila once more despatched ambassadors to Justinian, offering to assist him as a faithful ally, provided he would allow him the quiet possession of that country. But Justinian would not admit the ambassadors into his presence: upon which Totila resolved to pursue the war with the utmost vigor, and to make himself master of all the places which the Romans possessed in Italy, and in Sicily. This he fully accomplished; when Narses, who had formerly been joined in the command with Belisarius, was re-appointed general. But, while he was making preparations for an expedition, Totila, having equipped a fleet of 300 galleys, sent them to pillage the coasts of Greece. They made a descent on the island of Corfu; and, having laid it waste, sailed to Epirus, where they surprised and plundered the cities of Nicopolis and Anchialus, taking many ships on the coast, among which were some laden with provisions for the army of Narses. After these successes they laid siege to Ancona in Dalmatia. Being defeated, however, both by sea and land, Totila once more sent ambassadors to Constantinople, offering to yield Sicily and Dalmatia, to pay an annual tribute for Italy, and to assist the Romans as a faithful ally in all their wars; but Justinian, bent upon driving the Goths out of Italy, again refused to admit the ambassadors. Totila, finding therefore that no terms could be obtained, began to levy new forces, and to make great preparations by sea and land. He soon reduced the islands of Corsica and Sardinia; but this was the last of his successes. Narses arrived in Italy with a formidable army, and an immense treasure to pay the troops their arrears. He immediately took the road to Rome; while Totila assembled his forces, in order to decide the fate of Italy by a general engagement. The battle proved obstinate; but at last the Gothic cavalry being put to the rout, and retiring in great confusion among the infantry, the latter were thereby thrown into such disorder, that they could never afterwards rally. Narses, observing their confusion, encouraged his men to make a last effort; which the Goths not being able to withstand, betook themselves to flight, with the loss of 6000 men. Totila, finding the day lost, fled with only five horsemen; but was pursued and mortally wounded by a barbarian commander, who followed Narses. He continued his flight, however, for some time; but was at last obliged to halt to have his wound dressed, soon after which he expired.

This disaster did not yet entirely break the spirit of the Goths. They chose for their king one Teia, esteemed one of the most valiant men of their nation. The present progress of the Romans, however, was not to be arrested. Narses made himself master of a great number of towns, and of Rome itself, before the Goths could assemble their forces. The Roman general next proceeded to invest Cumæ; which Teia determined at all events to relieve, as the royal treasure was lodged in that city. This brought on an engagement, which, Procopius says, proved one of the most bloody that ever was fought. The Roman army consisted of vast multitudes of different nations; the Goths were few in comparison; but, animated by despair, and knowing that all that was at stake, they fought with the utmost fury. Their king placed himself in the first rank, to encourage his men by his example; and is said to have exhibited equal valor and talent. The Romans discovering him, and knowing that his death would probably put an end to the battle, if not to the war, directed their whole

force against his person. Teia maintained his ground with great intrepidity, received the missive weapons on his shield, and killing a great number of the enemy with his own hand. When his shield was so loaded with darts that he could not easily wield it, he called for another. Thus he shifted his shield three times; but as he attempted again to change it, his breast being necessarily exposed for a moment, a dart struck him with fatal force, and he fell down dead in the place where he had stood from the beginning of the battle. The Romans now cut off his head and exposed it to the Goths, not doubting but they would immediately retire. In this, however, they were disappointed. The Goths maintained the fight with great vigor, till night and the whole of the next day. On the third day, despairing of being able to overcome an enemy so much superior, they sent deputies to Narses, offering to lay down their arms, provided such of them as chose to remain in Italy were allowed to enjoy their possessions as subjects of the empire; and those who were willing to retire elsewhere were suffered to carry with them their effects. To these terms Narses assented; and thus the empire of the Goths in Italy was finally destroyed.

Narses had been assisted in this conquest by many barbarous nations, among whom were the Lombards, at that time settled in Pannonia. On the conclusion of the war they were dismissed with presents, and the nation for some time continued faithful allies to the Romans. In the mean time, Justinian dying, Narses, who governed Italy, was accused to the emperor Justin II., and the empress Sophia, of aspiring to the sovereignty of that country. Hereupon he was recalled, and Longinus sent to succeed him. Narses being a eunuch, the empress is reported to have said, that his employment at Constantinople should be to distribute in the apartments of her women the portion of wool which each was to spin. Enraged at this sarcasm, Narses replied, that he would himself begin such a web as she should never be able to finish; and immediately despatched messengers to Alboinus king of the Lombards, inviting them into Italy. In the month of April 568, therefore, that prince set out with his whole nation, men, women, and children, and all their moveable property. This multitude, arriving by the way of Istria, found the whole country abandoned, the inhabitants having fled to the neighbouring islands of the Adriatic. The gates of Aquileia were opened by the few inhabitants who had courage to stay: most of them, however, had fled with their valuable effects; and among the rest the patriarch Paulinus, who had carried with him all the sacred vessels of the churches. From Aquileia, Alboinus proceeded to Forum Julii, of which he likewise became master without opposition.

Here he spent the winter; during which time he erected Friuli into a dukedom, which continued till the year 1797 when it became a province of Maritime Austria. See FRIULI. In 569 he made himself master of Trivigi, Oderzo, Monte Selce, Vicenza, Verona, and Trent; in each of which he left a strong garrison of Lombards under the command of an officer, whom he distinguished by the title of duke. Padua and some other cities Alboinus did not attempt to reduce. In 570 he entered Liguria. The inhabitants were so terrified at his approach, that they abandoned their habitations, with such of their effects as they could carry off, and fled into the mountainous parts of the country. Brescia, Bergamo, Lodi, Como, and other cities, being thus left almost without inhabitants, submitted; after which he reduced Milan, and was proclaimed king of Italy. But, though the Lombards had thus conferred that title on Alboinus, he was by no means possessed of the whole country, nor indeed was it ever in the power of the Lombards. Having made himself master of Venetia, Liguria, Æmilia, Hetruria, and Umbria, Alboinus applied himself to legislation and the civilisation of his subjects. But, before he could make any progress in this work, he was taken off by the treachery of his wife; and Clephis, one of the nobles, chosen king. This monarch rebuilt some cities which had been ruined during the wars between the Goths and Romans, and extended his conquests to the gates of Rome; but he was murdered after a reign of eighteen months. His cruelty gave the Lombards such an aversion to regal power, that they now determined to divide the supreme authority among their dukes; and this scheme of government was adopted for ten years. During this period they proved successful in their wars with the Romans; but, perceiving that thus divided they could not long subsist, they resolved once more to submit to the authority of a single chief; and accordingly, in 585, Antharis was chosen king. The great object of ambition to the new race of Lombard monarchs was the conquest of all Italy; and this proved at last the ruin of their empire by Charles the Great, as related under the article FRANCE.

4. *Italy from the overthrow of the Lombard kingdom, to the extirpation of the Saracens.*—As the Lombards had not been possessed of the whole territory of Italy, so the whole of it never came into the possession of Charlemagne: neither, since the time of the Ostrogoths, has the whole of this country been under the dominion of any single state. Some of the southern provinces were still possessed by the emperors of Constantinople; and the liberal grants of Pepin and Charlemagne himself to the pope, had invested him with a considerable share of temporal power. The territories of the pope indeed were supposed to be held in vassalage from France; but this the popes themselves always denied. The undisputed territory of Charlemagne, in Italy, therefore, was restricted to Piedmont, the Milanese, the Mantuan, the territories of Genoa, Parma, Modena, Tuscany, Bologna, the dukedoms of Friuli, Spoleto, and Benevento: the last of which contained the greatest part of the present kingdom of Naples. The feudal government, which the Lombards had introduced into Italy, naturally produced revolts and commotions, as the different dukes inclined either to change their masters or to set up for themselves. Several revolts indeed happened during the life of Charlemagne; which, however, he always found means to crush; but, after his death, the

sovereignty of Italy became an object of contention between the kings of France and the emperors of Germany. That great monarch had divided his extensive dominions among his children; but they all died during his life-time, except Louis, whom he associated in the empire, and who succeeded to all his dominions after his death. From this time we may date the troubles with which Italy was so long overwhelmed; and of which, as they proceeded from the ambition of those called kings of Italy and their nobles, of the kings of France, and of the emperors of Germany, it is difficult to have any clear idea. The following short sketch, however, may perhaps give some satisfaction on this perplexed subject.

When Louis the son of Charlemagne was declared emperor of the West, Italy was held by Bernard the son of Pepin, brother to Lonis; but, though Bernard bore the title of king, he was only accounted a vassal of the emperor. His ambition, however, soon prompted him to rebel against his uncle; but, being abandoned by his troops, he was taken prisoner, had his eyes put out, and died three days after. As the disturbances still continued, and the nobles of Lombardy were yet very refractory, Lothaire, eldest son to the emperor, was in 823 sent into Italy; of which country he was first crowned king at Rome, and afterwards emperor of the West, during his father's lifetime. His unbounded ambition now prompted him to engage in rebellion against his father; whom he more than once took prisoner, though in the end he was obliged to submit, and ask pardon for his offences, which was obtained only on condition of his not passing the Alps without leave obtained from that prince. In the mean time the Saracens, taking advantage of these intestine wars, landed on the coasts of Italy, and committed such ravages, that even the bishops were obliged to arm for the defence of the country. Lothaire, however, after returning from his unnatural war with his father, was so far from attempting to put an end to these ravages, or to restore tranquillity, that he seized on some places belonging to the see of Rome, under pretence that they were part of his kingdom of Lombardy. After having embroiled himself, and almost lost all his dominions, in a war with his brothers after the death of Louis, and declared his son Louis king of Italy, this ambitious prince died, leaving to his son the title of emperor as well as that of king of Italy, with which he had before invested him.

The new emperor applied himself to the restoration of tranquillity in his dominions, and driving out the Saracens from those places which they had seized in Italy. This he fully accomplished, and obliged the infidels to retire into Africa; but in 875 he died without naming any successor. After his death some of the Italian nobles, headed by the duke of Tuscany, represented to the pope, that, as Louis had left no successor, the regal dignity, which had so long been usurped by foreigners, ought now to return to the Italians. The pope, however, finding that Charles the Bald, of France, was determined to obtain the imperial crown, resolved to gratify him, though at as high a price as possible. He accordingly crowned him emperor and king of Lombardy, on condition of his owning the independency of Rome, and that he himself only held the empire by gift of the pope. This produced a conspiracy among the discontented nobles; and at the same time the Saracens, renewing their incursions, threatened the ecclesiastical territories with the utmost danger. The pope solicited the emperor's assistance, but the latter died before any thing effectual could be done: after which, being distressed by the Saracens on one hand, and the Lombard nobles on the other, the unhappy pontiff was forced to fly into France. Italy now fell into the utmost confusion and anarchy; during which time many of the nobles and states of Lombardy assumed an independence, which they retained till the Revolution in 1796. In 879 the pope was reconducted to Italy with an army by Boson, son-in-law to Louis II., of France; but, though he inclined very much to have raised this prince to the dignity of king of Italy, he found his interest insufficient, and matters remained in their former situation. The nobles, who had driven out the pope, were now indeed reconciled to him, but the state of the country was worse than ever; the great men renouncing the authority of any superior, and every one claiming to be sovereign in his own territories. To add to the calamities which ensued, through the ambition of these despots, the Saracens committed every where the most terrible ravages; till at last the Italian nobles despising the kings of the Carlovingian race, who had weakened themselves by their mutual dissentions, began to think of throwing off even all nominal submission to a foreign yoke, and retaining the imperial dignity among themselves.

Accordingly in 885 they went to pope Adrian; and, requesting him to join them in asserting the independency of Italy, obtained the two following decrees, viz. That the popes, after their election, might be consecrated without waiting for the presence of the king or his ambassadors; and 2. That, if Charles the Gross died without sons, the kingdom of Italy, with the title of emperor, should be conferred on some of the Italian nobles. These decrees were productive of the worst consequences. The emperor complained of being deprived of his right, and the dissentions among the Italian nobles became more fatal than ever. The two most powerful of these, Berengarius duke of Friuli, and Vido, or Guido, duke of Spoleto, entered into an agreement, that on the death of the emperor the former should seize on the kingdom of Italy, and the latter on that of France. Berengarius succeeded without opposition; but Vido was disappointed, the French having chosen Eudes or Otho for their king. Upon this he returned to Italy, and turned his arms against Berengarius. Vido proved victorious, and drove his rival into Germany; where he sought the assistance of Arnolphus, who had succeeded on the death of Charles. Having thus obtained the kingdom of Italy, Vido employed his time in reforming the abuses of the state, and confirming the grants formerly made to the pope, out of gratitude for his having sanctified his usurpation. This tranquilli'y, however, was of short

duration Arnolphus sent an army into Italy; the Saracens from Spain ravaged the northern parts of the country, and, getting possession of a castle near the Alps, held it for many years; at the same time Benevento was besieged and taken by the forces of the eastern emperor, so that Vido found his empire very considerably circumscribed. The new king, distressed by so many enemies, associated his son Lambert in the government, and bribed the Germans to return to their own country. In 893, however, they again invaded Italy; but were obliged to leave the country, after having put Berengarius in possession of Pavia. In the mean time Vido died, and Lambert drove out Berengarius; but having joined a faction, headed by one Sergius, against pope Formosus, the latter offered the kingdom of Italy to Arnolphus; who, entering the country with an army, besieged and took Rome, massacring the faction of Sergius with unrelenting cruelty.

Arnolphus, thus master of Italy, and crowned emperor by the pope, began to form schemes of strengthening himself in his new acquisitions by putting out the eyes of Berengarius: but the latter, having timely notice of his treachery, fled to Verona; and the Italians were so provoked at this and the other cruelties of Arnolphus, that they drove him out of the country. His departure occasioned the greatest confusion at Rome. Formosus died soon after; and the successors to the papal dignity, having now no army to fear, pursued the projects of their ambition unrestrained. The body of Formosus was dug up and thrown into the Tiber by one pope; after which the pontiff himself was strangled, and Formosus's body buried in the Vatican. At last the coronation of Arnolphus was declared void, the Sergian faction entirely overthrown, and the decrees of Adrian annulled; it being now determined that the popes should not be consecrated but in presence of the emperor or his ambassadors. During these tumults Lambert enjoyed the kingdom of Italy in quiet; but the nobles, hating him on account of his tyrannical disposition, offered the crown to Louis king of Arles. This new competitor entered Italy with an army in 899; but was forced by Berengarius to renounce his claim upon oath, and to swear that he would never again enter Italy. This oath, however, was soon forgotten. Louis readily accepted of another invitation, and was crowned king of Italy at Pavia in 901.

In 902 he forced Berengarius to fly into Bavaria; but, having unadvisedly disbanded his army, Berengarius surprised him at Verona, and put out his eyes. Thus at last Berengarius became king of Italy without a rival; and held his kingdom for twenty years. He was not, however, without troubles. The Hungarians invaded Italy with a formidable army, and advanced within a small distance of Pavia, when Berengarius armed the whole force of his dominions; and the invaders retired without venturing an engagement. Many of them were lost in passing a river: upon which they sent deputies to Berengarius; offering to restore their booty, and never to come again into Italy, provided they were allowed a safe retreat. These conditions were imprudently refused; upon which the Hungarians attacked the army of Berengarius in despair, and defeated it with great slaughter. They now over-ran the whole country, plundering the towns of Treviso, Vicenza, and Padua, without resistance, and occasioned the greatest devastations for two years; nor could their departure be procured without paying them a large sum of money. Scarcely were these invaders departed, when the Saracens, who had settled at the foot of the Alps, invaded Apulia and Calabria, and made an irruption as far as Acqui in the neighbourhood of Pavia; while the inhabitants, instead of opposing them, fled to some forts which had been erected in the time of the first eruption of the Hungarians. In 912, however, John, presbyter of Ravenna, having obtained the papal dignity by means of Theodora wife of the count of Tuscany, applied himself to regulate the affairs of the church, and to repress the insults of the Saracens. While he was considering of the most proper methods of effecting this, one of them, who had received an injury from his countrymen, fled to Rome and offered to deliver the Italians from their invasions, if the pope would but allow him a small body of men. His proposals being accepted, sixty young men were chosen, all well armed; who, being conducted by the Saracen into by-paths, attacked the infidels as they were returning from their inroads, and several times defeated large parties. These losses destroying the self-confidence of the Saracens, a general alliance was concluded amongst all their cities; and, having fortified a town on the Garigliano, they abandoned the rest, and retired thither. Thus they became much more formidable than before; which alarming the pope, he consulted with Arnolphus prince of Benevento and Capua, sending at the same time ambassadors to Constantine the Greek emperor, inviting him to an alliance against the infidels. The Saracens, unable to withstand such a powerful combination, were besieged in their city: where being reduced to great straits, they at last set fire to it, and sallied out into the woods; but, being pursued by the Italians, they were all cut off to a man, A. D. 915.

5. *Italy, from the extirpation of the Saracens to the pontificate of Gregory VII.*—In this expedition Berengarius seems to have given great assistance; and this year he was crowned emperor by the pope. This gave displeasure to many of the ambitious nobles; conspiracies were repeatedly formed against him; in 922 Rodolphus king of Burgundy was crowned also king of Italy; and in 924 Berengarius was treacherously assassinated at Verona; of which disturbances the Hungarians taking advantage, plundered the cities of Mantua, Brescia, and Bergamo. Marching afterwards to Pavia, they invested it closely on all sides; and about the middle of March 925 set fire to the houses next the walls, and during the confusion broke open the gates, and treated the inhabitants with the greatest barbarity. Having burnt the capital, they next proceeded to Placenza, where they plundered the suburbs; and then returned to Pannonia laden with booty. The affairs of Italy now fell into the utmost confusion. A faction was formed against Rodolphus in favor of Hugh, count of Arles. The

latter prevailed, and was crowned king at Pavia in 927. The Italians, however, soon repented of their choice. The Romans first invited him to be their governor, and then drove him out with disgrace; at the same time choosing a consul, tribunes, &c., as if they had designed to assert their ancient liberty. One faction, in the mean time, offered the crown to Rodolphus, and the other to Arnold duke of Bavaria, while a fresh body of Saracens took this opportunity to plunder the city of Genoa. Hugh, in the mean time, having collected an army, marched against Arnold, and defeated him. Rodolphus entered into an alliance with him, and gave his daughter Adelaide in marriage to Lotharius, Hugh's son. Being thus free from all danger from foreign enemies, he marched against the Romans; but with them he also came to an agreement, and even gave his daughter in marriage to Alberic, whom they had chosen consul. But the country was still infested by the Hungarians and Saracens, and at the same time depopulated by a plague. Endless conspiracies were formed against Hugh himself; and at last, in 947, he was deprived of the regal power by Berengarius II. grandson to Berengarius I.; soon after which he retired into Burgundy, and became a monk.

Though Berengarius was thus possessed of the supreme power, he did not assume the title of king till after the death of Lotharius, which happened in 950; but in the mean time Italy was invaded by Henry duke of Bavaria, and the Hungarians. The former took and plundered Aquileia, and ravaged the neighbouring country; after which he returned without molestation into Germany: the latter made a furious irruption; and Berengarius, being unable to oppose him, was at last obliged to purchase his departure. In raising the sum agreed upon, however, Berengarius is said to have been more oppressive than even the Hungarians. The churches were robbed; by which means the king raised an immense sum of money, ten bushels of which he is said to have given to the Hungarians, but kept a much greater part to himself. Berengarius, not yet satisfied, wished to be put in possession at Paris, which was held by Adelaide the widow of Lotharius. To obtain his purpose, he proposed a marriage between her and his son Adelbert. This being rejected, Berengarius besieged and took the city. The queen was confined in a neighbouring castle, from whence she made her escape by a contrivance of her confessor. With him and one female attendant she concealed herself for some days in a wood; but, being obliged to remove thence for want of food, she applied for protection to Adelard bishop of Reggio. This person recommended her to his uncle Otho, who had a strong castle in the neighbourhood of Canoza. Here she was besieged by Berengarius; upon which messengers were sent to Otho king of Germany, informing him, that, by expelling Berengarius, and marrying Adelaide, he might easily obtain the kingdom of Italy.

This proposal he readily accepted, and married Adelaide; but allowed Berengarius to retain the greatest part of his dominions, upon condition of his doing homage for them to the kings of Germany. He deprived him, however, of the dukedom of Friuli and marquisate of Verona, which he gave to Henry duke of Bavaria, Berengarius, thus freed from all apprehensions not only oppressed his subjects in a most tyrannical manner, but revolted against Otho himself; which at last procured his ruin: for in 961 Otho returned with an army into Italy, where he was crowned king by the archbishop of Milan. In 962 he was crowned emperor by the pope. On this last occasion he received the imperial crown from his holiness, and kissed his feet with great humility: after which they both went to the altar of St. Peter, and bound themselves by a solemn oath, the pope to be always faithful to the emperor, and to give no assistance to Berengarius or Adelbert his enemies; and Otho to consult the welfare of the church, and to restore to it all its patrimony granted by former emperors. Otho, besides this, bestowed very rich presents on the papal see. He ordained that the election of popes should be according to the canons; that the pope should not be consecrated till he had publicly promised, in presence of the imperial commissaries, to respect the rights of the emperors: that these commissaries should constantly reside at Rome, and make a report every year how justice was administered there; and, in case of any complaints, lay them before the pope; but, if he neglected, then the commissaries might proceed with the causes. Thus Otho, however much he might allow the pope's supremacy in spiritual matters, plainly assumed the sovereignty in temporals; and thus Italy was for upwards of 300 years accounted a part of the German empire.

The popes, however, by no means approved of this superiority of the emperor. The latter was hardly departed, when John XII. broke the oath which he had just sworn; and entered first into an alliance with Adelbert count of Tuscany to expel the Germans, and then solicited the Hungarians to invade Italy. This treachery was soon punished. Otho returned with part of his army, and assembled a council of bishops, and as the pope did not appear, at which Otho pretended great concern, the bishops said that consciousness of guilt made him afraid to show himself. The emperor then enquired particularly into his crimes; upon which the bishops accused him of filling the palace with lewd women, of ordaining a bishop in a stable, drinking the devil's health, &c. As the pope still refused to appear to justify himself, he was formally deposed; and Leo the chief secretary, though a layman, elected in his stead. The new pope, in compliment to the emperor, granted a bull, by which it was ordained that Otho and his successors should have a right of appointing the popes and investing archbishops and bishops; and that none should dare to consecrate a bishop without leave obtained of the emperor. Thus were the affairs of Italy still kept in the utmost confusion, even during the reign of Otho I., who appears to have been a wise and active prince. He was no sooner gone than the new pope was deposed, all his decrees annulled, and John replaced. The party of Leo was now treated with great cruelty: but John soon finished his career; for

about the middle of May, 964, the same year in which he had been restored, being surprised in bed with a Roman lady, he received a blow on the head from the devil, according to the authors of those times, of which he died eight days after. A cardinal deacon, named Benedict, was then elected by the Romans, but deposed by Otho, and banished to Hamburgh. The emperor was scarcely returned to Germany, when his fickle Italians revolted, and sent for Adelbert, who had fled to Corsica. But, being soon reduced, they continued quiet for about a year; after which they revolted again, and imprisoned the pope. Otho, however, provoked at their refractory disposition, soon returned, and punished the rebels with great severity: after which he made several laws for the better regulation of the cities of Rome and Venice, and caused his son Otho, then only thirteen years of age, to be crowned emperor. This ceremony being over, Otho despatched an ambassador to Nicephorus, emperor of Constantinople, demanding his step-daughter Theophania in marriage for the young emperor: upon this alliance being rejected, with circumstances of atrocious perfidy, Otho instantly invaded the countries of Apulia and Calabria, and entirely defeated the Greek army. In the mean time, Nicephorus being killed, and his throne usurped by John Zimisces, Otho entered into an alliance with the latter, and easily obtained Theophania for his son.

She was crowned with great solemnity on the 8th of April 969: at the same time, it is pretended by some authors, that the Greeks renounced their rights to Calabria and Apulia. After the celebration of this marriage, the emperor undertook an expedition against the Saracens, who still resided at the foot of the Alps; but, being informed of the death of several German nobles, he thought proper to return thither, where he died of an apoplexy in 973. At the time of Otho's death Italy was divided into the provinces of Apulia, Calabria, the dukedom of Benevento, Campania, Terra Romana, the dukedom of Spoleto, Tuscany, Romagna, Lombardy, and the marquisates of Ancona, Verona, Friuli, Treviso, and Genoa. Apulia and Calabria were still claimed by the Greeks; but all the rest were either immediately subject to, or held of, the kings of Italy. Otho conferred Benevento, including the ancient Samnium, on the duke of that name. Campania and Lucania he gave to the dukes of Capua, Naples, and Salerno. Rome with its territory, Ravenna with the exarchate, the dukedom of Spoleto, with Tuscany, and the marquisate of Ancona, he granted to the pope; and retained the rest of Italy under the form of a kingdom. Some of the cities were left free, but all tributary. He appointed several hereditary marquisates and counties, but reserved to himself the sovereign jurisdiction in their territories. The liberty of the cities consisted in a freedom to choose their own magistrates, to be judged by their own laws, and to dispose of their own revenues; on condition that they took the oath of allegiance to the king, and paid the customary tribute. The cities that were not free were governed by the commissaries or lieutenants of the emperor: but the free cities were governed by two or more consuls, afterwards called potentates, chosen annually, who took the oath of allegiance to the emperor before the bishop of the city or the emperor's commissary. The tribute exacted was called foderum, parata, and mansionaticum. By the foderum was meant a certain quantity of corn, which the cities were obliged to furnish to the king, when marching with an army, or making a progress through the country; though the value of this was frequently paid in money. By the parata was understood the expense laid out in keeping the public roads and bridges in repair; and the mansionaticum included those expenses which were required for lodging troops or accommodating them in their camp. Under pretence of this last article the inhabitants were sometimes stripped of all they possessed except their oxen and seed. Besides regulating what regarded the cities, Otho distributed honors and possessions to those who had served him faithfully. The honors consisted in the titles of duke, marquis, count, captain, valvasor, and valvasin; the possessions were, besides land, the duties arising from the harbours, ferries, roads, fish-ponds, mills, salt-pits, the uses of rivers, &c. &c. The dukes, marquises, and counts, were those who received dukedoms, marquisates, and counties, from the king in fiefs; the captains had the command of a certain number of men by a grant from the king, duke, marquis, or count; the valvasors were subordinate to the captains, and the valvasins to them.

No sooner was the death of Otho I. known in Italy, than, as if they had been now freed from all restraint, the nobles declared war against each other: some cities revolted, and chose to themselves consuls; while the dominions of others were seized by the nobles, who strengthened themselves by erecting citadels. Rome especially was harassed by tumults, occasioned chiefly by the seditious practices of one Cincius, who pressed his fellow-citizens to restore the ancient republic. As the pope continued firm in the interests of the emperor, Cincius caused him to be strangled by Franco, a cardinal deacon; who was soon rewarded with the pontificate, and took upon him the name of Boniface VII. Another pope was chosen by the faction of the count of Tuscany; who, being approved by the emperor, drove Cincius and Boniface out of the city. Disturbances of a similar kind took place in other cities; but Milan continued quiet and loyal. In the mean time Boniface fled for refuge to Constantinople, where he excited the emperor to make war against Otho II. In 979 an army was accordingly sent into Italy which conquered Apulia and Calabria; but the next year Otho entered Italy with a formidable army; and, having taken a severe revenge on the authors of the disturbances, drove the Greeks entirely out of the provinces they had seized. Having then caused his son Otho III., at that time a boy of ten years of age, to be proclaimed emperor, he died at Rome in the year 983. Among the regulations made by this emperor one is very remarkable, and gives a strange idea of the inhabitants of Italy at that time. He made a law, that no Italian should be believed

upon his oath; and that, in any dispute which could not be decided otherwise than by witnesses, the parties should have recourse to a duel. Otho III. succeeded to the empire at twelve years of age; and during his minority, the disturbances in Italy revived. Cincius, called also Crescentius, renewed his scheme of restoring the republic. Pope John XV., opposing this, was driven out of the city; but was soon after recalled, on its being known that he had applied to the emperor for assistance. A few years after Crescentius again revolted, and expelled Gregory V. the successor of John XV.; raising to the papal dignity a creature of his own, under the name of John XVI. Otho, enraged at this insult, returned to Rome with a powerful army in 998, besieged and took it by assault; after which he caused Crescentius to be beheaded, and the pope he had set up, after having his eyes pulled out and his nose cut off, to be thrown headlong from the castle of St. Angelo. Four years after he himself died of the small pox; or, according to some, was poisoned by the widow of Crescentius, whom he had debauched under a promise of marriage.

Otho was succeeded in the imperial throne by Henry duke of Bavaria, and grandson to Otho II., who had no sooner settled the affairs of Germany, than he found it necessary to march into Italy against Ardouin marquis of Ivrea, who had assumed the title of king of Italy. Him he defeated in an engagement, and was himself crowned king of Italy at Pavia in 1005; but a few years after a new contest arose about the papal chair, which again required the presence of the emperor. Before he arrived, however, one of the competitors, Benedict VIII., had overpowered his rival, and both Henry and his queen received the imperial crown from his hands. Before the emperor entered the church, the pope enquired of him, 'Will you observe your fidelity to me and my successors in every thing?' To which he answered in the affirmative; and, after his coronation, confirmed and added to the privileges bestowed on the Roman see by his predecessors. Having repelled the incursions of the Saracens, and reduced the greatest part of Apulia and Calabria, he died in 1024. The death of this emperor was, as usual, followed by a competition for the crown. Conrad, being chosen emperor of Germany, was declared king of Italy by the archbishop of Milan; while a party of the nobles offered the crown to Robert king of France, or his son Hugh. But this offer being declined, and another likewise made to William duke of Guienne, Conrad enjoyed the dignity conferred on him by the archbishop. He was crowned king of Italy at Monza in 1026; and the next year he received the imperial crown from pope John XX., in presence of Canute the Great, king of England, and Rodolph III. king of Burgundy. His reign was similar to that of his predecessors. The Italians revolted, the pope was expelled, malcontents were subdued, and the pope restored: after which the emperor returned to Germany, and died in 1039. Under Henry III., who succeeded Conrad, the disturbances were prodigiously augmented. Pope Sylvester II. was driven out by Benedict; who in his turn was expelled by John bishop of Sabinum, who assumed the title of Sylvester III. Three months after Benedict was restored, and excommunicated his rivals; but soon after resigned, or rather sold the pontificate for a sum of money. In a short time he reclaimed it; and thus there were at once three popes, each of whom was supported on a branch of the papal revenue, while all of them made themselves odious by their scandalous lives. At last a priest called Gratian put an end to this triumvirate. Partly by artifice, and partly by presents, he persuaded all the three to renounce their pretensions; and the people of Rome, out of gratitude for so signal a service to the church, chose him pope, under the name of Gregory VI. Henry III. took umbrage at this election, in which he had not been consulted, and, marching an army into Italy, deposed Gregory for simony: the vacant papal chair was filled by his own chancellor Heidiger, bishop of Bamberg, who assumed the name of Clement II., and afterwards consecrated Henry and the empress Agnes. The Romans now swore never to elect a pope without the approbation of the reigning emperor; and Henry proceeded to Capua, where he was visited by Drago, Rainulphus, and other Norman adventurers, who had made themselves masters of great part of Apulia and Calabria, at the expense of the Greeks and Saracens. Henry not only solemnly invested them with those territories which they had acquired by conquest, but prevailed on the pope to excommunicate the Beneventines, who had refused to open their gates to him, and bestowed that city and its dependencies, as fiefs of the empire, upon the Normans. The emperor was scarcely returned to Germany when he received intelligence of the death of Clement II. He was succeeded in the apostolic see by Damascus II.; who also dying, soon after his elevation, Henry nominated Bruno bishop of Toul to the vacant chair. This Bruno, who was the emperor's relation, immediately assumed the pontifical attire; but, being a modest and pious prelate, threw it off on his journey, by the persuasion of a monk of Cluny, named Hildebrand, afterwards the famous Gregory VII., and entered Rome as a private person. 'The emperor alone, said Hildebrand, has no right to create a pope.' He accompanied Bruno, and secretly retarded his election, that he might arrogate to himself the merit of obtaining it. The scheme succeeded: Bruno, who took the name of Leo IX., believing himself indebted to Hildebrand for the pontificate, favored him with his particular friendship and confidence; and hence originated the power of this enterprising monk, of obscure birth, but boundless ambition, who governed Rome so long, and whose zeal for the exaltation of the church occasioned so many disasters to Europe. Leo soon after his elevation waited on the emperor at Worms, to ask assistance against the Norman princes, who were become the terror of Italy. Henry furnished his holiness with an army; at the head of which he marched against the Normans, after having excommunicated them; accompanied by a great number of bishops and other ecclesiastics, who

were all either killed or taken prisoners, the Germans and Italians being totally routed. Leo himself was led captive to Benevento, of which the Normans were now masters, but which Henry had granted to the pope in exchange for the fief of Bamberg in Germany. Here he was treated with so much respect by the conquerors, that he revoked the sentence of excommunication, and joined his sanction to the imperial investiture for the lands which they held in Apulia and Calabria. Leo died soon after his release; and the emperor about the same time caused his infant son, afterwards the famous Henry IV., to be declared king of the Romans. Gebehard, a German bishop, was elected pope, under the name of Victor II., and confirmed by the address of Hildebrand, who waited on the emperor in person for that purpose, though he disdained to consult him beforehand. Perhaps Hildebrand would not have found his task so easy, had not Henry been involved in a war with the Hungarians. As soon as the emperor had finished this war he marched into Italy to inspect the conduct of his sister Beatrice, widow of Boniface marquis of Mantua, and made her prisoner. She had married Gozelo, duke of Lorrain, without his consent; and contracted Matilda, her daughter by the marquis, to Godfrey duke of Spoleto and Tuscany, Gozelo's son by a former marriage. This formidable alliance justly alarmed Henry; he therefore attempted to dissolve it, by carrying his sister into Germany; where he died soon after his return, in the thirty-ninth year of his age, and the sixteenth of his reign.

This emperor, in his last journey to Italy, concluded an alliance with Contarini, doge of Venice. That republic was already rich and powerful, though it had only been enfranchised in 998, from the tribute of a mantle of cloth of gold, which it formerly paid, as a mark of subjection to the emperors of Constantinople. Genoa was the rival of Venice in power and in commerce, and was already in possession of the island of Corsica, which it had taken from the Saracens. These two cities engrossed at this time almost all the trade of Europe. Henry IV. was only five years old at his father's death, and the popes made use of the respite given them by his minority to shake off their dependence upon the emperors. After various contests about the pontificate, Nicholas II., a creature of Hildebrand's, was elected; who passed the following celebrated decree, viz. that for the future the cardinals only should elect the pope; and that the election should afterwards be confirmed by the rest of the clergy and the people, 'saving the honor,' adds he, 'due to our dear son Henry now king; and who, if it please God, shall be one day emperor, according to the right which we have already conferred upon him.' After this he entered into a treaty with the Norman princes, who, though they had lately sworn to hold their possessions from the emperor, now stipulated to hold them from the pope; and hence arose the pope's claim of sovereignty over the kingdoms of Naples and Sicily. Henry having assumed the government into his own hands in 1072, being then twenty-two years of age, was summoned by Alexander II. to appear before the tribunal of the holy see, on account of his loose life, and to answer the charge of having exposed the investiture of the bishops to sale; at the same time that the pope excited his German subjects to rebel against him. The rebels, however, were defeated, and peace was restored to Germany: but soon after, Hildebrand himself being elected to the pontificate. under the name of Gregory VII., he openly assumed the superiority over every earthly monarch.

6. *Italy during the eleventh and twelfth centuries, and to the disputes of the Guelphs and Gibelines.*—Gregory began his pontificate with excommunicating every ecclesiastic who should receive a benefice from the hands of a layman, and every layman who should take upon him to confer such a benefice. The emperor, instead of resenting this insolence, submitted, and wrote a penitential letter to the pope; who, upon this, condescended to take him into favor, after having severely reprimanded him for his licentious life. The quarrel between the church and the emperor was, however, soon revived and brought to a crisis. Solomon, king of Hungary, being deposed by his brother Geysa, had fled to Henry for protection, and renewed the homage of Hungary to the empire. Gregory, who favored Geysa, exclaimed against this act of submission; and said, in a letter to Solomon, 'You ought to know that the kingdom of Hungary belongs to the Roman church; and learn that you will incur the indignation of the holy see, if you do not acknowledge that you hold your dominions of the pope and not of the emperor.' Henry, though highly provoked at this declaration, thought proper to treat it with neglect; upon which Gregory resumed the dispute about investitures. The predecessors of Henry had in common with almost all princes enjoyed the right of nominating bishops and abbots, and of giving them investiture by the cross and the ring. The popes had been accustomed, on their part, to send legates to the emperors, in order to entreat their assistance in filling up the sees, &c. and, to obtain their confirmation. Gregory, however, sent two legates to summon Henry to appear before him as a delinquent, because he continued to bestow investitures, notwithstanding the recent apostolic decree to the contrary; adding that, if he should fail to yield obedience to the church, he must expect to be excommunicated and dethroned. Incensed at this arrogant message, from one whom he considered as his vassal, Henry dismissed the legates with very little ceremony, and in 1106 convoked an assembly of all the princes and dignified ecclesiastics at Worms; where, after mature deliberation, they concluded that Gregory, having usurped the chair of St. Peter by indirect means, infected the church of God with many novelties and abuses, and deviated from his duty to his sovereign in several scandalous attempts, the emperor, by that supreme authority derived from his predecessors, ought to divest him of his dignity, and appoint another in his place. In consequence of this determination, Henry sent an ambassador to Rome, with a formal deprivation of Gregory; who, in his turn, convoked a council, at which were present 110 bishops, who unanimously

agreed that the pope had just cause to depose Henry, to dissolve the oath of allegiance which the princes and states had taken in his favor, and to prohibit them from holding any correspondence with him, on pain of excommunication; which was immediately fulminated against the emperor and his adherents. 'In the name of Almighty God, and by our authority,' said Gregory, 'I prohibit Henry, the son of our emperor Henry, from governing the Teutonic kingdom and Italy: I release all Christians from their oath of allegiance to him; and strictly forbid all persons from serving or attending him as king!' The circular letters written by this pontiff breathe the same spirit with his sentence of deposition. He there repeats several times, 'that bishops are superior to kings, and made to judge them!' expressions alike artful and presumptuous, and calculated for bringing in all the churchmen to his standard. Gregory knew well what consequences would follow the thunder of the church. The German bishops came immediately over to his party, with many of the nobles: the torch of civil war still lay smothering, and a bull properly directed was sufficient to set it in a blaze. The Saxons, Henry's old enemies, made use of the papal displeasure for rebelling against him. Even Guelph, to whom the emperor had given the duchy of Bavaria, supported the malcontents with that power which he owed to his sovereign's bounty: nay, those very princes and prelates who had assisted in deposing Gregory gave up their monarch to be tried by the pope; and his holiness was solicited to come to Augsburg for that purpose. Willing to prevent this odious proceeding, Henry took the unaccountable resolution of suddenly passing the Alps, accompanied only by a few domestics, to ask absolution of the pope, who was then in Canoza, on the Appennine Mountains, a fortress belonging to the countess or duchess Matilda. At the gates of this place the emperor presented himself as an humble penitent. He alone was admitted without the outer court; where, being stripped of his robes, and wrapped in sackcloth, he was obliged to remain three days in the month of January, bare-footed and fasting, before he was permitted to kiss the feet of his holiness; who was all that time shut up with the devout Matilda. Her attachment to Gregory, which some historians represent as licentious, and her hatred to the Germans, were so great, that she made over all her estates to the apostolic see: a donation which was the cause of numerous wars, which since that period have raged between the emperors and the popes. She possessed in her own right great part of Tuscany, Mantua, Parma, Reggio, Placentia, Ferrara, Modena, Verona, and almost the whole of what was called the Patrimony of St. Peter, from Viterbo to Orvieto; together with part of Umbria, Spoleto, and the Marche of Ancona. The emperor was at length permitted to throw himself at the pontiff's feet, who condescended to grant him absolution, after he had sworn obedience to him in all things, and promised to submit to his solemn decision at Augsburg: so that Henry obtained nothing but disgrace by his journey; while Gregory, elated by his triumph, and now looking upon himself (not altogether without reason) as the lord and master of all the crowned heads in Christendom, said in several of his letters that 'it was his duty to pull down the pride of kings.'

This extraordinary conduct of Henry gave much disgust to the princes of Italy. They never could forgive the insolence of the pope, nor the abject humility of the emperor. Happily, however, for the latter, their indignation at Gregory's arrogance overbalanced their detestation of his meanness. He took advantage of this: and, by a change of fortune hitherto unknown to the German emperors, he found a strong party in Italy when abandoned in Germany. All Lombardy took up arms against the pope, while he was raising all Germany against the emperor. Gregory made use of every art to get another emperor elected in Germany; and Henry, on his part, left nothing undone to persuade the Italians to elect another pope. The Germans chose Rodolph, duke of Suabia, who was solemnly crowned at Mentz; and Gregory, hesitating on this occasion, behaved truly like the supreme judge of kings. He had deposed Henry, but still it was in his power to pardon him: he therefore affected to be displeased that Rodolph was consecrated without his order; and declared that he would acknowledge, as emperor and king of Germany, him of the two competitors who should be most submissive to the holy see. Henry, however, trusting more to the valor of his troops than to the generosity of the pope, set out immediately for Germany, where he defeated his enemies in several engagements; and Gregory, seeing no hopes of submission, thundered out a second excommunication against him, confirming at the same time the election of Rodolph, to whom he sent a golden crown, on which the following verse, equally haughty and puerile, was engraved:—

Petra dedit Petro, Petrus diadema Rodolpho.

This donation was also accompanied with a most enthusiastic anathema against Henry. After depriving him of strength in combat, and condemning him never to be victorious, it concludes with the following remarkable apostrophe to St. Peter and St. Paul:—'Make all men sensible that, as you can bind and loose every thing in heaven, you can also upon earth take from or give to every one, according to his deserts, empires, kingdoms, principalities—let the kings and princes of the age then instantly feel your power, that they may not dare to despise the orders of your church; let your justice be so speedily executed upon Henry, that nobody may doubt but he falls by your means and not by chance.' To avoid the effects of this second excommunication, Henry assembled at Brixen, in the Tyrol, about twenty German bishops, who, acting also for the bishops of Lombardy, unanimously resolved, that the pope, instead of having power over the emperor, owed him obedience and allegiance; and that Gregory VII., having rendered himself unworthy of the papal chair by his conduct and rebellion, ought to be deposed from a dignity he so little deserved. They accordingly degraded Hildebrand; and elected in his room Guibert archbishop of Ravenna, a person of un-

doubted merit, who took the name of Clement III. Henry promised to put the new pope in possession of Rome, but was obliged in the mean time to employ all his forces against Rodolph, who had re-assembled a large body of troops in Saxony. The two armies met near Mersburg, and both fought with great fury; but the fortune of the day seemed inclined to Rodolph, when his hand was cut off by the famous Godfrey of Bouillon, then in the service of Henry, and afterwards renowned for his conquest of Jerusalem. Discouraged by the misfortune of their chief, the rebels gave way; and Rodolph, perceiving his end approaching, ordered the hand that was cut off to be brought him; and made a speech to his officers on the occasion which could not fail to have an influence on the emperor's affairs:—'Behold,' said he, 'the hand with which I took the oath of allegiance to Henry; and which, at the instigation of Rome, I have violated, in perfidiously aspiring at an honor that was not my due.'

Thus delivered from this formidable antagonist, Henry soon dispersed the rest of his enemies in Germany, and set out for Italy to settle Clement in the papal chair. But, the gates of Rome being shut against him, he was obliged to attack it in form. The siege continued upwards of two years; Henry, during that time, being obliged to quell some insurrections in Germany. The city was at length carried by assault, and with difficulty saved from being pillaged; but Gregory was not taken: he retired into the castle of St. Angelo, and thence defied and excommunicated the conqueror. The new pope was, however, consecrated with the usual ceremonies; and expressed his gratitude by crowning Henry, with the concurrence of the Roman senate and people. Meanwhile the siege of St. Angelo was going on; but, the emperor being called into Lombardy, Robert Guiscard released Gregory, who died soon after at Salerno. His last words, borrowed from Scripture, were worthy of a better cause: 'I have loved justice and hated iniquity; therefore I die in exile!' Henry, however, did not enjoy all the advantages that might have been expected from the death of Gregory. In 1101 Pascal II. excited his son to rebel against him. The young prince persisted in his rebellion: and at last, having by feigned submissions prevailed on the emperor to disband his army, he treacherously seized and confined him. Henry, however, found means to escape from his confinement, and attempted to engage all the sovereigns of Europe in his quarrel; but, before any thing effectual could be done, he died at Liege in 1106.

Mr. Leckie, in his History of the Balance of Power in Europe, has some excellent reflections on the extraordinary success of Gregory in his attempts to aggrandise the papal see. 'By degrees,' he observes, 'the popes extended themselves: like the jacobins of the French revolution, their policy was to excite sedition in all countries, and to establish their own influence every where. Gregory knew so well how to cover his ambition under the mask of religion, that he found means to engage every prince in Europe to acknowledge him as liege lord. William the Conqueror was the only one who flatly refused his protection; but the successors of that prince had neither the power nor the firmness to reject this shameful servitude. The causes which operated to favor the growth of this extraordinary power were the barbarism and ignorance of the times, with its concomitant superstition. The pontiffs of those miserable times were almost adored as gods on earth. The rebellious and ambitious barons, in order to raise themselves and to humble their respective sovereigns, gave in to these impostures: and this is the source whence the electors, dukes, landgraves, margraves, &c., of Germany, have procured the sovereign authority which they now enjoy. They encouraged the priests in the dispute about investures, in which the emperors were forced to yield; while the clergy fomented the refractory spirit of the nobility. This is the true origin of the weakness of Germany in our days, which has made it a hot-bed of dissention and cabal, and keeps the whole of that extensive country in disorder or war. When these little impotent princes lose a part of their territory they appeal to justice for the violence they have suffered: and an outcry is raised, because the little miserable duke of Saxony is obliged to cede a part of his territory to increase the stability of the whole European system.

'The emperor,' he continues, 'being obliged to give up the patronage of the church to the pontiffs, tarnished the lustre of the imperial crown: and the subsequent cession of the sovereignty of Rome to the popes, by the house of Hapsburg, has completed the elevation of this non-descript and monstrous authority. How far justice was concerned in restoring this charlatan government in our days is a question which posterity will decide. It never did any thing but mischief as long as it had the means, and now that it is a cypher in the affairs of Europe it can do no good: by its existence it only fosters bigotry and ignorance. If the sovereigns flatter themselves that, by supporting its authority at the expense of human improvement, they will secure their own, they will be mistaken; if it be allowed to regain its influence on the vulgar it will again attempt to turn that very influence on their heads; it will renew all the impudent pretensions of past times, and teach the unlettered people to look to it for authority and protection.'

The dispute about investitures was not terminated by the deposition and death of Henry IV. His son Henry V. pursued the very same conduct for which he had deposed his father. Pascal opposed him with violence; upon which Henry gave him an invitation into Germany, to end the dispute in an amicable manner. Pascal did not accept of this invitation; but put himself under the protection of Philip I. of France, who undertook to mediate between the contending parties. This, however, proved ineffectual, and Henry was prevented by wars in Hungary and Poland from paying any further attention to the affair of investitures. At last, having settled the jarring interests of Germany, he resolved to go to Rome, to adjust the dispute personally with the pope. To give his arguments the greater weight, however he marched at the head of an army of

80,000 men. Pascal received him with great appearance of friendship, but would not renounce the claim of investitures; and Henry ordered the pope to be seized. The consul put the citizens in arms to defend the pope, and a battle was fought within the walls of Rome. The slaughter was so great that the waters of the Tiber were tinged with blood. The Romans were defeated, and Pascal was taken prisoner. The latter now renounced his right of investiture; solemnly swore never to resume it, and broke his oath as soon as Henry was gone, by fulminating the sentence of excommunication against him. In 1114 died the countess Matilda, who had bequeathed all her dominions to the pope; but, Henry thinking himself the only lawful heir, alleged, that it was not in Matilda's power to alienate her estates, which depended immediately on the empire. He therefore set out for Lombardy, and sent ambassadors to the pope, beseeching him to revoke the sentence of excommunication. Pascal, however, would not even favor the ambassadors with an audience; but, dreading the approach of Henry, he took refuge among the Norman princes in Apulia. The emperor arrived at Rome in 1117; but being soon after obliged to leave it, to settle some affairs in Tuscany, the pope returned to Rome, but died in a few days. On the third day after his decease, cardinal Cajetan was elected his successor and took the name of Gelasius II., but was instantly deposed by Henry; who set up the archbishop of Prague, as Gregory VIII. Gelasius, though supported by the Norman princes, was obliged to take refuge in France, where he died: and the archbishop of Vienna was elected by the cardinals then present under the name of Calixtus II.

This new pope attempted an accommodation with Henry; but, not succeeding, he excommunicated the emperor, the anti-pope, and his adherents. He next set out for Rome, where he was honorably received; and Gregory VIII. was forced to retire to Sutri, a strong town garrisoned by the emperor's troops. Here he was besieged by Calixtus and the Norman princes. The city was soon taken, and Gregory thrown into prison by his competitor; but at last, the states of the empire being wearied out with such a long quarrel, unanimously supplicated Henry for peace. He referred matters entirely to their decision; and, a diet being assembled at Wurtzburgh, it was decreed that an embassy should be immediately sent to the pope, desiring that he would convoke a general council at Rome, by which all disputes might be determined. This was accordingly done, and the affair of investitures at length regulated in the following manner, viz. That the emperor should leave the communities and chapters at liberty to fill up their own vacancies, without bestowing investitures with the cross and ring; that he should restore all that he had unjustly taken from the church; that all elections should be made in a canonical manner, in presence of the emperor or his commissaries; and whatever disputes might happen, should be referred to the decision of the emperor, assisted by the metropolitan and his suffragans; that the person elected should receive from the emperor the investiture of the fiefs and secular rights, not with the cross, but with the sceptre; and should pay allegiance to him for these rights only. After the death of Henry V. the usual disorders took place in Italy: during which Roger, duke of Apulia, conquered Sicily, and assumed the right of creating popes, of whom there were two at that time, viz. Innocent II. and Anacletus. Roger drove out the former, and Lothario emperor of Germany the latter, forcing Roger himself at the same time to retire into Sicily. The emperor then conducted Innocent back to Rome in triumph; and having subdued all Apulia, Calabria, and the rest of Roger's Italian dominions, erected them into a principality, and bestowed it, with the title of duke, upon Renaud a German prince, and one of his own relations. In the reign of Conrad III., who succeeded Lothario, the celebrated factions called the Guelphs and Gibelines arose, which for many years deluged the cities of Italy with blood. See Conrad III., Germany, and Guelphs. They took their origin during a civil war in Germany, when the emperor's enemies were styled Guelphs, and his friends Gibelines; and these names were quickly received into Italy and other parts of the emperor's dominions.

7. *From the time of Conrad III. to the expedition of Henry VII.*—Of this civil war many of the cities of Italy took the advantage to assert their independence; neither was it in the power of Conrad, who during his whole reign was employed in unsuccessful crusades, to reduce them; but in 1158 Frederick Barbarossa, successor to Conrad, entered Italy at the head of a very numerous and well-disciplined army. It was divided into several columns, for the conveniency of entering the country by as many different routes. Having passed the Alps, he reduced the town of Brescia; and, continuing to advance, besieged Milan, which surrendered at discretion. He was crowned king of Lombardy at Monza; and, having made himself master of all the other cities of that country, he ordered a minute enquiry to be set on foot concerning the rights of the empire, exacting homage of all those who held of it, without excepting even the bishops. Grievances were redressed; magistracies reformed; the rights of regality discussed and ascertained; new laws enacted for the maintenance of public tranquillity and the encouragement of learning, which now began to revive in the school of Bologna: above all, subvassals were not only prohibited from alienating their lands, but also compelled, in their oath to their lords paramount, to except the emperor by name, when they swore to serve and assist them against all their enemies. The pope took umbrage at this behaviour towards the ecclesiastics; but Frederick justified what he had done, telling his deputies that Jesus Christ himself, though the lord of all the sovereigns upon earth, had deigned to pay for himself and St. Peter the tribute which was due to Cæsar. But, Frederick having sent commissaries to superintend the election of new magistrates at Milan, the inhabitants were so much provoked at this infringement of their old privileges, that they insulted the imperialists, revolted, and refused to appear before the emperor's tribunal. This he highly resented, and resolved to chastise them: for which pur

pose he sent for a reinforcement to Germany, which soon after arrived with the empress; while he himself ravaged Liguria, declared the Milanese rebels to the empire, and plundered and burnt the city of Crema, which was in alliance with Milan. In the mean time, Adrian IV. dying, two opposite factions elected two new popes, known by the names of Victor II. and Alexander III. The emperor's allies necessarily acknowledged the pope chosen by him; and those princes who were jealous of the emperor acknowledged the other. The bulls of Victor II., Frederick's pope, were received in Germany, Bohemia, and one half of Italy, while the rest submitted to Alexander III. The emperor took a severe revenge on his enemies; Milan was razed from its foundation, and salt strewed on its ruins; Brescia and Placentia were dismantled; and the other cities which had taken part with them were deprived of their privileges.

Alexander III., however, who had excited the revolt, returned to Rome after his rival's death; and the civil war was renewed. The emperor caused another pope, and after his death a third, to be elected. Alexander then fled to France, the common asylum of the popes when oppressed by the emperors; but the flames of civil discord which he had raised continued daily to spread. In 1168 the cities of Italy, supported by the Greek emperor and the king of Sicily, entered into an association for the defence of their liberties; and the pope's party prevailed. In 1176 the imperial army, worn out by fatigues and diseases, was defeated by the confederates, and Frederick himself narrowly escaped. About the same time he was defeated at sea by the Venetians; and his eldest son Henry, who commanded his fleet, fell into the hands of the enemy. The pope, in honor of this victory, sailed out into the open sea, accompanied by the whole senate; and, after having pronounced a thousand benedictions on that element, threw into it a ring as a mark of his gratitude and affection. Hence the origin of that ceremony which was annually performed by the doge of Venice, under the notion of espousing the Adriatic. These misfortunes disposed the emperor to a reconciliation with the pope; but, considering it below his dignity to make an advance, he rallied his troops, and exerted himself with so much vigor in repairing his losses, that the confederates were defeated: after which he made proposals of peace, which were joyfully accepted, and Venice was appointed for the place of reconciliation. Here the emperor, the pope, and many princes and cardinals, attended; and the emperor put an end to the dispute, by acknowledging the pope, kissing his feet, and holding his stirrup while he mounted his mule. This reconciliation was attended with the submission of all the towns of Italy which had entered into an association for their mutual defence. They obtained a general pardon, and were left at liberty to use their own laws and forms of government, but were obliged to take the oath of allegiance to the emperor as their superior lord. Calixtus, the anti-pope, finding himself abandoned by the emperor, made also his submission to Alexander, who received him with great humanity; and to prevent for the future similar disturbances from attending the elections of the popes, he called a general council, in which it was decreed, that no pope should be deemed duly elected without having two-thirds of the votes in his favor. The affairs of Italy being thus settled, Barbarossa returned to Germany, and, having quieted some disturbances which had arisen during his absence in Italy, at last undertook an expedition into the Holy Land; where in the year 1190, he was drowned as he was swimming in the Cydnus.

He was succeeded by his son Henry VI. who at the same time became heir to the dominions of Sicily in right of his wife, daughter of William king of that country. After settling the affairs of Germany, the new emperor marched with an army into Italy, to be crowned by the pope, and to recover the succession of Sicily, which was usurped by Tancred, his wife's brother. For this purpose, he endeavoured to conciliate the affections of the Lombards, by enlarging the privileges of Genoa, Pisa, and other cities, in his way to Rome; where the ceremony of the coronation was performed by Celestin III. on the day after Easter in 1191. The pope, then in the eighty-sixth year of his age, had no sooner placed the crown upon Henry's head than he struck it off again, it is said, with his foot, as a testimony of the power residing in the sovereign pontiff to make and unmake emperors at his pleasure. The coronation being over, Henry prepared for the conquest of Naples and Sicily; but in this he was opposed by the pope; for though Celestin considered Tancred as a usurper, and desired to see him deprived of the crown of Sicily, which he claimed as a fief of the holy see, yet he was much more averse to the emperor's being put in possession of it, as that would render him too powerful in Italy. Henry, however, without regarding the threats or remonstrances of his holiness, took almost all the towns of Campania, Calabria, and Apulia; invested the city of Naples; and sent for the Genoese fleet, which he had before engaged, to come and form the blockade by sea; but, before its arrival, he was obliged to raise the siege, in consequence of a dreadful mortality among his troops: and all his future attempts upon Sicily were, during the life of Tancred, ineffectual. The whole reign of Henry from this time seems to have been a continued train of the most abominable perfidies and cruelties. Having treacherously seized and imprisoned Richard I. of ENGLAND (see that article), he had no sooner received the ransom paid for his royal captive, than he made new preparations for the conquest of Sicily. As Tancred died about this time, the emperor, with the assistance of the Genoese, accomplished his purpose. The queen dowager surrendered Salerno, and her right to the crown, on condition that her son William should possess the principality of Tarentum; but Henry no sooner found himself master of the place, than he ordered the infant king to be castrated, to be confined in a dungeon, and to have his eyes put out. The royal treasure was transported to Germany, and the queen and her daughter confined in a convent.

In the mean time the empress, though near the age of fifty, was delivered of a son, named Frederick; and Henry soon after assembled a

diet of the princes of Germany, to whom he proposed rendering the imperial crown hereditary, to prevent those disturbances which usually attended the election of emperors. A decree passed for this purpose; and Frederick, yet in his cradle, was declared king of the Romans. Soon after, the emperor, being solicited to undertake a crusade, obeyed the injunctions of the pope, but in such a manner as to make it turn out to his own advantage. He convoked a general diet at Worms; where solemnly declaring his resolution of employing his whole power, and even of hazarding his life for the accomplishment of so holy an enterprise, he expatiated upon the subject with so much eloquence, that almost the whole assembly took the cross. Nay, such multitudes from all the provinces of the empire enlisted, that Henry divided them into three large armies; one of which, under the bishop of Mentz, took the route of Hungary, where it was joined by Margaret, queen of that country, who entered herself in this pious expedition, and actually ended her days in Palestine: the second was assembled in Lower Saxony, and embarked in a fleet furnished by the inhabitants of Lubec, Hamburg, Holstein, and Friezland; and the emperor conducted the third into Italy, to take vengeance on the Normans in Naples and Sicily, who had risen against his government. The rebels were humbled; and their chiefs were condemned to perish by the most excruciating tortures. One Jornandi, of the house of the Norman princes, was tied naked on a chair of red hot iron, and crowned with a coronet of the same burning metal, which was nailed to his head. The empress Constantia, shocked at such cruelty, renounced her faith to her husband, and encouraged her countrymen to recover their liberties. Resolution sprung from despair. The inhabitants took arms; the empress headed them; and Henry, having dismissed his troops, no longer necessary to his bloody purposes, and sent them to pursue their expedition to the Holy Land, was obliged to submit to his wife, and to the conditions which she imposed on him in favor of the Sicilians. He died at Messina in 1197; and, as was supposed, of poison administered by the empress.

Henry's son, Frederick II., having been declared king of the Romans, became emperor on the death of his father; but as he was yet a minor the administration was committed to his uncle Philip, duke of Suabia, both by the will of Henry and by an assembly of the German princes. Other princes, however, incensed to see an elective empire become hereditary, held a new diet at Cologne, and chose Otho, duke of Brunswick, son of Henry the Lion. Frederick's title was confirmed in a third assembly, at Arnsburg; and his uncle Philip was elected king of the Romans, to give greater weight to his administration. These elections divided the empire into two powerful factions, and involved all Germany in ruin and desolation. Innocent III., who had succeeded Celestin in the papal chair, favored Otho, and excommunicated Philip and all his adherents. This able and ambitious pontiff was a sworn enemy of the house of Suabia; not from any personal animosity, but out of a principle of policy. That house had long been terrible to the popes, by its continual possession of the imperial crown; and the accession of the kingdom of Naples and Sicily made it still more to be dreaded: Innocent III., therefore, gladly seized the favorable opportunity for divesting it of the empire, by supporting the election of Otho, and sowing divisions among the Suabian party. Otho was also patronised by his uncle the king of England; which naturally inclined the king of France to the side of his rival. Faction clashed with faction; friendship with interest; caprice, ambition, or resentment gave the sway; and nothing was beheld on all hands but the horrors and the miseries of civil wars. Meanwhile the empress Constantia remained in Sicily, where all was peace, as regent and guardian for her infant son, Frederick II., who had been crowned king of that island, with the consent of pope Celestin III. But she also had her troubles. A new investiture from the holy see being necessary, on the death of Celestin III. Innocent III., his successor, took advantage of the critical situation of affairs for aggrandizing the papacy, at the expense of the kings of Sicily. They possessed the privilege of filling up vacant benefices, and of judging all ecclesiastical causes in the last appeal; they were really popes in their own island, though vassals of his holiness. Innocent pretended that these powers had been surreptitiously obtained; and demanded that Constantia should renounce them in the name of her son, and do homage for Sicily. But before any thing was settled the empress died, leaving the regency to the pope; so that he was enabled to prescribe his own conditions to young Frederick. The troubles of Germany still continued; and the pope redoubled his efforts to detach the princes and prelates from the cause of Philip, notwithstanding the remonstrances of the king of France, to whom he proudly replied, 'Either Philip must lose the empire, or I the papacy.' But all these dissensions and troubles in Europe did not prevent the formation of another crusade, for the recovery of the Holy Land.

Those who took the cross were principally French and Germans: Baldwin, count of Flanders, was their commander; and the Venetians, as greedy of wealth and power as the ancient Carthaginians, furnished them with ships, for which they took care to be amply paid both in money and territory. The Christian city of Zara, in Dalmatia, had withdrawn itself from the government of the republic: the army of the cross undertook to reduce it to obedience; and it was besieged and taken, notwithstanding the threats and excommunications of the pope. While the crusaders were spreading desolation through the east, Philip and Otho were desolating the west. At length Philip prevailed; and Otho, obliged to abandon Germany, took refuge in England. Philip confirmed his election by a second coronation, and proposed an accommodation with the pope; but, before this could be brought about, he fell a sacrifice to private revenge, being assassinated by the count Palatine of Bavaria, whose daughter he had promised to marry, but afterwards rejected. Otho returned

to Germany on the death of Philip; married that prince's daughter, and was crowned at Rome by pope Innocent III., after yielding to the holy see the long disputed inheritance of the countess Matilda, and confirming the rights and privileges of the Italian cities. But these concessions were only a sacrifice to present policy: Otho, therefore, no sooner found himself in a condition to act offensively, than he resumed his grant; and in 1210 not only recovered the possessions of the empire, but made hostile incursions into Apulia, ravaging the dominions of young Frederick, king of Sicily, who was under the protection of the holy see. For this reason he was excommunicated by Innocent; and Frederick, now seventeen years of age, was elected emperor by the diet. Otho, however, on his return to Germany, finding his party still considerable, and not doubting that he should be able to humble his rival by means of his superior force, entered into an alliance with his uncle John, king of England, against Philip Augustus of France, A. D. 1213. The unfortunate battle of Bouvines, where the confederates were defeated, completed the fate of Otho IV. He attempted to retreat into Germany, but was prevented by young Frederick; who had marched into the empire at the head of a powerful army, and was every where received with open arms. Thus abandoned by all the princes of Germany, and altogether without resource, Otho retired to Brunswick, where he lived four years as a private man, dedicating his time to religion.

Frederick II., being now universally acknowledged emperor, was crowned at Aix-la-Chapelle in 1215, with great magnificence; when, to preserve the favor of the pope, he added to the other solemnities of his coronation, a vow to go in person to the Holy Land. The bad success of this expedition is taken notice of under the article Crusade. The emperor had, on various pretences, refused to go into the east; and, in 1225, the pope, incensed at the loss of Damietta, wrote a severe letter to him, taxing him with having sacrificed the interests of Christianity, by delaying so long the performance of his vow, and threatening him with excommunication if he did not instantly depart with an army into Asia. Frederick, exasperated at these reproaches, renounced all correspondence with the court of Rome; renewed his ecclesiastical jurisdiction in Sicily; filled up vacant sees and benefices; and expelled some bishops, who were creatures of the pope. The pope at first threatened the emperor with the thunder of the church, for presuming to lift up his hand against the sanctuary; but, finding Frederick not to be intimidated, he became sensible of his own imprudence in wantonly incurring the resentment of so powerful a prince, and tried to soothe him by submissive apologies. They were accordingly reconciled, and conferred together at Veroli in 1226; where the emperor, as a proof of his sincere attachment to the holy see, published some severe edicts against heresy. A solemn assembly was afterwards held at Ferentino, where both the pope and the emperor were present, together with John de Brienne, titular king of Jerusalem, who was come to Europe to demand succours against the sultan of Egypt. John had an only daughter named Yolanda, whom he proposed as a wife to the emperor, with the kingdom of Jerusalem as her dower, on condition that Frederick should within two years perform the vow he had made to lead an army into the Holy Land. Frederick married her on these terms, and since that time the kings of Sicily have taken the title of king of Jerusalem: but he was in no hurry to conquer his wife's portion. The chief cities of Lombardy had entered into a secret league to renounce his authority. He convoked a diet at Cremona, where all the German and Italian noblemen were summoned to attend. A variety of subjects were there discussed; but nothing of consequence was settled. An accommodation, however, was soon after brought about by the mediation of the pope; who, as umpire of the dispute, decreed, that the emperor should lay aside his resentment against the confederate towns, and that they should furnish and maintain 400 knights for the relief of the Holy Land. Peace being thus concluded, Honorius reminded the emperor of his vow; Frederick promised compliance: but his holiness died before he could see the execution of it. He was succeeded by Gregory IX. brother of Innocent III.; who, pursuing the same line of policy, urged the departure of Frederick for the Holy Land, and, finding the emperor backward, declared him incapable of the imperial dignity, as having incurred the sentence of excommunication. Frederick, incensed at such insolence, ravaged the patimony of St. Peter, and was actually excommunicated. The animosity between the Guelphs and Gibelines revived; the pope was obliged to quit Rome; and Italy became a scene of war and desolation, or rather of a hundred civil wars; which, by inflaming the minds and exciting the resentment of the Italian princes, accustomed them to the horrid practices of poisoning and assassination. During these transactions, Frederick, to remove the cause of all these troubles, and gratify the prejudices of a superstitious age, by the advice of his friends resolved to perform his vow: and he accordingly embarked for the Holy Land, leaving the affairs of Italy to the management of Renaldo, duke of Spoleto.

The pope, however, prohibited the emperor's departure before he should be absolved from the censures of the church; but Frederick went in contempt of the church, and succeeded better than any person who had gone before him. He did not indeed desolate Asia, and gratify the barbarous zeal of the times by spilling the blood of infidels; but he concluded a treaty with Miliden, soldan of Egypt and master of Syria; by which the end of his expedition seemed fully answered. The soldan ceded to him Jerusalem and its territory as far as Joppa; Bethlehem, Nazareth, and all the country between Jerusalem and Ptolemais; Tyre, Sidon, and the neighbouring territories: in return for which, the emperor granted the Saracens a truce of ten years; and in 1230 returned to Italy. Frederick's reign, after his return from the east, was one continued quarrel with the popes. The cities of Lombardy had revolted during his absence, at the instiga

tion of Gregory IX.; and, before they could be reduced, he excited the emperor's son Henry, who had been elected king of the Romans, to rebel against his father. The rebellion was suppressed, the prince was confined, and the emperor obtained a complete victory over the associated towns. But his troubles were not yet ended. The pope excommunicated him anew, and sent a bull, filled with the most absurd and ridiculous language, into Germany, in order to sow division between Frederick and the princes of the empire. Frederick retorted in the same strain, in his apology to the princes of Germany, calling Gregory the Great Dragon, the Antichrist, &c. The emperor's apology was sustained in Germany; and, finding he had nothing to fear from that quarter, he resolved to take ample vengeance on the pope and his associates. For that purpose he marched to Rome, where he thought his party was strong enough to procure him admission; but his favorite scheme was defeated by the activity of Gregory, who ordered a crusade to be preached against the emperor, as an enemy of the Christian faith; a step which incensed Frederick so much, that he ordered all his prisoners, who wore the cross, to be exposed to the most cruel tortures. The two factions of the Guelphs and Gibelines continued to rage with greater violence than ever, involving cities, districts, and even private families, in divisions and butchery; no quarter being given on either side. Meanwhile Gregory IX. died, and was succeeded in the see of Rome by Celestin IV., and afterwards by Innocent IV., formerly cardinal Fiesque, who had always expressed the greatest regard for the emperor and his interest. Frederick was accordingly congratulated upon this occasion: but, having more penetration than those about him, he replied, 'I see little reason to rejoice; the cardinal was my friend, but the pope will be my enemy.'

Innocent soon proved the justice of this conjecture. He attempted to negociate a peace for Italy; but not being able to obtain from Frederick his exorbitant demands, and in fear for the safety of his own person, he fled into France, assembled a general council at Lyons, and in 1245 deposed the emperor. Conrad, the emperor's second son, had already been declared king of the Romans, on the death of his brother Henry, which soon followed his confinement: but, the empire being now declared vacant by the pope, the German bishops (for none of the princes were present), at the instigation of his holiness, proceeded to the election of a new emperor; and they chose Henry, landgrave of Thuringia, who was styled, in derision, the king of priests. Innocent now renewed the crusade against Frederick. It was proclaimed by the preaching friars, since called Dominicans, and the minor friars, known by the name of Cordeliers or Franciscans. The pope, however, did not confine himself to these measures only, but engaged in conspiracies against the life of an emperor who had dared to resist the decree of a council, and oppose the whole body of the monks and zealots. Frederick's life was several times in danger from plots, poisonings, and assassination; which induced him, it is said, to make choice of Mahommedan guards, who, he was certain, would not be under the influence of the prevailing superstition. About this time the landgrave of Thuringia dying, the same prelates who had taken the liberty of creating one emperor made another; namely, William, count of Holland, a young nobleman of twenty years of age, who bore the same contemptuous title with his predecessor. Fortune, which had hitherto favored Frederick, seemed now to desert him. He was defeated before Parma, which he had long besieged; and, to complete his misfortune, he soon after learned that his natural son Entius, whom he had made king of Sardinia, was defeated and taken prisoner by the Bolognese In this extremity Frederick retired to his kingdom of Naples, to recruit his army; and there died of a fever in the year 1250.

The affairs of Germany now fell into the utmost confusion, and Italy continued long in the same distracted state in which he had left it. The clergy took arms against the laity; the weak were oppressed by the strong; and all laws, divine and human, were disregarded. After the death of Frederick's son Conrad, who had assumed the imperial dignity as successor to his father, and the death of his competitor William of Holland, a variety of candidates appeared for the empire, and several were elected by different factions; among whom was Richard, earl of Cornwall, brother to Henry II. king of England; but no emperor was properly acknowledged till the year 1273, when Rodolph, count of Hapsburgh, was unanimously raised to the vacant throne. During the interregnum which preceded the election of Rodolph, Denmark, Holland, and Hungary, entirely freed themselves from the homage they were wont to pay to the empire; and much about the same time several German cities erected a municipal form of government, which still continues. Lubec, Cologne, Brunswick, and Dantzic, united for their mutual defence against the encroachments of the great lords, by a famous association, called the Hanseatic league: these towns were afterwards joined by eighty others, belonging to different states, which formed a kind of commercial republic. See HANSE. Italy also, during this period, assumed a new plan of government. That freedom for which the cities of Lombardy had so long struggled was confirmed to them for a sum of money: they were emancipated by the fruits of their industry. Sicily likewise changed its government and its prince. See SICILY. From the time of Frederick II. we may date the ruin of the German power in Italy. The Florentines, the Pisans, the Genoese, the Luccans, &c., became independent, and could not again be reduced. The power of the emperor, in short, was in a manner annihilated, when Henry VII. undertook to restore it in the beginning of the fourteenth century. For this purpose a diet was held at Frankfort, where proper supplies being granted for the emperor's journey, well known by the name of the Roman expedition, he set out for Italy, accompanied by the dukes of Austria and Bavaria, the archbishop of Triers, the bishop of Liege, the counts of Savoy and Flanders, and other noblemen, together with the militia of all the imperial towns.

8. *Italy, from the pontificate of Clement V. to the present period.*—Italy was still divided by the factions of the Guelphs and Gibelines, who butchered one another without humanity or remorse. But their contest was no longer the same; it was not now a struggle between the empire and the priesthood, but between faction and faction, inflamed by mutual jealousies and animosities. Pope Clement V. had been obliged to leave Rome, which was in the anarchy of popular government. The Colonnas, the Ursini, and the Roman barons, divided the city; and this division was the cause of a long abode of the popes in France, so that Rome seemed equally lost to the popes and the emperors. Sicily was in the possession of the house of Arragon, in consequence of the horrid massacre called the Sicilian vespers, by which that island was delivered from the tyranny of the French. See SICILY. Carobert, king of Hungary, disputed the kingdom of Naples with his uncle Robert, son of Charles II. The house of Este had established itself at Ferrara; and the Venetians wanted to make themselves masters of that country. The old league of the Italian cities no longer existed. It had been formed with no other view than to oppose the emperors; and, since they had neglected Italy, the cities were wholly employed in aggrandising themselves, at the expense of each other. The Florentines and the Genoese made war upon the republic of Pisa. Every city was also divided into factions within itself. In the midst of these troubles Henry VII. appeared in Italy in 1311, and caused himself to be crowned king of Lombardy at Milan. But the Guelphs had concealed the old iron crown of the Lombard kings, as if the right of reigning there was attached to a small circlet of metal.

Henry ordered a new crown to be made, with which the ceremony of inauguration was performed. Cremona was the first place that ventured to oppose the emperor. He reduced it by force, and laid it under heavy contributions. Parma, Vicenza, and Placentia, made peace with him on reasonable conditions. Padua paid 100,000 crowns, and received an imperial officer as governor. The Venetians presented Henry with a large sum of money, an imperial crown of gold enriched with diamonds, and a chain of very curious workmanship. Brescia made a desperate resistance, and sustained a severe siege; in the course of which the emperor's brother was slain, and his army diminished to such a degree that the inhabitants marched out under the command of their prefect Thibault de Drussati, and gave him battle; but they were repulsed with great loss, after an obstinate engagement; and at last obliged to submit, and their city was dismantled. From Brescia Henry marched to Genoa, where he was received with expressions of joy, and splendidly entertained. He next proceeded to Rome; where, after much bloodshed, he received the imperial crown from the hands of the cardinals. Clement V, who had originally invited Henry into Italy, growing jealous of his success, had leagued with Robert king of Naples and the Ursini faction, to oppose his entrance into Rome. He entered it in spite of them by the assistance of the Colonnas. Now master of that ancient city, Henry appointed a governor; and ordered, that all the cities and states of Italy should pay him an annual tribute. In this order he comprehended the kingdom of Naples, to which he was going to make good his claim of superiority by arms when he died at Benevento in 1313, as is commonly supposed of poison, given him by a dominican friar in the consecrated wine of the sacrament.

The efforts of Henry VII. were unable to restore the imperial power to Italy. From this time the authority of the emperor in that country consisted in a great measure in the conveniency which the Gibelines found in opposing their enemies under the sanction of his name. The power of the pope was much of the same nature. He was less regarded in Italy than in any other country in Christendom. There was indeed a great party who called themselves Guelphs; but they affected this distinction only to keep themselves independent of the imperialists; and they paid little more acknowledgment to his holiness than sheltering themselves under his name and authority. The most desperate wars were carried on by the different cities against each other; in which Castruccio Castracciani, and Sir John Hawkwood, an Englishman, are celebrated as heroes. A detail of these transactions would furnish materials for many volumes; and is yet of little importance, as nothing material was effected by the utmost efforts of valor, and the belligerent states were commonly obliged to make peace without any advantage on either side. By degrees, however, this martial spirit subsided; and, in the year 1492, the Italians were so little capable of resisting an enemy, that Charles VIII., of France conquered the whole kingdom of Naples in six weeks, and might easily have subdued the whole country, had it not been for his own imprudence. Other attempts on Italy were made by Louis XII., and Francis I. See FRANCE.

In the reigns of Louis XIII. and XIV. an obstinate war was carried on between the French and Spaniards, in which the Italian states bore a considerable share. The war concluded in 1660, with very little advantage to the French, who have been often unsuccessful in their Italian wars. The same ill success attended them in that part of the world, in the war which commenced between Britain and Spain in 1740. But the particulars of these wars, with regard to the different states of Italy, fall to be considered under the history of those states into which this country has been divided in modern times, viz. SARDINIA, MILAN, GENOA, VENICE, TUSCANY, LUCCA, St. MARINO, PARMA, MANTUA, MODENA, ROME, and NAPLES. No period of the history of Italy, it may be here added, however, has been of more importance, or afforded a more rapid succession of astonishing events, since the fall of the Roman empire, than that which has elapsed since the revolution of France. The whole of the independent states have been repeatedly changed into republics and monarchies of various extent and denomination, and have been parcelled out in such forms and magnitudes as suited the caprice of Napoleon, or the allied powers

9. *Italy. Its modern divisions and statistics.*—At the period of the French revolution Lombardy contained seven duchies; viz. Savoy, Piedmont, Montserrat, Milan, Mantua, Modena, Parma, and Placentia. The first three, and part of the fourth, belonged to Sardinia; the rest to the emperor of Germany. In 1797 Buonaparte formed the Austrian, with part of the Venetian and the ecclesiastical states, into the Cisalpine republic, which comprised twelve departments. In northern Italy, at this time, were also the republics of Genoa and Lucca.

Central Italy was occupied by the papal states; the small republic of Marino, under the pope's protection; part of the Venetian territory, Istria, Dalmatia Ragusa, and Tuscany. The short-lived kingdom of Etruria was formed out of the last-mentioned dukedom, Parma, Placentia, and Guastalla. Naples occupied then, as now, the southern division of Italy. By the arrangements of the congress of Vienna, the king of Sardinia was reinstated in his dominions nearly as they existed in 1792. To the emperor of Austria were assigned the Venetian states, the territory between the Tessino, the Po, and the Adriatic, with the valleys of Valteline, Bormio, and Chiavenna. The arch-duke, Francis D'Est, was created grand duke of Modena; and the arch-duchess, Maria Beautrice D'Est, became hereditary sovereign of the duchy of Massa, and the principal city of Carrara, with the Imperial Fiefs in La Lunigiana. The arch-duchess Maria Louisa, late empress of France, was made sovereign of the duchies of Parma, Placentia, and Guastalla. The archduke Ferdinand of Austria regained the grand duchy of Tuscany, and the principality of Piombino, with that part of Elba which belonged to the king of the two Sicilies. The pope acquired the Marshes with their dependencies; and Ferdinand IV., king of the two Sicilies, returned to the throne of Naples.

The following table exhibits the existing political divisions of Italy, with their respective populations, not subject to Foreign Powers.

	Governments.	Sq. miles.	Population.
1.	Lombardo - Venetian kingdom	18,660	4,930,000
2.	Kingdom of Sardinia	27,400	3,300,000
3.	States of the Church, or Pope's Dominions .	14,500	2,590,000
4.	Kingdom of the Two Sicilies	43,500	7,420,000
5.	Grand Duchy of Tuscany	9,270	1,275,000
6.	States of Modena . .	2,480	379,000
7.	States of Pama . . .	2,300	440,000
8.	Duchy of Lucca . .	430	143,000
9.	Republic of San Marino	40	7,000
10	Princip. Monaco . .	38	6,500
		118 610	20,920,500

The Alps and Appennines diversify this peninsula with almost every possible combination of hill and valley, rivers, lakes, and romantic scenery. Northern Italy is broken into bold and rugged acclivities by the former; from the southern face of which descend the streams that form the Po and various other classical rivers. At the head of the gulf of Genoa the latter spring, and extending through the whole of the centre, and the south of this delightful region, yield the sources of the Arne and the Tiber on the west, and numerous smaller, but equally beautiful streams, which flow into the Adriatic. Towards the southern extremity of Italy, the Appennines diverge into two branches, one of which advances eastward to Capo de Leuca, and the other southward to the straits of Messina. Several detached mountains, among which is the celebrated Vesuvius, here over-hang the gulf of Naples, and discharge their liquid fires into its waters. The Appennines are, in many parts, clothed with trees to their summits; in other places they are more precipitous, and attain the altitude of ice and snow. This range receives a variety of different names in the regions through which it passes. But see our articles ALPS and APPENNINES. The other large rivers of Italy are the Adige, the Brenta, the Piave, and the Tagliamento, all flowing southward from the Alps. In the narrow centre, or south of Italy, no great river can be expected to arise. In Naples, the only streams which deserve the name of rivers are the Vulturno, the Garigliano, anciently the Liris, and the Ofanto, formerly the Aufidus, which flows past Cannæ. The rivers which descend from the Appennines are apt, like other mountain currents, to swell suddenly, and to cause inundation in the level parts of the country, particularly towards the mouth of the Po. Here, therefore, large dykes or embankments abound.

The principal lakes of Italy northward are those of Garda, Maggiore, or Lucarno, Lugano, Como, Lecca, and Iseo. In the centre and south are Perugia, the ancient Thrasimene, Bolsena, Castel Gondolfo, Bracciano, Celano, Varano, and Averno. They add to the beauty of the scenes around them in a manner indescribably enchanting.

Italy, as to climate, has been divided into four separate regions. The first of these embraces the basin of the Po, extending about 260 miles in length, and 150 in its greatest breadth; being bounded by the Alps and Appennines on the north-west and south, and open to the Adriatic on the east. Here the atmosphere is uniformly serene and bright; and, being tempered by refreshing breezes from the adjacent heights, the climate is altogether one of the most salubrious and delightful in the whole world. The second region includes the Tuscan and Roman territories, being screened on the north by the Appennines, and more exposed to the heats of summer than to the rigors of winter. Frost and snow are here experienced; but the temperature is sufficient to mature the orange, the fig, and similar fruits. The third district contains Campania Felix, and its dependencies, where the vegetable treasures of nature are also found in the greatest perfection, the air uniformly mild and serene, and a peculiar glow of beauty pervades the landscape. The fourth division extends from the Appennines to the Adriatic, and embraces the southern districts of the peninsula. Warmer than any of the others, it yields the aloe, the palm, and other productions of a southern climate; but here, when the sirocco blows, the heats are overcoming

to a stranger from almost any other part of Europe. The climate of Italy also experiences much diversity from elevation and local circumstances. Generally the sea breeze, which rises about eight in the morning and continues till four in the afternoon, prevents even the hottest months from being oppressive.

Rain does not fall frequently in Italy during the summer months, but in autumn the showers are regular and heavy, succeeded by the inundations of the winter. In the summer and autumn months several districts are, notwithstanding the general salubrity, unhealthy; particularly the quarter called the Maremma, extending all the way from Leghorn to Terracina, on the Neapolitan frontier, a distance of 200 miles, and having its greatest breadth, about forty miles, in the Campagna di Roma. The prevailing disorder is an intermitting fever of the worst kind; the cause of which has not been accurately ascertained, but is, perhaps, to be sought in the pestilential air of the stagnant marshes. The most important productions of Italy are its vines and olives; other delicious fruit is also yielded in great variety; but corn is not so generally grown as in the more northern countries of Europe; pulse and other vegetables, however, abound; and cotton and silk are largely cultivated. Lombardy is the best corn country; in the Genoese and Tuscan territories the culture of fruit predominates; while the unhealthy district of the western coast from Leghorn to Terracina, and reaching inland to the first chain of the Appennines, remains chiefly in a state of pasture. Skilful agriculture is confined to the north. In this direction, and towards the German frontier, as well as in the Venetian and Genoese territory, and Tuscany, there are quarries of beautiful marble; caverns of stalactites are often met with in other parts. In the Appennines are found agate, alabaster, jasper, chalcedony, rock-crystal, crysolite, lapis lazuli, and other valuable stones; these mountains also abound in basalt, dried lava, pozzolana sand, sulphur, and volcanic matter. Other mineral productions of Italy are alum, copper, and iron. Piedmont is the richest mineralogical region in Italy, and next to it the Milanese. Sicily abounds in valuable minerals, and Sardinia is understood to have mines of gold and silver; but they are little known. Mineral springs, both cold and hot, are found in various parts. Herds of black cattle, sheep, and goats, stock the pastures. But few horses appear, and the breed is of little estimation. Mules are more common, being better adapted to the bad and mountainous roads. The operations of agriculture are extensively performed by oxen; and here the buffalo is found, though hardly in any other part of Europe. Swine are fed in large herds in Calabria; and the mountains and woods contain a number of wild animals.

Silks and velvets are the staple manufactures of Italy: in Tarento they make a coarse muslin; and at Teramo, in Abruzzo, are some celebrated potteries. In the southern provinces of Sorrento and Otranto cotton is manufactured: and at Nardo and Gallatona coverlets are made, which are exported to all parts. The porcelain of Naples is also superior. Besides these, there are woollen and silk manufactures at Florence, and a considerable number of artisans, who live by making vases, statues, and other models of the fine arts. At Venice the chief manufactures are silk, velvets, glass, and beads. Its commerce, however, is now almost annihilated. In the Veronese, it is computed, they make 100,000 ounces of silk annually.

The value of the silk produced in the Milanese is computed at not less than £300,000 annually, a considerable part of which is exported. Considerable manufactures of mosaic, china, and other ornaments, are also found at Milan. Bergamo had a woollen manufacture of great antiquity, and it is not yet entirely decayed; its export of silk sometimes amounts to £300,000 annually. It, as well as Brescia, has a manufactory of iron and steel. In the states of the church a manufacture of mosaics, cameos, necklaces, &c., is carried on, especially at Rome; and Bologna employs 7000 or 8000 persons in crapes and gauzes, which are very beautiful. Piedmont exports unwrought silk annually to the amount of 17,000,000 livres, or £748,000 sterling, and about £30,000 worth of damasks. The velvets and damasks of Genoa also preserve their ancient reputation; and beautiful silk stuffs are manufactured at Lucca. The articles most frequently shipped from England to Italy are coffee, sugar, and colonial produce; woollens, muslins, linens, calicoes, hardware, and dyestuffs: also fish, dried and salted. The average value of imports from England and her colonies is necessarily fluctuating, but seldom amounts to £1,000,000 sterling. The principal commercial towns are Naples, Venice, Genoa, Leghorn, Milan, Verona, Bologna, Florence, Civita Vecchia, Ancona, Lucca, and in Sicily, Messina and Palermo.

'To the ancient Italians,' says Mr. Eustace, 'we owe the plainest, the noblest, the most majestic *language* ever spoken; to the modern we are indebted for the softest and sweetest dialect which human lips ever uttered. The ancient Romans raised the Pantheon, the modern erected the Vatican. The former boast of the age of Augustus, the latter glory in that of Leo. The former have given us Virgil, the latter Tasso. In which of these respects are the modern Italians unworthy of their ancestors?' If our estimate of modern Italy is not so flattering as this comparison appears, that it has produced many elegant writers in natural and general history, antiquities, political economy, and various branches of literature, cannot be denied. The memoirs of the academies of Mantua, Milan, Turin, and particularly of Verona, contain most valuable papers. Those of Bologna and Florence have also been distinguished for their scientific researches; and the Royal Institute at Naples has produced many excellent mathematical treatises. No country of modern Europe in fine has surpassed Italy in the number of her eminent men in literature, and the fine arts. Nor does any exceed her in the number of universities and learned societies; the chief of which are those of Rome, Venice, Florence, Mantua, Padua, Parma, Verona, Milan, Pavia, Bologna, Ferrara, Pisa, Naples, Salerno, and Perusia. The various schools of painters,

sculptors, and architects, which owe their origin to Italy, are the admiration of the world.

While the established religion throughout Italy is the Roman Catholic, all other sects are now tolerated: the number of archbishops in the whole country is thirty-eight; that of the suffragans indefinite, as may be truly added of the inferior ecclesiastics. They consist of two great divisions, the parochial clergy, and the monastic orders. The former are often the teachers of their respective parishes, but the latter, originally their assistants, have become, in the lapse of ages, more numerous than their principals, and may now be divided into those of settled income, and those who live on alms.

Italy contains an extraordinary number of hospitals, erected, and in general provided for, by the piety or superstition of former ages. 'It may perhaps be asked,' says the elegant writer we have quoted above, 'why, with the same talents and the same virtues, the Italians do not now make the same figure in the history of the world as their ancestors? The answer appears to me obvious. To induce man to shake off his natural indolence, and exert all his energies, either urgent pressure or glorious rewards are necessary. Now the ancient Romans fought first for their safety and very existence, and afterwards, when imminent danger was removed from their city, they entered the lists of fame, and combated for the empire of the universe. In both cases, all their powers and all their virtues were called into action, either to save their country, or to crown it with immortal glory. The modern Italian has neither of these motives to arouse his natural magnanimity. His person, his property, his city even, is safe, whatever may be the issue of the contests of which his country is either the object or the theatre. Whether the French or Russians, the Germans or Spaniards, gain the victory, the Italian is doomed still to bear a foreign yoke. His inactivity and indifference in the struggle are therefore excusable, because prudent. Quid interest cui serviam, clitellas dum portem meas. As for glory and empire, to them, Italy divided and subdivided as she is, and kept in a state of political palsy by the intrigues or the preponderating power of her transalpine enemies, to them Italy can have no pretension. But if some happy combination of events should deliver her from foreign influence, and unite her many states once more under one head, or at least in one common cause, and that the cause of independence and of liberty, then Europe might confidently expect to see the spirit and glory of Rome again revive, and the valor and perseverance which subdued the Gauls, and routed the Cimbri and Teutones, again displayed in chastising the insolence of the French, and in checking the incursions of the Germans. She would even rise higher, and assuming the character which her situation, her fertility, and her population naturally give her, of the empire of the south, she might unite with Great Britain, the rival and the enemy of France, in restoring and in supporting that equilibrium of power so essential to the freedom and to the happiness of Europe But whether Italy be destined to re-assume her honors, and to enjoy once more an age of glory and of empire; or whether she has exhausted her portion of felicity, and is doomed to a state of hopeless bondage and dependence, it is not for man to discover. In the mean time, deprived of that sceptre of empire which Heaven once entrusted to her hands, to humble the pride of tyrants, and to protect oppressed nations, to portion out kingdoms and provinces, and to sway at pleasure the dominion of the universe, she has assumed the milder but more useful sovereignty of the intellectual world, and reigns the acknowledged queen of poetry and of music, of painting and of architecture, the parent of all the sciences that enlighten, and all the arts that embellish human life.'

ITALY, AUSTRIAN, a kingdom of Upper Italy, belonging to the house of Austria, and erected by an edict of the emperor, dated 7th of April, 1815, is situated between 44° 54' and 46° 40' N. lat., and 8° 31' and 13° 30' E. long. It is bounded on the north by Switzerland and Austria, on the east by Illyria, on the south-east by the Adriatic; on the south by the states of the church, Modena and Parma; and on the west by Piedmont. The line laid down by the congress of Vienna is, 1st. On the side of Piedmont, the Lago Maggiore, and the course of the Ticino; 2d. On the side of Parma, Placentia, and Guastalla, the course of the Po; 3d. On the side of Modena, the same boundary as on the 1st of January, 1792; 4th. On the side of the papal states, the course of the Po as far as the embouchure of the Goro; and 5th. On the side of Switzerland, the former frontier of Lombardy, along with the line which separates the valleys of the Valteline, Bormio, and Chiavenna, from the cantons of the Grisons, and Ticino. The name given to this region, in treaties and other public acts, is the Lombardo-Venetian kingdom, from its two great component parts, which are separated from each other by the river Mincio that on the right of the river is called the government of Milan, and that on the left the government of Venice. The former has nine provinces or delegations, and the latter eight: each delegation is subdivided into districts, and each district into communes or parishes. The following is a tabular view of the extent and population of each:—

I.—GOVERNMENT OF MILAN.

Delegations.	Extent in Sq. Miles.	Population.
1. Milan . .	670	427,000
2. Como . .	1230	299,000
3. Pavia . .	320	117,000
4. Lodi . .	390	141,000
5. Cremona . .	680	205,000
6. Mantua . .	880	214,000
7. Brescia . .	1200	306,000
8. Bergamo . .	1700	292,000
9. Sondrio . .	1270	81,000
Entire extent and population	8340	2,082,000

II.—Government of Venice.

Delegations.	Extent in Sq. Miles.	Population.
1. Venice . .	620	314,000
2. Padua . .	860	270,000
3. Verona . .	1330	285,000
4. Vicenza . .	950	311,000
5. Treviso . .	1310	295,000
6. Udina . .	2880	269,000
7. Belluno . .	1460	125,000
8. Rovigo . .	540	63,000
Entire extent and population	9950	1,932,000
Milan . . .	8340	2,082,000
Entire extent and population of Austrian Italy	18,290	4,014,000

The inhabitants are chiefly Italians, without any admixture, except of a few Greeks and Jews, and the German occupants of the mountains and northern district. Its climate, productions, &c., are fully detailed as those of Northern Italy in the foregoing article. The Austrian viceroy resides at Milan.

ITAMACA, a narrow river of Guiana, South America, which rises in the mountains about 100 miles from the coast, and falls into the Orinoco, near its mouth. It has from sixteen to eighteen feet water in its channel.

ITAMARCA, a fertile province of Brasil, bounded on the north by the province of Paraiba, south by that of Parnambuco, east by the sea, and west by the country of the Tapuyos Indians. It is of a hot climate, and grows tobacco, cotton, Brasil wood, and sugar canes.

Itamarca, an island of Brasil, in Pernambuco, about three leagues in length, and two in breadth, situated eight leagues northward of Recif; and separated from the main land by a channel from half a mile to a league in breadth. It contains no stream; but water flows from a hill in the neighbourhood of the town whenever it is dug for. It contains some sugar-mills and salt-works, and the shores are planted with cocoa trees, among which are scattered the straw cottages of the fishermen. The salt works are formed upon the sands, which are overflowed by the tide.

Itamarca, having the title of Nuestra Senora de la Conception, is the capital of the above island, and situated on the south-east side. It once contained 200 houses; but has now a neglected and decayed appearance. There is a square and a street branching from it formed of small huts, closed at the end by a church. The harbour is good, and commanded by an old fort. Long. 35° 6′ W., lat. 8° 0′ S.

ITATA, a fertile province of Chili, bounded on the north by Maule, by Chillan on the east, the Pacific Ocean on the west, and Puchacay on the south. It is about twenty leagues in length from east to west, and eleven from north to south. It produces the best wine in Chili, called Conception, from its being made in the vicinity of that city. Gold is found in the mountains, and in the sands of the rivers. The chief town is Coulemu, situated in lat. 36° 2′ S.

Itata, a river of the above province, which rises in the Chilian Andes, and runs north-east of the city of Conception. It is generally crossed on rafts, and enters the sea in lat. 36° S.

ITCH, *n. s.* & *v. n.* } Sax. ʒicþa. A cuta-
Itch'y, *adj.* } neous disease, extremely contagious, which overspreads the body with small pustules filled with a thin serum, and raised, as microscopes have discovered, by a small animal. It is cured by sulphur. A sensation of tickling uneasiness in the skin: figuratively, a teasing desire; a constant restless curiosity: itch, to feel uneasiness from tickling irritation; to desire, or long, for any thing: itchy, infected with the itch.

The Lord will smite thee with the scab and with the *itch*, whereof thou canst not be healed.
Deut. xxviii. 27.

In grete mischefe than shalt thou be,
For than againe shal come to thee
Sighes and plaintes, with newe wo,
That no *itching* pricketh the so.
Chaucer. Romaunt of the Rose.

Master Shallow, you have yourself been a great fighter, though now a man of peace.—Mr. Page, though now I be old, and of the peace, if I see a sword out, my finger *itches* to make one.
Shakspeare.

Cassius, you yourself,
Are much condemned to have an *itching* palm,
To sell and mart your offices for gold. *Id.*

Lust and liberty
Creep in the minds and marrows of our youths,
That 'gainst the stream of virtue they may strive,
And drown themselves in riot, *itches*, blains. *Id.*

Ah, powerful weapon! how dost thou bewitch,
Great, but base minds, and spottest with leprous *itch*,
That never are in thought, nor ever can be rich.
Fletcher. Purple Island.

The *itching* ears, being an epidemick disease, gave fair opportunity to every mountebank.
Decay of Piety.

As if divinity had catched
The *itch* on purpose to be scratched.
Hudibras

My right eye *itches*; some good luck is near;
Perhaps my Amaryllis may appear. *Dryden.*

He had still pedigree in his head, and an *itch* of being thought a divine king. *Id.*

A certain *itch* of meddling with other people's matters, puts us upon shifting. *L'Estrange.*

From servants' company a child is to be kept, not by prohibitions, for that will but give him an *itch* after it, but by other ways. *Locke.*

A troublesome *itching* of the part was occasioned by want of transpiration. *Wiseman's Surgery.*

When universal homage Umbra pays,
All see 'tis vice, and *itch* of vulgar praise.
Pope.

All such have still an *itching* to deride,
And fain would be upon the laughing side. *Id.*

ITEA, in botany, a genus of the monogynia order and pentandria class of plants. The petals are long, and inserted into the calyx: caps. unilocular and bivalved. There is but one species, a native of North America. It grows by the sides of rivers, and in other parts where the ground is

moist. It rises to the height of eight or ten feet, sending out many branches garnished with spear-shaped leaves placed alternately, of a light green color. At the extremity of the branches are produced fine spikes of white flowers, three or four inches long, standing erect. When these shrubs are in vigor, they will be entirely covered with flowers, so that they make a beautiful appearance during the flowering season, which is in July. They are propagated by layers, and are not injured by the cold of this climate; but are apt to die in summer, if planted on a dry gravelly soil. The shoots should be laid down in autumn, and will be rooted in one year.

I'TEM, *adv.* & *n. s.* Lat. Also; a word used when any article is added to the former; a new article; a hint or innuendo.

I could have looked on him without the help of admiration, though the catalogue of his endowments had been tabled by his side, and I to peruse him by *items.* *Shakspeare.*

If this discourse have not concluded our weakness, I have one *item* more of mine: if knowledge can be found, I must lose that which I thought I had, that there is none. *Glanville.*

IT'ERATE, *v. a.*
IT'ERANT, *adj.*
ITERA'TION, *n. s.*
ITIN'ERANT, *adj.*
ITIN'ERARY, *n. s.* & *adj.*
Lat. *iter, itero, itinerarium.* To repeat; utter again, or inculcate by frequent mention; to do over again: iteration, repetition: itinerant, wandering; unsettled: itinerary, a book of travels: travelling; done on a journey.

To unrestie bothe reste and remedie;
Fruitfull to all tho that in hire affie
To hem that rennen thou are *itineraris.* *Chaucer.*

We covet to make the psalms especially familiar unto all: this is the very cause why we *iterate* the psalms oftener than any other part of Scripture besides; the cause wherefore we inure the people together with their minister, and not the minister alone to read them, as other parts of Scripture he doth. *Hooker.*

Truth tir'd with *iteration*
As true as steel, as plantage to the moon.
Shakspeare.

There be two kinds of reflections of sounds; the one at distance, which is the echo, wherein the original is heard distinctly, and the reflection also distinctly: the other in concurrence, when the sound returneth immediately upon the original, and so *iterateth* it not, but amplifieth it. *Bacon.*

Iterations are commonly loss of time, but there is no such gain of time, as to *iterate* often the state of the question; for it chaseth away many a frivolous speech. *Bacon's Essays.*

Waters being near, make a current echo; but being farther off, they make an *iterant* echo.
Bacon's Natural History.

He did make a progress from Lincoln to the northern parts, though it was rather an *itinerary* circuit of justice than a progress. *Id. Henry VII.*

In all these respects it hath a peculiar property to engage the receiver to persevere in all piety, and is farther improved by the frequent *iteration* and repetition. *Hammond.*

Ashes burnt, and well reverberated by fire, after the salt thereof hath been drawn out by *iterated* decoction. *Browne.*

Adam took no thought,
Eating his fill; nor Eve to *iterate*
Her former trespass fear'd, the more to sooth
Him with her loved society. *Milton's Paradise Lost.*

It should be my care to sweeten and mellow the voices of *itinerant* tradesmen, as also to accommodate their cries to their respective wares.
Addison's Spectator.

The clergy are sufficiently reproached, in most *itineraries,* for the universal poverty one meets with in this plentiful kingdom. *Addison on Italy.*

Which [law] denies to an *itinerant* hawker of grievances the power of stamping their names upon his wares. *Canning's Speeches.*

ITHACA, in ancient geography, an island in the Ionian Sea, on the coast of Epirus; the country and the kingdom of Ulysses, near Dulichium, with a town and port situated at the foot of mount Neius. Pliny speaks of it as about twenty five miles in compass; Artemidorus makes it only ten. It consists merely of a narrow ridge of limestone, seventeen miles long, and four in extreme breadth, rising into rugged eminences, with scarcely a hundred yards of continuous level surface. Near the middle it is intersected by a deep bay, which penetrates nearly across it. Upon this bay the town of Vathi, the capital, is situated, containing 2000 inhabitants. The chief produce of the island is currants; but it yields also a small quantity of oil and excellent wine. Grain is raised for about one-fourth of the consumption. On a hill near Vathi are some massive ruins of walls, with a number of sepulchres, which are supposed to mark the site of the capital of Ulysses. Near the south-east end of the island is the cliff still called Koraka, and supposed to be the rock Korax of the Odyssey. Under it, in a secluded spot, is a fountain, conceived to be that of Arethusa. The island is called Ithaca by the more intelligent natives, which is corrupted into Theaki by the lower classes. Between Ithaca, Santa Maura, and the continent, are situated Meganisi, Calamo, Atako, and Carto, four small rocky isles, besides several minute islets. Its population may be taken, according to Mr. Williams, at 9400.

ITHOMAIA, a festival held at Ithome, in honor of Jupiter, hence called Ithomates, in which musicians contended.

ITHOME, a town of Messenia, which stood a ten years' siege by the Spartans, but at last surrendered, A. A. C. 724.

An ITINERARY, itinerarium, a journal, or an account of the distance of places. The most remarkable is that which goes under the names of Antoninus and Æthious, or, as Barthius found in his copy, Antoninus Æthicus; a Christian writer, posterior to the times of Constantine. Another, called Hierosolymitanum, from Bourdeaux to Jerusalem, and from Hieraclea through Aulona and Rome to Milan, under Constantine. The itinerary of Antonine shows all the grand Roman roads in the empire, and all the stations of the Roman army. It was drawn up by order of the emperor Antoninus Pius; but is now very defective, having suffered much under the hands of the copyists and editors. Itinerarium denotes a day's march.

ITIQUIRA, an interior river of Brasil, which falls into the Porruclos, an arm of the La Plata, and has a course of 500 miles, in nearly all of which it is navigable.

ITIUS PORTUS, in ancient geography, styled the crux geographorum, or cross of geographers,

from the difficulty of ascertaining its position. It would be endless to recite the different opinions concerning it, with the various reasons advanced in support of them. Three ports are mentioned by Cæsar; two without any particular name, viz. the Higher and the Lower, with respect to the Portus Itius. Calais, Boulogne, St. Omer, and Whitsand, have each in their turn had their advocates. Cæsar gives two distinctive characters or marks which seem to agree equally to Boulogne and Whitsand; namely the shortness of the passage, and the situation between two other ports; therefore nothing can with certainty be determined about its situation.

ITSELF', *pron.* It and self. The neutral reciprocal pronoun, applied to things.

Who then shall blame
His pestered senses, to recoil and start,
When all that is within him does condemn
Itself for being there? *Shakspeare. Macbeth.*

Up to the bridge contagious terror struck
The tower *itself* with the near danger shook.
Marvell.

Borrowing of foreigners, in *itself* makes not the kingdom rich or poor. *Locke.*

ITTIGIUS (Thomas), a learned professor of divinity at Leipsic, son of John Ittigius, professor of physic in the same university. He first published A Treatise upon Burning Mountains; after which he became a minister, and exercised that function in various churches there. He furnished several papers in the Leipsic acts, besides publishing some historical works and dissertations. He died in 1710.

ITURBIDE (——), a modern Mexican chief and emperor, was born at Valladolid in Mexico, in 1790, and was the son of a native Spaniard, who married a Creole lady of fortune. Our hero was bred a farmer, and entered early into the militia of his native province. In 1810 he was a lieutenant, and the part he took in suppressing the insurrection of Morales induced the Mexican government to give him the rank of colonel. He was also made for a time commander of Bahia; but seems to have been offended with the public authorities at being deprived of that post. In the latter part of 1819 he was invited to take the command of an army destined to the south, and marched to Acapulco, where he matured a plan for rendering Mexico independent, and the extension of freedom to all classes of the people. In the summer of 1820 he was declared emperor of Mexico; and for a short period there appeared a prospect that the convulsions of that country would be terminated under this new and able sovereign. But he was incapable of maintaining his authority against cabal: in the beginning of 1823 he found himself obliged to leave the Mexican territory; and came to this country. Still he retained a strong party in Mexico; and, after his abdication, the province of Guadalaxara or Jalisco became the scene of several of their plots and machinations. An expedition was accordingly despatched thither by the federal government to crush the incipient conspiracy. Just at the period this had been effected, Iturbide sailed from England, and landed in disguise on the Mexican coast near Soto la Marina. He was accompanied by his friend Beneski, who applied to general Garza, the commander of the province of New Santander, for passports, which that officer granted to the applicant, but refused to grant another till he should see the person for whom it was wanted. The next day, being informed that Beneski had again landed with two other persons, he sent a party after them, and Iturbide was immediately recognized. The decree issued by the congress, declaring him a traitor if he should land on the Mexican territory, was then read to him; and Garza sent him as a prisoner towards Mexico, to await the decision of that body. This was but a short time delayed, for the congress ordered his immediate execution; and he was accordingly shot on the evening of his reaching Padillo. On his abdication the federal government had settled on him a considerable pension, on condition of his residing in Italy, and after his catastrophe 8000 dollars were granted to his widow.

ITYS, in fabulous history, a son of Tereus king of Thrace, by Procne daughter of Pandion king of Athens. He was killed by his mother when he was about six years old, and served up before his father. He was changed into a pheasant, his mother into a swallow, and his father into an owl.

ITZEHOA, an ancient and handsome town of Germany, in the duchy of Holstein, belonging to Denmark, seated on the Stoer. Long. 9° 25' E., lat. 54° 8' N.

IVA, in botany, a genus of the pentandria order, and monœcia class of plants; natural order forty-ninth, compositæ. Male CAL. common and triphyllous; the florets of the disc monopetalous and quinquefid; the receptacle divided by small hairs. Female five florets in the radius; two long styles; and one naked and obtuse seed. Species two, natives of South America.

JUAN (St.), a city of South America, in the province of Cuyo, Buenos Ayres. It has a parish church, with three chapels; also several convents.

JUAN GUYA, PUNTA DE, a cape on the coast of Terra Firma, in long. 73° 36' W., lat. 11° 36' N.

JUAN (St.), DE BAPTISTA, a town of Mexico, in the province of Sonora, situated between the sources of the two rivers Hiaqui and Sonora.

JUAN (St.), a river of Guatimala, South America, navigable for large vessels, and having a fort at its entrance. This is the name of several rivers in South America, and two in St. Domingo. Also of a considerable river of Florida. and a lake of South America, in the kingdom of Grenada.

JUAN FERNANDEZ. See FERNANDEZ.

JUAN RODRIGUEZ CABRILLO, an island on the coast of New California, in long. 120° 31' W., lat. 34° N.

JUAN DEL RIO, SAN, a town in the intendancy of Mexico, 6489 feet above the level of the sea: it is surrounded with gardens, adorned with vines and aroma. It is 100 miles south of Mexico.

JUAN DEL RIO, SAN, a considerable town of Mexico, in the intendancy of Durango, southwest of the lake of Parras. Inhabitants 10,200.

JUANA (St.), an island and fortress of Chili, in the river Biobio.

JUAN DE ULUA, i. e. The Island of Sacrifices, an island in the bay of Vera Cruz, on the coast of Mexico. It was first visited by Grijalva in 1518, who gave it this name from having seen the remains of some human sacrifices, which the natives told him they were in the habit of offering. The interpreters, who only spoke the language of Yucatan, believed that Acolhua or Ulua was the name of the island. A strong fortress, called the castle of St. Juan d'Ulua, now covers nearly the whole rock, in the form of an irregular square. The expense of finishing it is said to have been upwards of £8,000,000 British sterling. It contains barracks, cisterns, and a newly erected light-house.

JUBA I. a king of Numidia and Mauritania. He succeeded his father Hiempsal, and favored the cause of Pompey against Julius Cæsar. He defeated Curio, whom Cæsar had sent to Africa, and after the battle of Pharsalia he joined his forces to those of Scipio. He was conquered in a battle at Thapsus, and totally abandoned by his subjects. He killed himself with Petreus, who had shared his good fortune and his adversity, A.U.C. 707. His kingdom became a Roman province, of which Sallust was the first governor.

JUBA II., the son of the former, was led captive to Rome to adorn the triumph of Cæsar. His captivity was the source of the greatest honors, and his application to study procured him more glory than he would have obtained from the inheritence of a kingdom. He gained the affections of the Romans by the courteousness of his manners; and Augustus rewarded his fidelity by giving him in marriage Cleopatra the daughter of Antony, conferring upon him the title of king, and making him master of all the territories which his father once possessed, A.U.C. 723. His popularity was so great, that the Mauritanians deified him; the Athenians raised him a statue, and the Æthiopians worshipped him. Juba wrote a History of Rome in Greek, which is often quoted and commended by the ancients. Of it only a few fragments remain. He also wrote on the History of Arabia, and the Antiquities of Assyria, chiefly collected from Berosus. He also composed some treatises upon the drama, Roman antiquities, the nature of animals, painting, grammar, &c., now lost.

JU'BILANT, *adj.*
JUBILA'TION, *n. s.*
JU'BILEE, *n. s.*
JU'BILATE, *n. s.*
Fr. *jubilé*; Lat. *jubilo.* Uttering songs of triumph: jubilation, the act of declaring triumph: jubilee, a public festivity; a season of peculiar joy: jubilate, a song of triumph.

They may now God be thanked of his lone,
Maken hir *jubilee* and walk alone.
Chaucer. The Sompnoures Tale.

'Nowe *jubilate* sang! what meneth this?'
Said than the lynet—'Welcome lord of blisse.
Id. The Court of Love.

Angels utt'ring joy, heaven rung
With *jubilee*, and loud hosannas filled
The eternal regions. *Milton's Paradise Lost.*

The planets list'ning stood,
While the bright pomp ascended *jubilant.*
Milton.

The town was all a *jubilee* of feasts. *Dryden.*

Joy was then a masculine and a severe thing, the recreation of the judgment, or rejoicing the *jubilee* of reason. *South.*

All monarchs in their mansions
Now swarm forth in rebellion, and demand
His death, who made their lives a *jubilee.*
Byron. Sardanapalus.

JUBILEE, among the Jews, denotes every fiftieth year; being that following the revolution of seven weeks of years; at which time all the slaves were made free, and all lands reverted to their ancient owners. The jubilees were not observed after the Babylonish captivity. The learned are divided about the year of jubilee; some maintaining that it was every forty-ninth, and others that it was every fiftieth year. The ground of the former opinion is chiefly this, that the forty-ninth year, being of course a sabbatical year, if the jubilee had been kept on the fiftieth, the land must have had two sabbaths, or have lain fallow two years, which, without a miracle, would have produced a dearth. On the other hand it is alleged, that the scripture expressly declares for the fiftieth year, Lev. xxv. 10, 11. And besides, if the jubilee and sabbatical year had been the same, there would have been no need of a prohibition to sow, reap, &c., because this kind of labor was prohibited by the law of the sabbatical year. Lev. xxv. 4, 5. The authors of the Universal History, book i. chap. 7, note R, endeavour to reconcile these opinions, by observing, that as the jubilee began in the first month of the civil year, which was the seventh of the ecclesiastical, it might be said to be either the forty-ninth or fiftieth, according as one or other of these computations was followed. Learned critics have made a calculation thought by others to be tolerably exact, that if the Jews had still observed the jubilees, the fiftieth year of Tiberius, when John the Baptist first began to preach 'the acceptable year of the Lord' would have been a jubilee, and consequently the last; since, fifty years after, the Jewish commonwealth was no longer in being. This agrees with the tradition of the Jews, who assert, that the son of David will come during the last jubilee. The political design of the law of the jubilee was to prevent the too great oppressions of the poor, as well as their being liable to perpetual slavery. A kind of equality was thus preserved through all the families of Israel, and the distinction of tribes was also preserved, that they might be able, when there was occasion, on the jubilee year, to prove their right to the inheritance of their ancestors. It served also, like the Olympiads of the Greeks, and the Lustra of the Romans, for the readier computation of time. The jubilee has also been supposed to be typical of the gospel state and dispensation, described by Isaiah lxi. 1, 2, in reference to this period, as 'the acceptable year of the Lord.'

JUBILEE, in a modern sense, denotes a grand church festivity, celebrated at Rome, wherein the pope grants a plenary indulgence to all sinners; at least to as many as visit the churches of St. Peter and St. Paul at Rome. The jubilee was first established by Boniface VII. in 1300, in favor of those who should go ad limina aposto-

lorum; and it was only to return every 100 years. But the first celebration brought in such store of wealth to Rome, that the Germans called this the golden year, which occasioned Clement VI., in 1343, to reduce the period of the jubilee to fifty years. Urban VI., in 1389, appointed it to be held every thirty-five years, that being the age of our Saviour; and Paul II. and Sextus IV., in 1475, brought it down to every twenty-five, that every person might have the benefit of it once in his life. Boniface IX. granted the privilege of holding jubilees to several princes and monasteries: for instance, to the monks of Canterbury, who had a jubilee every fifty years; when people flocked from all parts to visit the tomb of St. Thomas à Becket. There is now usually one at the inauguration of a new pope. To be entitled to the privileges of the jubilee, the bull enjoins fastings, alms, and prayers. It gives the priests a full power to absolve in all cases, even those otherwise reserved to the pope: to make commutations of vows, &c., in which it differs from a plenary indulgence. During the time of jubilee, all other indulgences are suspended. There are particular jubilees in certain cities, when several of their feasts fall on the same day: at Puey en Velay, for instance, when the feast of the Annunciation happens on Good Friday; and at Lyons when the feast of St. John Baptist concurs with the feast of Corpus Christi. In 1640 the Jesuits celebrated a solemn jubilee at Rome; that being the centenary or 100th year from their institution, and the same ceremony was observed in all their establishments throughout the world.

JUBILEE is also used for any solemnity or festival, appointed or repeated at a distant period. Thus Edward III. caused his birth-day to be observed in manner of a jubilee, in the fiftieth year of his reign. This he did, by releasing prisoners, pardoning all offences except treason, making good laws, and granting many privileges to the people. A jubilee was also celebrated throughout Great Britain and Ireland, on the 25th of October 1809; the late King George III. entering on the fiftieth year of his reign. A grand jubilee was held at Stratford-upon-Avon, on the 23rd of April 1764, in honor of Shakspeare, being the second centenary of the birthday of that unparalleled dramatic poet; whose unrivalled merits will induce posterity to repeat it, as long as the drama is admired, or the English language understood. The celebrated Garrick was the principal planner and conductor of the entertainment, and wrote most of the songs for the occasion.

JUCUN'DITY, *n. s.* Lat. *jucunditas, jucundus.* Pleasantness; agreeableness.

The new or unexpected *jucundities*, which present themselves, will have activity enough to excite the earthiest soul, and raise a smile from the most composed tempers. *Browne.*

JUDÆA, in ancient geography, taken largely, either denotes all Palestine, or the greater part of it; and thus it is generally taken in the Roman history: Ptolemy, Rutilinus, Jerome, Origen, and Eusebius, take it for the whole of Palestine. It has also been considered as the third part of it, on this side the Jordan; and that the south part is distinct from Samaria and Galilee; in which sense it is often taken, not only in Josephus, but also in the New Testament. Thus regarded it contained four tribes; Judah, Benjamin, Dan, and Simeon, together with Philistia and Idumea; so as to be comprised between Samaria on the north and Arabia Petræa on the south, and bounded by the Mediterranean on the west, and by the lake Asphaltites, with part of the Jordan, on the east. Josephus divides it into eleven toparchies; Pliny into ten; by which it has a somewhat greater extent than that just mentioned. See PALESTINE.

While we thus refer for modern geographical particulars of this land to its more general appellation, our biblical readers will recollect the origin of the name Judæa, as connecting it with the royal tribe of the house of Israel, i. e. Judah, and as calculated from that circumstance to point the Jews and all mankind to the fulfilment of those prophecies which regarded the appearance of the Messiah in that tribe. The only two tribes whose distinct genealogy was connected with the 'service of God and the promises' were Levi and Judah: these, therefore, we find preserved more distinctly throughout and after the captivity in Babylon than any other; and, while the former yielded some of the most distinguished ornaments of the sacerdotal race, the very name of Judah was transferred, after this event, to the land and to the people in the cognomina *Judæa* and *Jews*.

Since the appearance of the true Messiah in this land, although a large portion of the Jewish nation has been preserved unmixed with the other nations of the earth, the distinction of the tribes is lost. Judah is not known from Ephraim: Levi cannot be distinguished from Simeon or Dan.

Palestine is therefore no longer Judæa, i. e. the land emphatically of Judah: it is no longer the peculiar inheritance of the Jews. Hence it is remarkable that none of the passages in the New Testament, which advert to the future conversion of that people to the Christian faith, ever mention their return to that land. 'They are beloved for the fathers' sakes'—'they shall obtain mercy,' we are told: the 'receiving of them again' into God's church shall 'be as life from the dead.' But nothing is suggested as to their locality. It is not mentioned as a part of their 'mercy' or deliverance that they shall return again to Judæa.

It is the absence of any thing like even an allusion to such a circumstance in the New Testament, that has led many modern critics wholly to doubt that construction of certain prophecies of the ancient Scriptures which have been thought still to hold out such an expectation. As the subject has been brought into considerable discussion of late, and much of the entire system of modern writers on prophecy rests on this view of it, we are disposed to record briefly the arguments on each side of the question.

It strictly consists of two parts, suggesting these two enquiries: 1. Will the Jews ever be re-gathered *as a nation?* And, 2, Will they as such ever *re-possess Palestine?* Neither of these questions should be confounded with the expectation of their future general conversion, which various

Christians entertain cordially, who are disposed to consider the foregoing as at least very doubtful matters.

In proof of the affirmative of both the two questions, thus suggested, Dr. Doddridge, in his Lectures as edited by Kippis, quotes Isa. xxvii. 12, 13; Ezek. xi. 17—21; xxxvi. 24—28; xxxvii. 21—28; xxxix. 25—29; Hosea i. 10, 11; Amos ix. 14, 15; Zech xiv. 10, 11. 21. He adds other passages in collateral proof of these points, i. e. Isa. lxvi. 16. 24; Ezek. xxxviii. 19; Joel iii. 9—14; Zech. xiv. 1—15; Rev. xx. 8—10; Isa. lix. 19; Micah iv. 11. 13; Zeph. iii. 8. At least, these last passages are brought forward to prove, that 'on their settlement in their own land some enemies shall make an assault upon them [the Jews], and some celebrated victory over such enemies is foretold.'

The next respectable commentator whom we shall quote on this side of the question is Whitby. He adduces, in his Commentary on Isaiah xi. 11, the following passages, to prove 'the restoration of the Jewish nation, when they shall embrace the Gospel, and be restored to their own country.' Deut. xxx. 3—5; xxxii. 43; Isa. xxvii. 12, 13; xlv. 17, &c.; xlix. 6, &c.; liv. lix. 20; lx., lxi., lxii., lxv., lxvi.; Jer. xxiii. 8; xxx. 8—10; xxxi. 36—40; l. 4; Ezek. xi. 17, &c.; xx. 34, &c.; xxxiv. 13; xxxvi. 24, &c.; xxxvii. 21; Hosea i. 11; iii. 5; Joel iii. 1, &c.; Amos ix. 14, 15; Obad. v. 17; Micah vii. 14, 15; Zech. viii. 7, 13; x. 6, &c; xii. 10; xiv. 8, &c.; Rom. xi. 25, 26; 2 Cor. iii. 10.

Certainly if a tenth part of these passages spoke unequivocally of such events as the national re-gathering of the Jews, and their literal return to Palestine, we should be bound to admit the propriety of expecting them. We do not advert to other writers on this subject, because all the chief passages ever quoted are contained in the foregoing lists, or are of a similar class with those quoted.

Those who consider these events as not predicted in Scripture remark, as we have intimated, on the paucity of the attempted proof of them from the New Testament. The only passages quoted by the above able commentators are Rev. xx. 8; Rom. xi. 25, 26; and 2 Cor. iii. 10; in not one of which are either of those two subjects distinctly mentioned at all. The quotation from St. Paul's epistle to the Romans we have already adverted to, in this paper, as predicting the future *conversion* of the Jews simply. The chapter contains no allusion to their national character, or to their land. They are represented as being broken off from their ancient privileges as a *church*, into which the Gentiles are grafted (the latter clearly were never grafted into the Jewish nation), and are promised a restoration to similar or superior privileges on their believing the Gospel. But not a hint is given of their acquiring any temporal or local advantages in consequence: no other advantages are promised them, and they can receive no greater, than those into which the Gentiles are grafted. 2 Cor. iii. 10 speaks of the glory of the Gospel as superior to that of the law: the Jew, of course, shall partake it, on his conversion, but after an evangelical or Gospel manner: not returning back to that dispensation, or its peculiarities, 'which' in this very place is said to have 'had no glory, by reason of the glory that excelleth.' Rev. xx. 8 predicts a conflict, transpiring a thousand years after a 'first resurrection,' and the assembling of an army gathered together from 'the four quarters of the earth:' all its nations seem to constitute the bands described under their leaders Gog and Magog; they are said in the ninth verse to 'encompass the camp of the saints and the beloved city;' but the nation of the Jews is named in no part of the connexion, nor Judæa, nor Jerusalem. If a literal resurrection be not intended then the whole chapter is an allegory, and a literal camp and city cannot be intended: if a literal resurrection of God's people be, as some suppose, really meant, then neither the camp nor the city, can intend Jews exclusively, or his people of any one nation. Such are the remarks of those who oppose the opinion of a literal return of the Jews, on the few passages of the New Testament above quoted on the point.

Our space will not permit a similar examination of the passages quoted from the Old Testament. Before the reader can justly estimate their bearing, if they have any, on these points, they require to be arranged in the order of time in which they were written: 'the former' must be separated from 'the latter' prophets. This is most important; for it will appear that, out of forty-nine passages thus accumulated, thirty-nine are the production of prophets living before or *in* the captivity in Babylon; and the term 'captivity,' and the promises of restoration as far as they are literal, may apply wholly therefore to that calamity, and the return from it. Prophecies of a literal return, from a later captivity, may be expected to occur *after* the return from the former; or, if two captivities were contemplated by earlier writers, such an important fact should be made to appear.

The passages quoted from the later prophets, i. e. from those who delivered their predictions subsequent to the return from Babylon, are at best, as supposed to bear on these topics, remarkably obscure. They are wholly taken from one prophet, Zechariah, his *eighth*, his *tenth*, his *twelfth*, and *fourteenth* chapters. A popular advocate of the national restoration has pronounced the first of these the strongest of all the passages in its favor. But it will be seen to allude, at least principally, to events passing in the time of the prophet. We are to recollect the specific object of his mission, in common with that of Haggai, was to encourage the building of the second temple, and toward this great work the whole chapter bears an aspect. Its language is, '*I am* returned unto Zion!' 'Let your hands be strong that hear in *these* days these words. 'Again have I thought in *these* days to do well unto Jerusalem.' It promises a more complete return from the east and west; but it expressly declares that the existing 'remnant shall possess *all* these things.' And it is a well known fact that parties of the Jews kept returning to Jerusalem as she gradually lifted up her head; and that the small number of between 40,000 and 50,000, which first returned, was increased many fold in the time of the Asmonean princes. At

the period of their dispersion by the Romans, the Jews were probably as numerous as at present.

Writers who reject the national restoration can find nothing in this eighth chapter of Zechariah, with regard to the prosperity of the Jews, that may not be included in the 'encouragement' which this prophet was sent to afford his own generation, and that was not fulfilled before the advent of the Messiah. The twentieth to the twenty-third verse probably relates to the conversion of the Gentiles by the means of the Jewish apostles: nor must we forget that our Saviour was 'a Jew.' At any rate these verses respect 'many people' and other 'nations.' Similar remarks are made by these writers on the tenth chapter. Dr. Whitby himself considers the 'riders on horses,' and the 'mighty men who tread down their enemies,' of the fifth verse, to allude to the victorious efforts of the Maccabees. Never had the Jews braver commanders, nor more decided Divine interpositions in their favor, than in their time. The pride of Assyria and Egypt being brought down (11th verse) seems the consummation of the national deliverances promised. Zechariah xii. 10 predicts, we know, upon unquestionable authority (John xix. 37), the peculiar manner of the death of Jesus Christ: it is perfectly clear that there was a great mourning in Jerusalem, when the first Christian church was gathered in that memorable scene of the Messiah's murder, and from amongst the ranks of his immediate murderers. The verse *was* then literally fulfilled in a sense it never can again be; and in that individual repentance of thousands of converted Jews (among whom a great company of the 'priests' are specified, Acts vi. 7), the families of Levi, David, &c., could be distinguished 'apart, and their wives apart.' But the former is, as was seen, no longer possible; and never can again be but by a miraculous restoration of the genealogies of the tribes. Zech. xiv. 8 must be as clearly a *symbolical*, and not a literal prediction: the living or springing waters are not a literal river; 'the whole land being turned into a plain' (ver. 10) would be a literal curse in that country. Every plain in such countries is, as Humboldt somewhere remarks, a desert. It is the well known symbol of Ezek. xlvii. 1, Rev. xxii. 1, and of our Lord himself (John vii. 38), for the spiritual blessings of the gospel; and speaks of their diffusion from a spiritual Jerusalem.

Bonus textuarius est bonus theologus. The writers who quote so largely the 'former' prophets on this subject cannot have closely examined the context of the passages commonly accumulated, and the infallible explanation of many of them in the New Testament. Amos is the earliest prophet they quote; and particularly his ixth chap. 11--15. But the 'raising up of the tabernacle of David,' here promised, is expressly applied (Acts xv. 16) to the establishment of the gospel in the hands of the Messiah; upon a principle of its 'agreeing' with the words of other 'prophets;' and thus the symbols of the 13th and 14th verses 'agree' with Joel iii. 18, and Isa. lxi. 4:—the verses immediately preceding this last passage being quoted and applied to his own preaching by our Lord. Hosea i. 10, 11; Isa. xi. 10; liv. 13; lix. 20; lxi. 1—3; lxv. 1, 2, lxvi. 24; are also directly quoted and explained in the New Testament, as the margin of any Bible with references will show. The *connexion* of Joel iii. 1 is largely explained in St. Peter's quotation of the last verse of the preceding chapter, Acts ii. Jer. xxxi. 31—34 is likewise quoted (Heb. viii. 6—11) as a 'promise' upon which the entire Christian dispensation is established. Such numerous quotations out of the above lists of passages, say the parties whose opinions we are now exhibiting, may establish a principle of explanation for the whole: many of them are quoted, not by way of accommodation, but in strict argument, and by way of *proof* that the events to which they are applied were of old predicted. If the quotation be not correct the proof will fail; if it be, we have at least one good and sound exposition of the passages quoted in the final dispensation of God's will.

In brief, these parties say, 1. Extract from these lists passages explained in the New Testament, and you have very few, except exactly similar ones, left upon the subject. 2. Examine closely the connexion of the remaining passages (of the prophets), and the greater part of them refer, in express terms, to *calamities existing*, or threatened to come immediately. They are passages, for instance, from Isaiah, Joel, Jeremiah, and Ezekiel (almost entirely), who lived just before or in the Assyrian and Babylonian captivities. Many of them describe by name, tense, and mood, those captivities; and cannot, without an utter disregard of grammatical construction, be applied to any other: for instance, Isa. xxvii. 12, 13, '*Assyria* and Egypt.' Jer. xxx., following xxix. 10 ('After seventy years be *accomplished at Babylon* I will visit you'), says, 'Write all *I have* spoken in a book, for I will bring again the captivity,' &c., the passage quoted by Whitby. So again Ezek. xxxvii. 21, much depended on by some writers, is closely connected with the preceding vision of the dry bones—which are explained to be the whole house of Israel who were *in* their graves, and who expressly complain of an existing calamity under that figure (ver. 11); i. e. the grave of their captivity in Chaldea, where Ezekiel prophecied. But we cannot go into further details. 3. With regard to the quotations from the Pentateuch, and particularly Deut. xxx. 3—5, these parties contend that numerous passages of this kind are to be found entirely conditional on the obedience of the Jews while they were a nation: that when God found them an unworthy and a rebellious people, his faithfulness was concerned to fulfil on the other hand his threatening of taking his church or kingdom from them; that such passages must be construed under the new circumstances and entire change of dispensation in which we are placed by the gospel, &c. 4. They add, that while, in their view, it has been an inoperative mistake in the creed of many good men, to suppose that any future literal distinction is in reserve for the Jews,—if it be in reality a mistake, and at the same time be exhibited as an important part of God's revealed will that this extraordinary people shall be brought to great temporal honor, it may have the unhappy ten-

dency of inflating their pride—delaying their conversion—and calling off the attention of all who advocate it from matters of infinitely greater moment.

JUDAH, Heb. יהודה, i. e. Praise, or Confession, the fourth son of Jacob, and father of the chief tribe of the Jews, distinguished by his name. Died 1636 B.C.

JUDAH is also used for the people of Judah, including not only the whole people of that tribe, but those of the tribe of Benjamin, the majority of the Levites, and many individuals from all the other tribes, who adhered to the house of David, to avoid the idolatrous worship established by Jeroboam I. Many other individuals from the dispersed tribes are also supposed to have joined them after the Babylonish captivity, when they were called Jews. See JEWS.

CHRONOLOGICAL SERIES OF THE KINGS OF JUDAH.

A. M.

3029. Rehoboam succeeded his father Solomon, and reigned seventeen years, to 3046.
3046. Abijam, three years, to 3049.
3049. Asa, forty-one years, to 3090.
3090. Jehoshaphat, twenty-five years, to 3115.
3115. Jehoram, four years along with his father, and four alone, to 3119.
3119. Ahaziah, one year.
3120. Athaliah, his mother, usurped the crown, murdered the royal family, and reigned six years, to 3126.
3126. Joash was raised to the throne by Jehoiada; and reigned forty years, to 3165.
3165. Amaziah, twenty-nine years, to 3194.
3194. Uzziah, or Azariah, reigned twenty-seven years, to 3221; when, attempting to offer incense in the temple, he was struck with a leprosy, and obliged to quit the government. He lived after this twenty-five years, and died in 3246.
3221. Jotham, his son, took upon him the government, and reigned twenty-five years during his father's life, and sixteen alone. He died in 3262.
3262. Ahaz reigned sixteen years, to 3278.
3278. Hezekiah, twenty-nine years, to 3307.
3307. Manasseh, fifty-five years, to 3362.
3362. Amon, two years, to 3364.
3364. Josiah, thirty-one years, to 3395.
3395. Jehoahaz, three months.
3395. Eliakim, or Jehoiakim, eleven years, to 3406.
3406. Jehoiachin, or Jeconiah, three months and ten days.
3406. Mattaniah, or Zedekiah, reigned eleven years, to 3417; when Jerusalem was taken, the temple burnt, and the people carried captives to Babylon.

CHRONOLOGICAL SERIES OF THE PRINCES OF JUDAH, AFTER THE CAPTIVITY.

The following list is given by Alstedius in his Thesaurus Chronologiæ.

3421. Zorobabel governed thirty-two years after the captivity.
3453. Resa Mesullam, forty-six years.
3499. John, the son of Resa, forty years.

A. M.

3539. Judas Hircanus, fourteen.
3553. Joseph I., seven.
3560. Shimei, eleven.
3571. Mattathias, or Eli, twelve.
3583. Maath, or Asarmath, nine.
3592. Nagge, or nanges, ten.
3602. Heli, or Eli, eight.
3610. Nahum, seven.
3617. Amos Sirach, fourteen.
3631. Matthias, ten.
3641. Joseph II., sixty.
3701. John Hircanus, seventeen. This was the last prince of the Jews, of the royal family of David, and a progenitor of Jesus Christ (tritavus) in the seventh degree.
3718. An interregnum of sixty-two years.
3780. Mattathias Asmonæus, or Maccabæus, governed three years.
3783. Judas Maccabæus, six.
3789. Jonathan Maccabæus, eighteen.
3807. Simon Maccabæus, eight.
3815. John Hircanus I. thirty.
3845. Aristobulus I., king and high-priest; the first king of the Jews since Zedekiah, one year.
3846. Alexander Jannæus, twenty-seven.
3873. Queen Alexandra, nine.
3882. Hircanus II., three months.
3882. Aristobulus II., five years.
3887. Hircanus II., restored, twenty-three.
3909. Antigonus, one year.
3910. Herod the Great, thirty-eight.
3948. Archelaus, nine.
3957. Herod Antipas, twenty-five.
3983. Herod Agrippa I., seven.
3990. Herod Agrippa II., twenty-six.

The kingdom of Judah was of small extent compared with that of the kingdom of Israel; consisting only of two tribes, Benjamin and Judah: and being bounded on the east by the Jordan; on the west by the Mediterranean, in common with the Danites, except some places recovered by the Philistines, and others taken by the kings of Israel; on the south its limits seem to have been contracted by Hadad. 1 Kings xi. 15.

The tribe of Judah was one of the twelve divisions of Palestine by tribes (Josh. xv.), having Idumea on the south from the extremity of the Lacus Asphaltites, also the Wilderness of Zin, Cadesbarnea, and the brook or river of Egypt; on the east the said lake; on the west the Mediterranean; and on the north the mouth of the said lake; where it receives the Jordan, Bethsemes, Thimna, quite to Ekron on the sea.

JUDAH HAKKADOSH, or the saint, a rabbi celebrated for his learning and riches, lived in the time of the emperor Antoninus, and was the friend and preceptor of that prince. Leo of Modena, a rabbi of Venice, tells us, that rabbi Judah, who was very rich, collected, about twenty-six years after the destruction of the temple, in a book which he called the Mishna, the constitutions and traditions of the Jewish magistrates who preceded him. See MISHNA and TALMUD.

JU'DAIZE, *v. n.* Fr. *judaiser;* low Latin

judaizo. To conform to the manner of the Jews.

Paul *judaised* with the Jews, was all to all
Sandys.

JUDAS MACCABÆUS, a celebrated general of the Jews, renowned for his many victories over his enemies, at last slain in battle, 261 B. C. See JEWS,

JUDAS TREE, *n. s.* Lat. *siliquastrum.* A plant.

Judas tree yields a fine purplish, bright red blossom in the Spring, and is increased by layers.
Mortimer's Husbandry.

JUDE (St.), or JUDAS, called also Lebbæus and Thaddæus, the son of Joseph, and brother of St James the younger. Matt. xiii. 55. He preached in Mesopotamia, Arabia, Syria, Idumea; and died in Berytus for the confession of Christ. He wrote that epistle which goes under his name, after the death of most of the apostles. He was cruelly put to death for reproving the superstition of the Magi.

JUDEA. Se JUDÆA.

JUDENBURG, a town and circle of Upper Styria, situated on the left bank of the Muhr, and the next place in the duchy to Gratz. The town has not, however, above 2000 inhabitants, and had hardly recovered from a dreadful fire which took place in 1807, when, on 18th of June 1818, another fire consumed the whole, except thirty houses. It was taken by the French in April 1797. It is thirty-eight miles west by north of Gratz, and 108 south-west of Vienna.

The CIRCLE OF JUDENBURG comprehends the western part of Upper Styria, and has a territorial extent of 2250 square miles. Inhabitants 95,000, of whom a large number are Lutherans. It is hilly, and sterile, but abounds in iron mines and works. Silver, lead, and nitre, are found here, though in smaller quanties; and at Aussee there are fine salt mines.

JUDEX (Matthew), one of the principal writers of the Centuries of Magdeburg, was born at Tippleswolde, in Misnia, in 1528. He taught theology with great reputation; but met with many disturbances in the exercise of his ministry from party feuds. He wrote several works, and died in 1564.

JUDGE, *n. s.* & *v. a.*
JUDG'ER, *n. s.*
JU'DICATORY, *n. s.*
JU'DICATURE, *n. s.*
JUDIC'IAL, *adj.*
JUDIC'IALLY, *adv.*
JUDIC'IARY, *adj.*
JUDIC'IOUS, *adj.*
JUDIC'IOUSLY, *adv.*

Lat. *jus, judex, judico.* These words are all derived from *jus*, right, equity: judge is one invested with authority to decide any question or cause; one who presides in a court of law or justice: one who has skill to determine upon the merit of any proposed subject of enquiry: judge, to decide; pass sentence; give an opinion; discern or distinguish, pass severe censure or doom, when used in scripture: judger, an old word for judge: judicatory, distribution of justice: a court of justice: judicature, power or authority to administer justice; also a court of justice: judicial, practised in the administration of justice; inflicted as a penalty: judicially, according to forms of justice: judiciary, passing judgment: judicious, prudent; wise; skilful in determining: judiciously, in a wise and discriminating manner.

Shall not the *judge* of all the earth do right?
Genesis.

Judge in yourselves: is it comely that a woman pray unto God uncovered? 1 *Cor.* xi. 13.

How doth God know? Can he *judge* through the dark cloud? *Job* xxii. 13.

Your cours is don, your faith han he conserved;
Goth to the croune of lif that may not faille;
The rightful *juge*, which that ye han served,
Shal yeve it you, as ye han it deserved.
Chaucer. The Second Nonnes Tale.

For your husband,
He's noble, wise, *judicious*, and best knows
The fits o' the season. *Shakspeare. Macbeth.*

Beshrew me, but I love her heartily;
For she is wise, if I can *judge* aright.
Shakspeare.

My lord Bassanio gave his ring away
Unto the *judge* that begged it.
Id. Merchant of Venice.

The honour of the judges in their *judicature* is the king's honour. *Bacon's Advice to Villiers.*

No such crime appeared as the lords, the supreme court of *judicatory*, would judge worthy of death.
Clarendon.

Thou art *judge*
Of all things made, and judgest only right. *Milton.*

Love hath his seat
In reason, and is *judicious*. *Id.*

To each savour meaning we apply;
And palate call *judicious*. *Id.*

Authors to themselves,
Both what they *judge* and what they chuse. *Id.*

His zeal
None seconded, as out of reason *judged*
Singular and rash. *Id.*

Before weight be laid upon *judiciary* astrologers, he influence of constellations ought to be made out.
Boyle.

How dares your pride,
As in a listed field to fight your cause,
Unasked the royal grant; nor marshal by,
As knightly rites require, nor *judge* to try.
Dryden.

So bold, yet so *judiciously* you dare,
That your least praise is to be regular. *Id.*

Then those, whom form of laws
Condemned to die, when traitors *judged* their cause.
Id.

We are beholden to *judicious* writers of all ages for those discoveries they have left behind them.
Locke.

Whether it be a divine revelation or no, reason must *judge*, which can never permit the mind to reject a greater evidence, to embrace what is less evident. *Id.*

It will behove us to think that we see God still looking on, and weighing all our thoughts, words, and actions in the balance of infallible justice, and passing the same *judgment* which he intends hereafter *judicially* to declare. *Grew.*

In *judicatures*, to take away the trumpet, the scarlet, the attendance, makes justice naked as well as blind. *South.*

The resistance of those will cause a *judicial* hardness. *Id.*

Her very *judges* wrung their hands for pity;
Their old hearts melted in 'em as she spoke
And tears ran down their silver beards.
Rowe's Lady Jane Grey.

How properly the tories may be called the whole body of the British nation, I leave to any one's *judging*. *Addison.*

One court there is in which he who knows the secrets of every heart will sit *judge* himself. *Sherlock.*

Human *judicatories* give sentence on matters of right and wrong but inquire not into bounty and beneficence. *Atterbury.*

What government can be without *judicial* proceedings? And what *judicature* without a religious oath? *Bentley.*

A perfect *judge* will read each piece of wit,
With the same spirit that its author writ. *Pope.*

We wisely strip the steed we mean to buy;
Judge we in their caparisons of men. *Young.*

Their *judge* was conscience, and her rule their law,
That rule, pursued with reverence and with awe,
Led them, however faltering, faint, and slow,
From what they knew, to what they wished to know.
Cowper. Truth.

A tale should be *judicious*, clear, succinct,
The language plain, and incidents well linked;
Tell not as new what every body knows,
And, new or old, still hasten to a close.
Id. Conversation.

I *judge* thee by thy mates;
It is for God to *judge* thee as thou art.
Byron. Deformed Transformed.

Even so. I *judged* it fitting for their safety,
That, ere the dawn, she sets forth with her children
For Paphlagonia, where our kinsman Cotta
Governs. *Id. Sardanapalus.*

JUDGES. See JUSTICE.

JUDGES, in Jewish antiquity, supreme magistrates who governed the Israelites from the time of Joshua till the reign of Saul. They continued during the whole time of the republic of Israel; being a space of about 339 years. See ISRAEL.

JUDGES, for ordinary affairs, civil and religious, were appointed by Moses in every city to terminate differences; in affairs of greater consequence, the differences were referred to the priests of Aaron's family, and the judge of the people or prince at that time established. Moses likewise set up two courts in all the cities, one consisting of priests and Levites, to determine points concerning the law and religion; the other consisting of heads of families, to decide in civil matters.

JUDGES, BOOK OF, a canonical book of the Old Testament, so called from its relating the state of the Israelites under the administration of many illustrious persons who were called judges, from being both the civil and military governors of the people, and who were raised up by God upon special occasions, after the death of Joshua, till the time of their choosing a king.

JUDGES, SELECT, judices selecti, in antiquity, were persons summoned by the prætor to give their verdict in criminal matters in the Roman courts, as juries do in ours. No person could be regularly admitted into this number till he was twenty-five years of age. The sortitio judicum, or impanneling the jury, was the office of the judex questionis, and was performed after both parties were come into court, for each had a right to reject or challenge whom they pleased, others being substituted in their room. The number of the judices selecti varied according to the nature of the charge. When the proper number appeared, they were sworn, took their places in the subsellia, and heard the cause.

JUDG'MENT, *n. s.* French *jugement* The power of discerning the relations between one term or one proposition and another.

O *judgment!* thou art fled to brutish beasts,
And men have lost their reason.
Shakspeare. Julius Cæsar.

The faculty, which God has given man to supply the want of certain knowledge, is *judgment*, whereby the mind takes any proposition to be true or false, without perceiving a demonstrative evidence in the proofs. *Locke.*

Judgment is that whereby we join ideas together by affirmation or negation; so, this tree is high. *Watts.*

And *judgment* drunk, and bribed to lose his way,
Winks hard, and talks of darkness at noon day.
Cowper. Progress of Error.

Doom; the right or power of passing judgment.

If my suspect be false, forgive me God;
For *judgment* only doth belong to thee.
Shakspeare..

The act of exercising judicature; judicatory.

They gave *judgment* upon him. *2 Kings.*

When thou, O Lord, shalt stand disclosed
In majesty severe.
And sit in *judgment* on my soul,
O how shall I appear? *Addison's Spectator.*

Determination; decision.

Where distinctions or identities are purely material, the *judgment* is made by the imagination, otherwise by the understanding. *Glanville's Scepsis.*

We shall make a certain *judgment* what kind of dissolution that earth was capable of. *Burnet's Theory.*

Reason ought to accompany the exercise of our senses, whenever we would form a just *judgment* of things proposed to our inquiry. *Watts.*

The quality of distinguishing propriety and impropriety; criticism.

Judgment, a cool and slow faculty, attends not a man in the rapture of poetical composition. *Dennis.*

'Tis with our *judgments* as our watches, none
Go just like; yet each believes his own. *Pope.*

You must not every worm promiscuous use,
Judgment will tell the proper bait to choose.
Gay's Rural Sports.

Opinion; notion.

I see men's *judgments* are
A parcel of their fortunes, and things outward
Draw the inward quality after them,
To suffer all alike.
Shakspeare. Antony and Cleopatra.

When she did think my master loved her well,
She, in my *judgment*, was as fair as you.
Shakspeare.

Sentence against a criminal.

The chief priests informed me, desiring to have *judgment* against him. *Acts* xxv. 15.

When he was brought again to the' bar, to hear
His knell rung out, his *judgment*, he was stirred
With agony. *Shakspeare. Henry VIII.*

On Adam last this *judgment* he pronounced.
Milton.

Condemnation. This is a theological use.

The *judgment* was by one to condemnation; but the free gift is of many offences unto justification. *Rom.* v. 16.

The precepts, promises, and threatenings of the Gospel will rise up in *judgment* against us, and the articles of our faith will be so many articles of accusation *Tillotson.*

Punishment inflicted by providence, with reference to some particular crime.

What man henceforth that breatheth vitall aire
Will honour heaven, or heavenly powers adore,
Which so unjustly doth their *iudgments* share,
'Mongst earthly wights, as to afflict so sore
The innocent, as those which do transgresse,
And doe not spare the best or fairest more
Than worst or foulest, but doe both oppresse?

Spenser. Daphnaida.

This *judgment* of the heavens, that makes us tremble,
Touches us not with pity. *Shakspeare. King Lear.*

We cannot be guilty of greater uncharitableness than to interpret afflictions as punishment and *judgments*: it aggravates the evil to him who suffers, when he looks upon himself as the mark of divine vengeance. *Addison's Spectator.*

Distribution of justice.

The Jews made insurrection against Paul, and brought him to the *judgment* seat. *Acts* xviii. 12.

This false knight was slaine for his untrouthe,
By *jugement* of Alla hastily.

Chaucer. The Man of Lawes Tale.

Your dishonour
Mangles true *judgment*, and bereaves the estate
Of that integrity which should become it.

Shakspeare.

Justiciary law.

I am charged to tell his highness that the court
Has passed its resolution, and that, soon
As the due forms of *judgment* are gone through,
The sentence will be sent up to the Doge.

Byron. Marino Faliero.

The last doom.

At every time that me remembreth of the day of dome, I quake; for whan I ete or drinke, or do what so I do, ever semeth me that the trompe sowneth in mine eres, riseth ye up that bended and cometh to the *jugement*. O good God! moche ought a man to drede swiche a *jugement* ther as we shul be alle, as Seint Poule sayth, before the streit *jugment* of oure Lord Jesu Crist, wheras he shal make a general congregation, wheras no man may be absent.

Chaucer. The Persones Tale.

Judgment, among logicians, a faculty, or rather act of the human soul, whereby it compares its ideas, and perceives their agreement or disagreement. See Logic, and Metaphysics.

Judgment, in law, is the sentence pronounced by the court upon the matter contained in the record. Judgments are of four sorts. First, where the facts are confessed by the parties, and the law determined by the court; as in the case of judgment upon demurrer: secondly, where the law is admitted by the parties, and the facts disputed; as in the case of judgment on verdict: thirdly, where both the fact and the law arising thereon are admitted by the defendant; which is the case of judgments by confession or default: or, lastly, where the plaintiff is convinced that either fact, or law, or both, are insufficient to support his action, and therefore abandons or withdraws his prosecution; which is the case in judgments upon a nonsuit or retraxit. The judgment, though pronounced or awarded by the judges, is not their determination or sentence, but the determination and sentence of the law; it is the remedy prescribed by law for the redress of injuries; and the suit or action is the vehicle or means of administering it. What that remedy may be, it is indeed the result of deliberation and study to point out; and therefore the style of the judgment is not that it is decreed or resolved by the court, for then the judgment might appear to be their own; but 'it is considered,' consideratum est per curiam, that the plaintiff do recover his damages, his debt, his possession, and the like: which implies that the judgment is none of their own; but the act of law, pronounced and declared by the court, after due deliberation and enquiry. See *Blackstone's Comment.*

Judgment, in criminal cases, is the next stage of prosecution, after trial and conviction are past. For when, upon a capital charge, the jury have brought in their verdict guilty, in the presence of the prisoner, he is either immediately, or at a convenient time soon after, asked by the court if he has any thing to offer why judgment should not be awarded against him. And in case the defendant be found guilty of a misdemeanor (the trial of which may, and does usually, happen in his absence, after he has once appeared), a capias is awarded and issued, to bring him in to receive his judgment; and, if he absconds, he may be prosecuted even to outlawry. But whenever he appears in person, upon either a capital or inferior conviction, he may at this period, as well as at his arraignment, offer any exceptions to the indictment, in arrest or stay of judgment: as for want of sufficient certainty in setting forth either the person, the time, the place, or the offence. And, if the objections be valid, the whole proceedings shall be set aside. A pardon also may be pleaded in arrest of judgment: and it is the same when pleaded here as when upon arraignment; viz. the saving the attainder, and, of course, the corruption of blood: which nothing can restore but parliament, when a pardon is not pleaded till after sentence. And certainly, upon all accounts, when a man has obtained a pardon, he is in the right to plead it as soon as possible. Praying the benefit of clergy may also be ranked among the motions in arrest of judgment. See Clergy. If all these resources fail, the court must pronounce that judgment which the law has annexed to the crime. Of these some are capital, which extend to the life of the offender, and consist generally in being hanged by the neck till dead; though, in very atrocious crimes, other circumstances of terror, pain, or disgrace, are superadded: as, in treasons of all kinds, being drawn or dragged to the place of execution; in high treason affecting the king's person or government, beheading; and, in murder, a public dissection. But the humanity of the English nation has authorised, by tacit consent, an almost general mitigation of such judgments as favor torture or cruelty: a sledge or hurdle being usually allowed to such traitors as are condemned to be drawn. Some punishments consist in exile or banishment, by abjuration of the realm, or transportation to New South Wales: others in loss of liberty, by perpetual or temporary imprisonment. Some extend to confiscation, by forfeiture of lands, or moveables, or both; or of the profits of lands for life: others induce a disability of holding offices or employments, of being heirs, executors, and the like. Some are merely pecuniary, by stated

or discretionary fines: and, lastly, there are others that consist principally in their ignominy, thougn most of them are mixed with some degree of corporeal pain; and these are inflicted chiefly for such crimes as either arise from indigence, or render even opulence disgraceful: such as whipping, hard labor in the house of correction, and the stocks. Disgusting as this catalogue may seem, it will afford pleasure to a British reader, and do honor to the British laws, to compare it with that shocking apparatus of death and torment to be met with in the criminal codes of almost every other nation in Europe. And it is moreover one of the glories of our law, that the nature, though not always the quantity or degree of punishment, is ascertained for every offence; and that it is not left in the breast of any judge, nor even of a jury, to alter that judgment which the law has beforehand ordained for every subject alike, without respect of persons.

JUDICIA CENTUMVIRALIA, in Roman antiquity, were trials before the centumviri, to whom the prætor committed the decision of certain questions of inferior nature, like our justices of peace at the quarter sessions. During these trials, a spear was stuck up in the forum, to signify that the court was sitting.

JUDICIUM CALUMNIÆ, was an action brought against the plaintiff for false accusation. The punishment, upon conviction, was inustio frontis, or branding in the forehead. See INUSTIO.

JUDICIUM DEI, judgment of God, was a term anciently applied to all extraordinary trials of secret crimes; as those by arms, and single combat, and the ordeals; or those by fire, or red hot plough-shares; by plunging the arm in boiling water, or the whole body in cold water; in hopes God would work a miracle, rather than suffer truth and innocence to perish. These customs were long kept up even among Christians. See BATTLE, ORDEAL, &c.

JUDICIUM PRÆVARICATIONIS was an action brought against the prosecutor, after the criminal was acquitted, for suppressing the evidence of, or extenuating his guilt, rather than urging it home, and bringing it to light.

JUDITH, Heb. יהודית, i. e. praising, the daughter of Merari, a Jewish heroine, whose history is related in the apocryphal book which bears her name. See APOCRYPHA and HOLOFERNES.

JUDITH'S RIVER, a river of North America, which has its source in the Rocky Mountains, near that of the Muscleshell and the Yellowstone River. Its entrance is 100 yards wide from bank to bank, the water occupying about seventy-five yards. It is a clear fine stream: the bed being composed entirely of gravel and mud with some sand. The low grounds in the vicinity are wide and woody, and here is abundance of the large horned animals. In its waters are a great number of beavers.

IUERNUS, in ancient geography, a town in the south-west of Ireland: now called Dunkeram (Camden): called Donekyne by the natives, situated on the Maire, in the province of Munster.

IUERNUS, or IERNUS, a river in the south-west of Ireland, now called the Maire, or Kenmare, running frcm east to west in the province of Munster.

IVES, or YVES (St.), a celebrated bishop of Chartres, born in the territory of Beauvais, in the year 1035. His merit procured his election to the see of Chartres in 1092, or 1093, under the pontificate of Urban II., who had deposed Geoffroy his predecessor. He compiled a Collection of Decrees, and wrote twenty-two sermons, published in 1647, in folio He died A. D. 1115.

IVES (John), F. R. S. and F. A. S., a late celebrated antiquarian, born at Yarmouth in 1751. He published Select Papers, 1773: Remarks on the Garianonum of the Romans, 12mo. 1774 and died in 1776.

IVES (St.), a borough and sea-port town o Cornwall, seated on a bay of the same name; its harbour having been almost choked up by the vast shoals of sand driven upon this coast by the north-west winds, the magistrates and trustees of the port, in 1816, resolved to extend the pier, and to construct a breakwater, to shelter the port, by which means it is calculated that the harbour will accommodate 200 sail of large vessels at spring-tides, and the town be highly benefited. The rocks here are streaked with a resemblance of copper, of which there are some mines in the neighbourhood. It is a custom of the manor here, that, on the death of every person worth ten pounds, ten shillings shall be paid to the vicar. By the pilchard trade, and that of Cornish slates, this town has thriven greatly, and twenty or thirty sail of ships belong to it. It is a corporation, governed by a mayor, thirty-six burgesses, a recorder, town-clerk, &c., and sends two members to parliament. It has a spacious church, which is often washed by the sea.

IVES (St.), a market-town in Huntingdonshire, sixty-four miles from London. It has a fine stone bridge over the Ouse, had in the ninth century a mint, and was noted for its medicinal water. It has a good market on Monday for fatted cattle brought from the north; and two fairs. Here Oliver Cromwell rented a farm before he was chosen a burgess for Cambridge.

JUG, *n. s.* Dan. *jugge;* Lat. *jugulum.* A large drinking vessel with a gibbous or swelling belly.

You'd rail upon the hostess of the house,
Because she bought stone *jugs* and no sealed quarts.
Shakspeare.

He fetched 'em drink,
Filled a large *jug* up to the brink. *Swift.*

JUGERUM, in Roman antiquity, a square of 120 Roman feet; its proportion to the English acre being as 10·000 to 16·097.

JUGGERNATH, or JAGATNATHA, (i. e. the Lord of the world), a temple and place of Hindoo worship, on the sea coast of Orissa, near the town of Pursotem, esteemed by its wretched votaries the most sacred of their establishments. From a distance it seems a shapeless mass of building, forming an excellent land-mark for navigators. On approaching it several courts or enclosures are found to surround the interior, where no European is admitted. At the outer gate are two large statues of an imaginary animal, nearly

as large as an elephant. Juggernath, the idol, is made of dark wood, with a distended mouth, and frightful visage. At his side are seated two other images, one painted white, the other yellow: the first is said to be that of his sister Shubudra, the other his brother Balaram. These images on particular festivals are dressed, and placed on an immense carriage or moving tower, called a rutkh, which is drawn by the pilgrims attending the place. During the procession devotees sacrifice themselves, by falling under the wheels of this carriage. Juggernath is accounted one of the incarnations of Vishnu, and the temple here is known to have existed above 800 years. Between the years 1720 and 1730 the rajah of Persotem removed the image to the mountains on the western border of Orissa, which injured the revenues; but the nabob Alaverdy Khan made him restore it. The concourse of pilgrims to this place is so immense, that the revenue which the East India Company derived from them amounts it is said, to £12,000 annually. A road has been lately made from Calcutta to Juggernath, at the expense principally of a rich Hindoo.

JUG'GLE, *v. n.* & *n. s.*, JUG'GLER, *n. s.*, JUG'GLINGLY, *adv.* Fr. *jongler*; Lat. *joculor*. To play tricks by slight of hand; to practice artifice or imposture: juggle, a trick of legerdemain; an imposture, or deception: juggler, one who practises slight of hand; a cheat, a trickish fellow: jugglingly, after the manner of a cheat.

Aristæus was a famous poet, that flourished in the days of Crœsus, and a notable *juggler*. *Sandys.*

They say this town is full of cozenage,
As nimble *jugglers* that deceive the eye,
Drug-working sorcerers that change the mind,
Disguised cheaters, prating mountebanks,
And many such like libertines of sin. *Shakspeare.*

Is't possible the spells of France should *juggle*
Men into such strange mockeries? *Id.*

O me, you *juggler*; oh, you canker blossom,
You thief of love; what, have you come by night
And stolen my love's heart from him? *Id.*

Be these *juggling* fiends no more believed,
That palter with us in a double sense.
Id. Macbeth.

I saw a *juggler* that had a pair of cards, and would tell a man what card he thought. *Bacon.*

I sing no harm
To officer, *juggler*, or justice of peace. *Donne.*

The ancient miracle of Memnon's statue seems to be a *juggling* of the Ethiopian priests. *Digby.*

They ne'er forswore themselves, nor lied,
Disdained to stay for friends consents;
Nor *juggled* about settlements. *Hudibras.*

Fortune-tellers, *jugglers*, and impostors, do daily delude them. *Browne's Vulgar Errours.*

The notion was not the invention of politicians, and a *juggle* of state to cozen the people into obedience. *Tillotson.*

The *juggler* which another's slight can shew,
But teaches how the world his own may know.
Garth.

One who is managed by a *juggler* fancies he has money in hand; but, let him grasp it never so carefully, upon a word or two it increases or dwindles.
Addison's Freeholder.

What magick makes our money rise,
When dropt into the southern main;
Or do these *jugglers* cheat our eyes? *Swift.*

Let all my soldiers quaff
That generous juice, by *juggling* priests denied.
Darcy's Love and Ambition

Keep thy smooth words and *juggling* homilies
For those who know thee not.
Byron. Sardanapalus.

JUGLANS, in botany, a genus of the monœcia order, and polyandria class of plants; natural order fiftieth, amentaceæ. Male CAL. monophyllous and squamiform: COR. divided into six parts; there are eighteen filaments. Female CAL. quadrifid, superior: COR. quadripartite; there are two styles, and the fruit a plum with a furrowed kernel. There are five species.

1. J. alba, the white, and

2. J. nigra, the black Virginia walnut, are cultivated in this country, though, having very small kernels, they are less proper for fruit than the

3. J. regia, the common walnut. This tree rises fifty feet high or more, with a large upright trunk, branching into a very large spreading head, with large pinnated leaves, of two or three pairs of oval, smooth, somewhat serrated lobes, terminated by an odd one; and monœcious flowers, succeeded by clusters of large green fruit enclosing furrowed nuts of different shapes and sizes. All the sorts are propagated by planting their nuts, which will grow in any common soil. The nuts being procured in the proper season, in their outer covers or husks if possible, they should be preserved in dry sand until February, and then planted. After two years' growth in the seed-bed, they are to be taken out, and planted in the nursery, where they must remain till grown five or six feet high, when they must be transplanted where they are to remain; but, if intended for timber as well as fruit trees, they ought to be finally transplanted when they have attained the height of three or four feet. The fruit is used at two different stages of growth; when green to pickle, and when ripe to eat raw. Walnuts are ready for pickling in July and August, and are fully ripe in September and October. As soon as gathered, lay them in heaps a few days to heat and sweat, to cause their outer husks, which adhere closely, to separate from the shell of the nut; then clean them from the rubbish, and deposit them in some dry room for use, covering them over closely with dry straw half a foot thick, and they will keep three or four months. The wood of the walnut tree is also very valuable; cabinet-makers esteem it highly for several sorts of furniture and light works; for, being beautifully veined, it takes a fine polish, and the more knotty it is, the more it is valued. Walnut trees are also well adapted for planting round the borders of orchards, where, by their large spreading heads, they guard the smaller fruit trees from boisterous winds. The kernels are similar in quality to almonds, but are not, like them, used in medicine.

JUGLER (John Frederick), a Saxon philological writer, was born near Naumburgh, in 1714. Having been for some time employed in teaching youth, he was nominated counsellor to the king of England, and Inspector of the Equestrian Academy of Lunenburg. He died in 1791 His principal literary work is Bibliotheca Historiæ

Literariæ Selecta, 3 vols. 8vo. founded on Struve's Introduction to the History of Literature. He was the author likewise of Memoirs of Eminent European Statesmen and Lawyers, 6 vols. 8vo.; a Dissertation on the Use of Libraries, &c.

JU'GULAR, *adj.* & *n. s.* Lat. *jugulum.* Belonging to the throat: a vein of the neck.

A gentleman was wounded into the internal *jugular*, through his neck. *Wiseman's Surgery.*

He died as born, a Catholic in faith,
Like most in the belief in which they're bred,
And first a little crucifix be kissed,
And then held out his *jugular* and wrist.
Byron. Don Juan.

JUGULAR, among anatomists, is applied to certain veins and glands of the neck. See ANATOMY.

JUGULARES, in the Linnæan system, an order or division of fish, the general character of which is, that they have ventral fins before the pectoral fins. See the article PISCES.

JUGUM, the yoke, a disgrace inflicted by the Romans upon their vanquished enemies, by making them pass singly between two spears, with a third laid over the top of them.

JUGURTHA, the illegitimate son of Manastabal, the brother of Micipsa, sons of Masinissa, king of Numidia. Micipsa, who inherited his father's kingdom, educated his nephew with his two sons Adherbal and Hiempsal; but, as he saw that the former was of an aspiring disposition, he sent him with a body of troops to the assistance of Scipio, who was besieging Numantia, hoping thus to get rid of a youth whose ambition seemed to threaten the tranquillity of his children. His hopes were frustrated; Jugurtha showed himself brave and active, and endeared himself to the Roman general. Micipsa appointed him successor to his kingdom along with his sons; but the kindness of the father proved fatal to the children. Jugurtha destroyed Hiempsal, and stripped Adherbal of his possessions, and obliged him to fly to Rome. The Romans listened to the well-grounded complaints of Adherbal; but Jugurtha's gold prevailed among the senators, and the supplicant monarch, forsaken in his distress, perished by the snares of his enemy. Cæcilius Metellus was at last sent against Jugurtha; and his firmness and success soon reduced the crafty Numidian, obliging him to fly among his savage neighbours for support. Marius and Sylla succeeded Metellus, and fought with equal success. Jugurtha was at last betrayed by his father-in-law Bocchus, and delivered up to Sylla, A. A. C. 106. He was exposed to the view of the Roman people, and dragged in chains to adorn the triumph of Marius. He was afterwards thrown into prison, and suffered to perish of hunger.

IVICA, or YVICA. See YVICA.

JUICE, *n. s.* } Lat. *jus;* Fr. *jus;* Dut.
JUICE'LESS, *adj.* } *juys.* The sap of plants and
JUI'CINESS, *n. s.* } fruits; formerly the fluids
JUI'CY, *adj.* } of animal bodies were so called: juiceless, without moisture, or fluidity: juicy, moist; full of juice; succulent.

Earth being taken out of watery woods, will put forth herbs of a fat and *juicy* substance. *Bacon.*

Each plant and *juiciest* gourd will pluck. *Milton.*

Juice in language is less than blood; for if the words be but becoming and signifying, and the sense gentle, there is *juice;* but where that wanteth, the language is thin, scarce covering the bone.
Ben Jonson's Discoveries.

The musk's surpassing worth! that in its youth,
Its tender nonage, loads the spreading boughs
With large and *juicy* offspring. *Phillips.*

When Boreas' spirit blusters sore,
Beware the inclement heavens; now let thy hearth
Crackle with *juiceless* boughs. *Id.*

An animal whose *juices* are unsound can never be nourished: unsound *juices* can never repair the fluids.
Arbuthnot.

If I define wine, I must say, wine is a *juice* not liquid, or wine is a substance; for *juice* includes both substance and liquid. *Watts.*

Unnumbered fruits,
A friendly *juice* to cool thirst's rage contain.
Thomson.

Pleasure admitted in undue degree
Enslaves the will, nor leaves the judgment free.
'Tis not alone the grape's enticing *juice*
Unnerves the moral powers, and mars their use.
Cowper. Progress of Error.

The grapes gay *juice* thy bosom never cheers—
Thou—more than Moslem—when the cup appears—
Think not I mean to chide—for I rejoice
What others deem a penance is thy choice.
Byron. Corsair.

The JUICES OF PLANTS, for medicinal purposes, are expressed to obtain their essential salts, either to be used without preparation, or to be made into syrups and extracts. The general method is, by pounding the plant in a marble mortar, and then by putting it into a press. In this manner is obtained a muddy, green liquor, which generally requires to be clarified. All juices are not extracted with equal ease. Some plants, even when fresh, contain so little juice, that water must be added. Others, which contain a considerable quantity of juice, furnish but a small quantity of it by expression, because they contain also much mucilage, which renders the juice so viscid that it cannot flow.—Water must also be added to these plants to obtain their juice. The juices thus obtained are not, properly speaking, one of their principles, but a collection of all the proximate principles of plants soluble in water. The juice contains also some part of the resinous substance, and the green coloring matter, which in almost all vegetables is of a resinous nature. Juices which are acid, and not very mucilaginous, are spontaneously clarified by rest and gentle heat. The juices of most antiscorbutic plants, abounding in saline volatile principles, may be disposed to filtration merely by immersion in boiling water; and as they may be contained in closed bottles, while they are thus heated in a water bath, their saline volatile part, in which their medicinal qualities chiefly consist, may thus be preserved. The most general method of clarification, for those juices which contain much mucilage, is boiling with the white of an egg. The juices, especially before they are clarified, contain almost all the same principles as the plant itself; because, in the operation by which they are extracted, no decomposition happens, but every thing remains, as to its nature, in the same state as in the plant. The principles contained in the juice are only separated from the grosser, oily, earthy, and resinous part, which compose the solid matter that remains under the press. These

juices, when well prepared, have therefore the same medicinal qualities as the plants from which they are obtained. Different parts of the same plant, yield different juices. The same veins in their course through the different parts of the plant, yield juices of a different appearance. Thus the juice in the root of the cow parsnip is of a brimstone color; but in the stalk it is white.

JU'JUB, *n. s.* } Lat. *zizyphus*. A plant JU'JUBES, *n. s.* } whose flower consists of several leaves, which are placed circularly and expand in form of a rose. The fruit is like a small plum, but it has little flesh upon the stone.—Miller.

JUKE, *v. n.* Fr. *jucher*.

To perch upon any thing as birds.

Juking, in Scotland, denotes still any complaisance by bending of the head.

Two asses travelled; the one laden with oats, the other with money: the money-merchant was so proud of his trust, that he went *juking* and tossing of his head. *L'Estrange.*

JUL, or JOL, a Gothic word signifying a sumptuous feast; and particularly applied to a religious festival, first among the heathens and afterwards Christians. By the latter it was given to Christmas; which is still known under the name Iul, Iule, or Yool, and hence too January was by the Saxons styled Giuli, i. e. the Festival. As this feast had originally been dedicated by our heathen ancestors to the sun, their supreme deity; so the Christians, for the purpose of engaging the minds of their Gentile brethren, ordered it should be celebrated in memory of the birth of Christ: and thus it has been through ages a feast of joy and entertainment.

JULAMERICK, an elevated district in the east of Kurdistan, having the pachalic of Bagdad on the south, and Armenia on the north. It produces in some places a quantity of corn, and abundance of pasturage every where. There is a great number of villages, but only one town in the province, called also Julamerick. It is on the banks of the Hakiar, and has a citadel built of stone. Inhabitants 1000: 120 miles E. S. E. of Betlis.

JU'LAP, *n. s.* A word of Arabic original; Low Lat. *julapium*; Fr. *julep*.

Behold this cordial *julap* here,
That flames and dances in his crystal bounds
With spirits of balm and fragrant syrups mixt.
Milton.

Julap is an extemporaneous form of medicine, made of simple and compound water sweetened, and serves for a vehicle to other forms not so convenient to take alone. *Quincy.*

If any part of the after-birth be left, endeavour the bringing that away; and by good sudorificks and cordials expel the venom, and contemperate the heat and acrimony by *julaps* and emulsions.
Wiseman's Surgery.

Here the great masters of the healing art,
These mighty mock-defrauders of the tomb,
Spite of their *julaps* and catholicons
Resign to fate! *Blair's Grave.*

JULAP, or JULEP. See PHARMACY.

JULIA, the daughter of Augustus, was famous for her accomplishments, and infamous for her lewdness, for which her father banished her. She married Metellus, Agrippa, and lastly Tiberius; who suffered her to perish for want.

JULIA LEX, in Roman antiquity, a law made by Julius Cæsar, A. U. C. 691; confirming the privileges of all Greece; and ordaining that the Roman magistrates should act there as judges, &c. There were nine other Juliæ Leges enacted in the reign of Augustus; one of which punished adultery with death; and another, de maritandis ordinibus, proposed rewards to such, of a certain description, as married, and punished celibacy. It also permitted patricians, senators excepted, to intermarry with libertini.

JULIAN, a celebrated Roman emperor, styled the Apostate, because, though he professed the Christian religion before he ascended the throne, he afterwards openly embraced Paganism, and endeavoured to abolish Christianity. He made no use of violence, however, for this purpose; but behaved with a politic mildness to the Christians; recalled all who had been banished on account of religion under Constantius: but he prohibited Christians to plead before courts of justice, or to enjoy any public employments. He even prohibited their teaching polite literature; well knowing the great advantages they drew from profane authors in their attacks upon Paganism and irreligion. Though he on all occasions showed a sovereign contempt for the Christians, whom he called Galileans, yet he was sensible of the advantage they obtained by their virtue and the purity of their manners; and therefore incessantly proposed their example to the Pagan priests. At last, however, when he found that all other methods failed, he gave public employments to the most cruel enemies of the Christians, when the cities in most of the provinces were filled with tumults and seditions, and many of them were put to death. Historians mention, that Julian attempted to prove the falsehood of our Lord's prediction with respect to the temple of Jerusalem, by rebuilding it; but that all his endeavours served only the more perfectly to verify it. See JERUSALEM. Julian being mortally wounded, in a battle with the Persians, it is said that he caught in his hand some of the blood which flowed from his wound, and throwing it towards heaven, cried, 'Thou Galilean hast conquered.' But Theodoret relates, that Julian discovered a different disposition, and employed his last moments in conversing with Maximus the philosopher, on the dignity of the soul. He died the following night, aged thirty-two. For an account of his reign and exploits, see WESTERN EMPIRE. No prince was ever more variously represented by different authors; on which account it is difficult to form a true judgment of his character. It must, however, be acknowledged, that he was learned, liberal, temperate, brave, vigilant, and a lover of justice: but, on the other hand, he had apostatised to Paganism; was an enemy to the Christian religion; and was, in fact, a persecutor, though not of the most sanguinary class. We have several of his discourses or orations; some of his letters; a treatise entitled Misopogon, which is a satire on the inhabitants of Antioch; and some other pieces, all written in an elegant style. They were published in Greek and Latin by father Petau in 1630, in 4to., and Spanhemius gave a fine edition of them in

folio in 1696. His most famous work was that composed against the Christians, of which some fragments are preserved in Cyril's refutation of it.

JULIAN ALPS, an extensive chain of mountains in Maritime Austria, between Italy and Germany, chiefly in the province of Friuli.

JULIAN CALENDAR, that depending on and connected with the Julian year. See KALENDAR.

JULIAN EPOCH, the era of the institution of the Julian reformation of the calendar, which began A. A. C. 46.

JULIAN PERIOD, in chronology, a period so called, as being adapted to the Julian year. See CHRONOLOGY, Index. It is made to commence before the creation. Its principal advantage is, that the same years of the cycles of the sun, moon, and indiction, of which three cycles it was made to consist by Joseph Scaliger in 1580, belonging to any year of this period, will never fall together again till after the expiration of 7980 years. There is taken for the first year of this period that which has the first of the cycle of the sun, the first of the cycle of the moon, and the first of the indiction cycle, and so reckoning on. The first year of the Christian era is always, in our systems of chronology, the 4714th of the Julian period. To find what year of the Julian period any given year of Christ answers to: to the given year of Christ add 4713, because so many years of the Julian period were expired A. D. 1.; and the sum gives the year of the Julian period sought.

JULIEN (Pierre), one of the most eminent of modern sculptors, was born in 1731, at Paulien in France, and applied himself to the study of the art at Lyons, where he obtained an academical prize. He then went to Paris, and placed himself under Coustou; visited Rome in 1768; and left behind him several admirable specimens which he there executed. Ten years afterwards appeared his principal production, The Dying Gladiator. This gained him a seat in the French Academy, and his best works still excite the admiration of connoisseurs. He died in 1804.

JULIERS, a fertile duchy of Westphalia, now annexed to Prussia, and included in the government of Aix-la-Chapelle. It is seated between the Maese and the Rhine, and bounded by Prussian Guelderland on the north, by Cologne on the east, and by the Netherlands on the west. It contains a superficial area of about 1600 miles, and yields an annual revenue of £100,000. Its horses and flax are much esteemed, and form large articles of trade. Fine linen is also manufactured and sent to Holland. The duchy belonged for a considerable time to the sovereigns of Cleves; but, the reigning family becoming extinct in 1609, the succession was disputed during the long war, terminated by the peace of Westphalia in 1642. By that treaty, Juliers was allotted to the palatine of Neuberg, and belonged to that family, and to the elector palatine, till the peace of Luneville, when it was ceded to France: in 1815 it was first transferred to Prussia.

JULIERS, or JULICH, is a small strong town in the government of Aix-la-Chapelle, the capital of the above duchy. It stands near the Ruht, and has manufactures of vinegar and leather. It was taken by prince Maurice of Nassau in 1610, and by the Spaniards in 1622. It was surrendered at discretion to the French under Pichegru on the 9th of October, 1794, after a battle fought near it on the 6th, wherein the Austrians lost above 4000 men killed and wounded, and 800 prisoners. There were six pieces of cannon, and 50,000 lbs. of powder in the arsenal. Inhabitants 2150: twenty-two miles west of Cologne, and fifteen north-east of Dusseldorf.

JULIS, a town of the isle of Coos, famous for being the birth place of Simonides. Its walls were of marble (Plin. iv. c. 12), and there are still parts of these monuments of its ancient splendor remaining entire, above twelve feet high.

JULIUS, the surname of a celebrated patrician family in Rome, who claimed their descent from Iulus, the son of Æneas. They were brought to Rome by Romulus, where they soon enjoyed the highest offices in the republic, which was at last overturned by one of them. The Cæsars were a branch of the Julian family.

JULIUS CÆSAR. See CÆSAR.

JULIUS I., pope of Rome, succeeded Mark, A. D. 337. He was a man of great learning and piety. Some of his letters are extant. He sent legates to the council of Sardis, and supported the cause of Athanasius. He died in 352.

JULIUS II. (Julian de la Rovere), pope, remarkable for his warlike disposition: he engaged the principal powers of Europe to league with him against the republic of Venice, called the League of Cambray, in 1508. The Venetians having purchased peace, by the cession of part of Romania, Julius turned his arms against Louis XII. king of France, and appeared in person, armed cap-a-pee, at the siege of Mirandola; which he took by assault in 1511. But, proceeding to excommunicate Louis, the king wisely turned his own weapons against him, by calling a general council at Pisa: at which the pope, refusing to appear, was declared to be suspended from the holy see; and thus Louis, in his turn, excommunicated the pope, who died soon after in 1512. He built the famous church of St. Peter at Rome, and was a patron of the polite arts.

JULIUS VICUS, in ancient geography, a town of the Nemetes in Gallia Belgica, situated between the Tres Tabernæ, and Noviomagus, now called GERMERSHEIM, which see.

JULLIE, a town of France in the department of Rhone and Loire, five miles north of Villefranche.

IULUS, a name of Ascanius.

IULUS, a son of Ascanius, born in Lavinium. In the succession of the kingdom of Alba, Ænius Sylvius, the son of Æneas and Lavinia, was preferred to him. He was, however, made chief priest.

IULUS, in entomology, a genus of insects of the order aptera. The feet are very numerous, being on each side twice as many as the seg-

ments of the body; the antennæ are moniliform; there are two articulated palpi; and the body is of a semicylindrical form. There are several species.

1. I. sabulosus, is of an ashen color, smooth, and sometimes has two longitudinal bands of a dun-color upon its back. The body is composed of about sixty segments, which appear double; one part of the segment being quite smooth, the other charged with longitudinal striæ, set very close together, which causes the cylindric body of the insect to appear intersected alternately with smooth and striated segments. Each segment gives rise to two pairs of feet, which makes 240, or 120 feet on each side. These feet are slender, short, and white. The antennæ are very short, and consist of five rings. The insect, when touched, rolls itself up into a spiral form; so that its feet are inwards, but yet turned towards the ground. It is found together with the following species, to which it bears a resemblance, though it is much larger.

2. I. terrestris, is a small species, having on each side 100 very short closely set feet. The body is cylindrically round, consisting of fifty segments, each of which gives rise to two pairs of feet; by which means the feet stand two and two by the side of each other, so that between every two there is a little more space. Its color is blackish, and the animal is very smooth. It is met with under stones, and in the earth. See ENTOMOLOGY.

JU'LUS, *n. s.* July flower.

Julus, ιουλος, among botanists, denotes those long worm-like tufts or palms, as they are called in willows, which at the beginning of the year grow out, and hang pendular down from hazels, walnut-trees, &c.—Miller.

JULY', *n. s.* Lat. *Julius;* Fr. *juillet.* The month anciently called quintilis, or the fifth from March, named July in honor of Julius Cæsar; the seventh month from January.

> Then came hot *July*, boiling like to fire,
> That all his garments he had cast away
> Upon a lion raging yet with ire,
> He boldly rode and bade him to obay.
> *Spenser. Faerie Queene.*

July I would have drawn in a jacket of light yellow, eating cherries, with his face and bosom sunburnt. *Peacham.*

> Tight boxes, neatly sashed, and in a blaze,
> With all a *July* sun's collected rays,
> Delights the citizen, who gasping there,
> Breathes clouds of dust, and calls it country air.
> *Cowper. Retirement.*

JULY, the month during which the sun enters the sign Leo. Mark Antony first gave this month the name of Julius, after Julius Cæsar, who was born in it. On the 19th day of this month the dog-days are commonly supposed to begin; when, according to Hippocrates and Pliny, 'the sea boils, wine turns sour, dogs go mad, the bile is increased and irritated, and all animals decline and languish.'

JU'MART, *n. s.* Fr.

Mules and *jumarts*, the one from the mixture of an ass and a mare, the other from a mixture of a bull and a mare, are frequent. *Locke.*

JUM'BLE, *v. a.*, *v. n.*, & *n. s.* In Chaucer *jombre*, from Fr. *combler*.—Skinner. To mix violently and confusedly together: to be agitated together: jumble, confused mixture; a mass of incongruous articles.

> Ne *jombre* no discardant thing ifere,
> As thus, to usen termes of phisicke;
> In loves termes holde of thy matere
> The forme alwaie; and doe that it be lik;
> For if a painter would ypaint a pike
> With asses feete, and hedded as an ape,
> It cordeth not; so were it but a jape!
> *Chaucer. Troilus and Creseide.*

Had the world been coagmented from that supposed fortuitous *jumble*, this hypothesis had been tolerable. *Glanville.*

> How tragedy and comedy embrace,
> How farce and epick get a *jumbled* race. *Pope.*

Persons and humours may be *jumbled* and disguised; but nature, like quicksilver, will never be killed. *L'Estrange.*

A verbal concordance leads not always to texts of the same meaning: and one may observe, how apt that is to *jumble* together passages of Scripture, and thereby disturb the true meaning of holy Scripture. *Locke.*

> Writing is but just like dice,
> And lucky mains make people wise;
> And *jumbled* words, if fortune throw them,
> Shall, well as Dryden, form a poem. *Prior.*

Is it not a firmer foundation for tranquillity, to believe that all things were created, and are ordered for the best, than that the universe is mere bungling and blundering; all ill-favoredly cobbled and *jumbled* together by the unguided agitation and rude shuffles of matter? *Bentley.*

They will all meet and *jumble* together into a perfect harmony. *Swift.*

What *jumble* here is made of ecclesiastical revenues, as if they were all alienated with equal justice. *Id.*

JUMBOO, or JUMNOO, an independent district of Hindostan, on the east side of the Acosines, or Chunab River, and in about the thirty-third degree of northern latitude. It is governed by a Hindoo chief, and is considered one of the most flourishing of the native districts.

Jumboo, the capital, is situated on the side of a hill, on the banks of a small river which falls into the Chunab, on the high road from Cashmere to Delhi. The traffic of Cashmere, which formerly passed through Lahore, has, since that country has fallen into the hands of the Seiks, been turned into this channel. Several water-mills have been erected in the neighbourhood.

JU'MENT, *n. s.* Fr. *jument;* Lat. *jumentum.* Beast of burden.

Juments, as horses, oxen, and asses, have no eructation, or belching. *Browne's Vulgar Errours.*

JUMNA, or YUMNA, a river of Hindostan, which has its source in the Himmaleh Mountains. Before it reaches the thirtieth degree of northern latitude, it is between 200 and 300 yards broad; and, on entering the province of Delhi, directs its course, at the distance of from fifty to seventy miles, in a parallel line to that of the Ganges. Passing Delhi and Agra it now falls into the Ganges at Allahabad. Its length may be estimated at 780 miles; but above its junction with the Chumbul, that is, ten miles below the fort of Etayeh, it is fordable from the month of October

till June. In the rainy season, however, it may be navigated by flat-bottomed boats of considerable burden. The country between the Jumna and Ganges is called by the Hindoos Anterbede, and by the Mahommedans, Dooab.

In the year 1815 Mr. James Baillie Fraser explored a portion of that unknown and interesting region, which lies in the bosom of the Himalaya Mountains, and gives birth to several of the greatest rivers in India. He proceeded from Delhi to Nahn, and thence through the districts of Sirmoor, Joobul, and Bischur to the Sutledge. Returning to the banks of the Jumna, he penetrated to the very sources of that river, and viewed it collecting from numerous small streams formed by the melting of the snow. From Jumnatree he crossed the snowy range to the Baghirtuee, the greatest and most sacred branch of the Ganges, and, following up the course of this river, he reached Gangootree. Mr. Fraser's observations made at this spot, beyond which he found it impracticable to penetrate, tend to confirm the prevailing belief of the Hindoos, and the accounts of the ancient Shasters, that this magnificent river, equally an object of veneration, and a source of fertility, plenty, and opulence to Hindostan, rises within five miles due east of Gangootree; and that the Ganges finds its origin in a vast basin of snow, confined within the five mighty peaks of Roodroo Himala. This mountain, reckoned the loftiest and largest of the snowy range in this quarter, and probably yielding to none in the whole Himalaya range, is supposed to be the throne or residence of Mahadeo. It has five principal peaks called Roodroo Himala, Burrumpoore, Bissempoore, Oodgurreekanta, and Sooryarounee. These form a semicircular hollow of a very considerable extent, filled with eternal snow; from the gradual dissolution of which the principal part of the stream is generated. Mr. Fraser's journal embraces a full account of the very singular state of society which is found among the inhabitants of these lofty regions: copious extracts were read in the Royal Society at Edinburgh in 1819.

Captain Hodgson's journey to these regions, however, has thrown still more light on this interesting subject. 'In the maps published ten years ago,' he says (Asiatic Researches, vol. xiv.), 'the Jumna is laid down as having a very long course from the latitude of 34° 30′. It was not known, until the year 1814, that the Jumna, properly so called, was a comparatively small river above its junction with the Tonse in the Dún, and I believe the existence of the latter river, though fully treble the size of the Jumna, was unknown to Europeans.

'The junction of the Tonse and Jumna takes place at the north-west end of the Dún valley, in lat. 30° 30′, where the large river loses its name in that of the small one, and the united stream is called the Jumna. The course of the Jumna from Jumnotri, which is in lat. 30° 59′, is generally south 50° west. It is fordable above the confluence, but the Tonse is not. Not having yet visited the sources of the Tonse, I am not certain whether it rises within the Himálaya, as the B'hágirathi does, or at its south-west, or exterior base, like the Jumna; but the latter I believe to be the case. I apprehend that three considerable streams, which, like the Jumna, originate from the south faces of the Himàlaya, in the districts of Barasa, Leuiowari, and Deodara Kowarra, join to form the Tonse; and it receives a considerable accession of water from the Paber River, which I imagine to be equal in size to any of the three above mentioned feeders. Respecting them, I have at present only native information to guide me, but of the Paber I can speak with more confidence; for when, in June 1816, I penetrated within the Himálaya, by the course of the Setlej, I found that the north bases of many of the snowy peaks, seen from the plains of Hindostan, were washed by that river; its course, in the province of Kunaur, in lat. 31° 31′, and long. 78° 18′, being from east 25° south, to 25° to the north of west. In this position, the Setlej is bounded both to the north and south by high and rugged snowy mountains, from which many torrents descend, and increase its bulk. Leaving the left bank, and bed of the river, I ascended the snowy range, of which it washes the north base, and crossed over it on the 21st of June, 1816, at forty minutes past eleven o'clock in the forenoon, during a heavy fall of snow, being the first European who effected a passage over the grand Himálaya ridge in that direction.

'On surmounting the crest of the pass, I found that the Indravatí River, which is a principal branch of the Paber, originated from the snows, on which I descended, on the south-west, or hither side of the ridge; and I followed its channel to the place where it joins the Paber, which river must have its beginning, in like manner, on the same side of the ridge, as I was informed by the people of the country it had, and I am nearly certain it is the case; and it is most probable, that all the streams which form the Tonse do, in like manner, descend from the south-west side of the fronting snowy range, the north-east base of which is washed by the Setlej, as above mentioned.'

He says afterwards, 'The Camaulda is the largest river which the Jumna receives above the confluence of the Tonse; its course is from north 10° west, down the Ráma Seráí district, which is a small valley, and is reported to be in some places a mile wide, but it is now overrun with jungles, full of wild beasts. The Camaulda, now swollen by the rain, is about seventy feet wide, and two feet and a half deep, and very rapid. Immediately on crossing it, the country up the Jumna assumes a more pleasing appearance; the mountains which bound it, though very lofty, do not rise so abruptly, and several small villages are seen on their lower slopes. On the right bank of the river there is a slip of level ground 300 to 500 yards wide. The summits of the mountains are covered by cedars and other pines, and the snow yet lies on them.'

On the 21st of April captain Hodgson went from Cursali to Jumnotri, a distance of two miles seven furlongs. He ascended at Bhairo-Ghati, the steepest ascent he ever met with, by cutting steps in the snow with spades. He then

descended a steep path, by steps cut in the snow, to the Jumna, where a cascade of the stream cuts through the snow, and falls from a rock about fifty feet high. Excepting where the stream is visible for a few yards, through a hole in the snow, the snow-bed is about 100 yards wide, and bounded by high precipices, from which masses of rock of forty feet in length have recently fallen.

'At Jumnotri, the snow which covers and conceals the stream is about sixty yards wide, and is bounded to the right and left by mural precipices of granite; it is forty feet five inches and a half thick, and has fallen from the precipices above. In front, at the distance of about 500 yards, part of the base of the great Jumnotri Mountain rises abruptly, cased in snow and ice, and shutting up and totally terminating the head of this defile, in which the Jumna originates. I was able to measure the thickness of the bed of snow over the stream very exactly, by means of a plumb-line let down through one of the holes in it, which are caused by the steam of a great number of boiling springs which are at the border of the Jumna. The snow is very solid and hard frozen; but we found means to descend through it to the Jumna, by an exceedingly steep and narrow dark hole made by the steam, and witnessed a very extraordinary scene, for which I was indebted to the earliness of the season, and the unusual quantity of snow which has fallen this year. When I got footing at the stream (here only a large pace wide), it was some time before I could discern any thing, on account of the darkness of the place, made more so by the thick steam; but, having some white lights with me, I fired them, and, by their glare was able to see and admire the curious domes of snow over head; these are caused by the hot steam melting the snow over it. Some of these excavations are very spacious, resembling vaulted roofs of marble; and the snow, as it melts, falls in showers, like heavy rain, to the steam which appears to owe its origin in a great measure to these supplies. Having only a short-scaled thermometer with me, I could not ascertain the precise heat of the spring, but it was too hot to keep the finger in it for more than two seconds, and must be near the boiling point. Rice boiled in it but imperfectly. The range of springs is very extensive, but I could not visit them all, as the rest are in dark recesses and snow caverns. The water of them rises up with great ebullition through crevices of the granite rock, and deposits a ferruginous sediment, of which I collected some. It is tasteless, and I did not perceive any peculiar smell. Hot springs are frequent in the Himálaya: perhaps they may be a provision of nature, to ensure a supply of water to the heads of the rivers in the winter season, when the sun can have little or no power of melting the snows in those deep defiles.

'From near this place, the line of the course of the Jumna is perceptible downward to near Lak'ha Mandel, and is 55° 40' south-west. From the place called Bhairo Gháti the bed of the river is overlaid with snow to the depth of from fifteen to forty feet, except at one or two places, where it shows itself through deep holes in the snow.'

JUMP, *v. n.*, *v. a.*, *adv.*, & *n. s.* Dut. *gumpen*; Lat. *junctus*. To leap or skip; to leap suddenly; to jolt to a degree; tally, or join: to pass by a leap; to pass over carelessly: exactly, nicely: jump, the act of skipping; a lucky chance. From *jupe*, a waistcoat, a kind of loose or limber stays worn by sickly ladies.

Otherwise one man could not excel another, but all should be either absolutely good, as hitting *jump* that indivisible point or center wherein goodness consisteth; or else missing it, they should be excluded out of the number of well-doers. *Hooker.*

In some sort it *jumps* with my humour. *Shakspeare.*

Do not embrace me till each circumstance
Of place, time, fortune do cohere and *jump*
That I am Viola. *Id. Twelfth Night.*

But since so *jump* upon this bloody question,
You from the Polack wars, and you from England,
Are here arrived. *Id. Hamlet.*

Herein perchance he *jumps* not with Lipsius. *Hakewill.*

Never did trusty squire with knight,
Or knight with squire, e'er *jump* more right;
Their arms and equipage did fit,
As well as virtues, parts, and wit. *Hudibras.*

This shews how perfectly the rump
And commonwealth in nature *jump*. *Id.*

The herd come *jumping* by me,
And fearless, quench their thirst, while I look on,
And take me for their fellow-citizen. *Dryden.*

Good now, how your devotions *jump* with mine. *Id.*

The surest way for a learner is, not to advance by *jumps* and large strides; let that, which he sets himself to learn next, be as nearly conjoined with what he knows already, as is possible. *Locke.*

We see a little, presume a great deal, and so *jump* to the conclusion. *Addison. Spectator.*

So have I seen from Severn's brink,
A flock of geese *jump* down together,
Swim where the bird of Jove would sink,
And swimming never wet a feather. *Swift.*

Candidates petition the emperor to entertain the court with a dance on the rope; and whoever *jumps* the highest succeeds in the office. *Gulliver's Travels.*

I am happier for finding our judgments *jump* in the notion. *Pope to Swift.*

Flings at your head conviction in the lump,
And gains remote conclusions at a *jump*. *Cowper. Conversation.*

JUN'CATE, *n. s.* } Fr. *juncade*; Ital. *gion-*
JUN'KET, *v. n.* } *cata*. Cheesecake; a kind of sweetmeat of curds and sugar; any delicacy; a furtive or private entertainment. It is now improperly written junket in this sense, which alone remains much in use: sometimes written junket, to feast secretly.

Was it a dreame or did I see it playne;
A goodly table of pure yvory
All spread with *juncats*, fit to entertayne
The greatest prince with pompous royalty. *Spenser's Sonnets.*

You know, there wants no *junkets* at the feast. *Shakspeare.*

With stories told of many a feat,
How fairy Mab the *juncates* eat. *Milton.*

The apostle would have no revelling or *junketing*. *Smith.*

Whatever good bits you can pilfer in the day, save them to *junket* with your fellow servants at night. *Swift.*

She taught him, however, very early to inspect the steward's accounts, to dog the butler from the cellar, and to catch the servants at a *junket!* *Johnson. Rambler.*

JUN'COUS, *adj.* Lat. *junceus.* Full of bullrushes.

JUNC'TION, *n. s.* } Lat. *jungo.* Union;
JUNC'TURE, *n. s.* } coalition. Juncture, the line at which things are united; a joint; union; amity; a critical point of time.

Nor are the soberest of them so apt for that devotional compliance and *juncture* of hearts, which I desire to bear in those holy offices to be performed with me. *King Charles.*

All other animals have transverse bodies; and, though some do raise themselves upon their hinder legs to an upright posture, yet they cannot endure it long, neither are the figures or *junctures*, or order of their bones, fitted to such a posture. *Hale.*

She has made the back-bone of several vertebræ, as being less in danger of breaking than if they were all one entire bone without those gristly *junctures.* *More.*

Besides those grosser elements of bodies, salt, sulphur, and mercury, there may be ingredients of a more subtile nature, which, being extremely little, may escape unheeded at the *junctures* of the distillatory vessels, though never so carefully luted. *Boyle.*

Upon the *junction* of the two corps, our spies discovered a great cloud of dust. *Addison.*

By this profession in that *juncture* of time, they bid farewell to all the pleasures of this life. *Id.*

When any law does not conduce to the publick safety, but in some extraordinary *junctures*, the very observation of it would endanger the community, that law ought to be laid asleep. *Id.*

Fly, then, and tell him, 'twas my last request
That Zames take my post until the *junction*
So hoped for, yet delayed by Ofratanes,
Satrap of Susa. *Byron. Sardanapalus.*

JUNCTURE. See JOINT.

JUNCTURE, in oratory, is a part of composition, particularly recommended by Quintilian, and denotes such an attention to the nature of the vowels, consonants, and syllables, in the connection of words, with regard to their sound, as will render the pronunciation most easy and pleasant, and best promote the harmony of the sentence. Thus the coalition of two vowels, occasioning a hollow and obscure sound, and likewise of some consonants, rendering it harsh and rough, should be avoided: nor should the same syllable be repeated at the beginning and end of words, because the sound becomes hereby harsh and unpleasant. The following verse in Virgil's Æneid is an example:

Arma virumque cano, Trojæ qui primus ab oris.

JUNCUS, the rush, in botany: a genus of the monogynia order and hexandria class of plants. natural order fifth, tripetaloideæ: COR. none: CAL. hexaphyllous: CAPS. unilocular. There are many species, which are universally known, being very troublesome weeds, and, difficult to be eradicated.

1. J. aculus, the marine rush, and

2. J. conglomeratus, the round-headed rush, are planted with great care on the banks of the sea in Holland, to prevent the water from washing away the earth; which would otherwise be removed every tide, if it were not for the roots of those rushes, which fasten very deep in the ground, and mat themselves near the surface, in such a manner as to hold the earth closely together. Therefore, whenever the inhabitants perceive that the roots of these rushes are destroyed, they are very assiduous in repairing them. In summer, when the rushes are fully grown, they are cut and tied up in bundles, which are dried, and afterwards carried into the larger towns and cities, where they are wrought into baskets. These species do not grow so strong in this country as on the Maese, where they sometimes arrive at the height of four feet and upwards.

3. J. effusus, the soft rush. The pith of this species and the conglomeratus is used for wicks to rush-lights.

4. J. odoratus, sweet rush, or camel's hay, is sometimes brought from Turkey and Arabia, tied up in bundles about a foot long. The stalk, in shape and color, somewhat resembles a barley-straw; it is full of fungous pith, like that of our common rushes: the leaves are like those of wheat, and surround the stalk with several coats, as in the reed. The flowers are of a carnation color, striped with a lighter purple. The whole plant, when in perfection, has a hot bitterish, not unpleasant, aromatic taste, and a very fragrant smell: by long keeping it loses greatly its aromatic flavor. Distilled with water, it yields a considerable quantity of essential oil. It was formerly often used in medicine as an aromatic, and in obstructions of the viscera, &c., but is very little employed at present.

JUNE, *n. s.* Fr. *Juin;* Lat. *Junius.* The sixth month from January.

And after her came iollie *June*, arrayd
All in greene leaves, as he a player were,
Yet in his time he wrought as well as playd
That by his plough-yrons mote right well appeare.
Spenser. Faerie Queene.

June is drawn in a mantle of dark green.
Peacham.

JUNE, Lat. *Junius*, is derived by some from Juno. Ovid, in the sixth book of his Fasti, makes the goddess say,

Junius à nostro nomine nomen habet.

Others rather derive it à junioribus, this being for young people as the month of May was for old ones:

Junius est juvenum; qui fuit antè senum.

In this month is the summer solstice, and the sun enters Cancer.

JUNGERMANNIA, in botany: a genus of the natural order of algæ, in the cryptogamia class of plants. Male flower pedunculated, and naked; the anthera quadrivalved. Female flower is sessile, naked, with roundish seeds. There are numerous species, natives of Britain, growing in woods and shady places, by the sides of ditches, &c. Many of them are beautiful objects for the microscope.

JUNGIA, in botany, a genus of the polygamia segregatæ order, and syngenesia class of plants; the common receptacle is chaffy; the perianth three flowered: the florets tubular.

two lipped: the exterior lip ligulate: the interior one bipartite. Species one only: a native of North Granada.

JUGIPORE, a town of Bengal, in the district of Raujeshy, on the eastern bank of the Bhagerutty River. It contains the principal silk establishment of the East India Company, which was erected in 1773, and employs 3000 persons; principally women and children. The Company have endeavoured with great success to introduce here the Italian and particularly the Novi mode of spinning silk.

JUNGHAH, a town and lordship of Suabia, belonging to the prince of Furstenburg, fourteen miles west of Buchan, and forty south of Stuttgard.

JUNIA Lex Sacrata, a law made by Lucius Junius Brutus, the first tribune of the people, A.U.C. 260, that the persons of the tribunes should be inviolable; that an appeal might be made from the consuls to the tribunes: and that no senator should exercise the office of a tribune.

JUNIATTA, a river of Pennsylvania, United States, which has its rise in the Alleghany Mountains, and, after a course of 180 miles, unites with the Susquehanna, about fifteen miles above Harrisburg. It is navigable from Bedford to its mouth, or about 150 miles.

JUNIEN (St.), a town in the department of the Upper Vienne, France, between the Vienne and the Glane. It has considerable manufactures of woollen, leather, and hats, and is twenty miles west of Limoges. Population 6000.

JU'NIOR, *adj.* Lat. *junior.* One younger than another.

According to the nature of men of years, I was repining at the rise of my *juniors*, and unequal distribution of wealth. *Tatler.*

The fools, my *juniors*, by a year,
Are tortured with suspense and fear,
Who wisely thought my age a screen,
When death approached to stand between.
Swift.

With mattock in his hand
Digs through whole rows of kindred and acquaintance
By far his *juniors*. *Blair's Grave.*

But with all this, in their aspects—
At least in some, the *juniors* of the number—
A searching eye, an eye like yours, Vincenzo,
Would read the sentence ere it was pronounced.
Byron. Marino Faliero.

JU'NIPER, *n. s.* Lat. *juniperus.* A tree.

Sweet is the Rose, but grows upon a brere;
Sweet is the *Junipeer*, but sharpe his bough;
Sweet is the Eglantine, but pricketh near;
And sweet is Moly, but his root is ill;
So every sweet with soure is tempered still.
Spenser. Sonnets.

A clyster may be made of the common decoctions, or of mallows, bay, and *juniper* berries, with oil of linseed. *Wiseman.*

Juniper Tree, juniperus, a genus of the monadelphia order, and monœcia class of plants: natural order fifty-first, coniferæ. Male amentum a calyx of scales: cor. none: three stamina: female cal. tripartite: petals three, and as many styles: berry trispermous, and equal by means of three tubercles of the indurated calyx adhering to it.

J. Bermudiana, the Bermudian cedar, grows twenty or thirty feet high, has small acute leaves by threes below, the upper ones awl-shaped, acute, and decurrent, by pairs or fours, spreading outward, and diœcious flowers, succeeded by purplish berries. It is a native of Bermudas.

J. Chinensis, has leaves decurrent, imbricate, expanding, crowded, the stem leaves threefold, the branch leaves fourfold.

J. communis, the common juniper, grows naturally in many parts of Britain upon dry barren commons, where it seldom rises above the height of a low shrub. Those who have been used to see it in its wild state, on sandy barren commons, &c., will have little inducement to plant it; as there they will see it procumbent, seldom showing a tendency to aspire: but, when planted in a good soil, it will rise to the height of fifteen or sixteen feet, and produce numerous branches from the bottom to the top, forming a well looking bushy plant. These branches are exceedingly tough, and covered with a smooth bark of a reddish color, having a tinge of purple. The leaves are narrow and sharp-pointed, growing by threes on the branches; their upper surface has a grayish streak down the middle; but the under one is of a fine green color. The flowers are small, and of a yellowish color. They are succeeded by the berries, which are of a bluish color when ripe. Of this species there is a variety called Swedish juniper, which grows ten or twelve feet high, very branchy the whole length, with the branches growing erect. But Mr. Miller says, the Swedish juniper is a distinct species. A prostrate but very dwarfish variety is mentioned by Lightfoot, under the name of dwarf Alpine juniper. It is frequently found in the Highland hills, and has broader and thicker leaves than the former; the berries are also larger, and more oval than spherical.

J. lycia, lycian cedar, or olibanum tree, grows twenty feet high, branching erect; garnished with small obtuse oval leaves, every where imbricated; having diœcious flowers succeeded by large oval brown berries. It is a native of Spain and Italy.

J. oxycedrus, the Spanish juniper, rises from ten to fifteen feet high, closely branched from the bottom to top; having short, awl-shaped, spreading leaves by threes, and small diœcious flowers, succeded by large reddish-brown berries.

J. the Phœnician cedar, grows about twenty feet high, branching pyramidally; adorned with ternate and imbricated obtuse leaves; and diœcious flowers, succeeded by small yellowish berries. It is a native of Portugal.

J. sabina, or savin tree; of which there are the following varieties, viz. spreading, upright, and variegated savin. The first grows three or four feet high, with horizontal and very spreading branches; with short, pointed, decurrent, erect, opposite leaves; and diœcious flowers, succeeded by bluish berries, but very rarely producing either flowers or fruit. The second grows eight or ten feet high, with upright branches, dark-green leaves like the former, and diœcious flowers, succeeded by plenty of berries. The third has the ends of many of the shoots and young branches variegated with white, and the

leaves finely striped; so that it makes a beautiful appearance.

J. thurifera, or blue-berried Spanish juniper, grows twenty feet high or more, branching in a conic form, with acute imbricated leaves, growing by fours, and small diœcious flowers, succeeded by large blue berries.

J. Virginiana, the Virginia cedar, grows thirty or forty feet high, branching from bottom to top in a conic manner, small leaves by threes adhering at their base; the younger ones imbricated, and the old ones spreading, with diœcious flowers, succeeded by small blue berries.

All the junipers are propagated by seeds, and the savins by layers and cuttings; but these last may also be raised from the berries, if they can be procured. They may all be sown in beds of common light earth; except the cedar of Bermudas, which must be sown in pots for shelter in winter. When the hardy kinds have had two or three years' growth, in the seed-bed, they may be planted out in autumn, or in spring, in nursery rows two feet asunder, to remain till of due size for final transplantation into the shrubbery. The Bermudas cedar must be sheltered under a frame for the first year or two; when they must be separated into small pots, to be sheltered also in winter for three or four years, till they have acquired some size and strength; then turned out into pots in the full ground, where they are to remain in a warm situation; though a shelter of mats for the first winter or two during hard frosts will be of great service. The season for transplanting all the species is either in autumn, October, or November, or in March, and early in April.

Juniper berries have a strong, not disagreeable smell; and a warm, pungent, sweet taste; which, if they are long chewed, or previously well bruised, is followed by a bitter one. The fresh berries yield, on expression, a rich, sweet, honey-like, aromatic juice; if previously pounded, so as to break the seeds, the juice proves tart and bitter.—These berries are useful carminatives and stomachics; for these purposes, a spirituous water and essential oil are prepared from them, and they are also ingredients in various medicines. The liquor remaining after the distillation of the oil, passed through a strainer, and gently exhaled to the consistence of a rob, proves likewise a medicine of great utility, and in many cases is perhaps preferable to the oil or the berry itself. This rob is of a dark brownish-yellow color, a balsamic sweet taste, with a little of the bitter. But one of the best forms under which they can be used is that of a simple watery infusion, which, with the addition of a little gin, is very useful for hydropic patients. An infusion of the tops has also been advantageously employed in the same manner. The wood when burnt emits a fragrant odor like incense. It is of a reddish color, very hard and durable; and, when large enough, is used in marquetry and veneering, and in making cups, cabinets, &c. The oil of juniper mixed with that of nuts makes an excellent varnish for pictures, wood-work, and preserving iron from rusting. The resin, powdered and rubbed into paper, prevents the ink from sinking through it, for which it is frequently used under the name of pounce.—The charcoal made from this wood endures longer than any other, insomuch that live embers are said to have been found in the ashes after being a year covered. Hence the Scriptural expression for a durable fire, 'coals of juniper.'

JUNIUS, the family surname of several eminent Romans, remarkable for their attachment to liberty. See BRUTUS, and ROME.

JUNIUS (Adrian), one of the most learned men of his age, was born at Hoorn in Holland, in 1511. He travelled into all parts of Europe, and practised physic with reputation in England; where, among other works, he composed a Greek and Latin Lexicon; an Epithalamium on the marriage of queen Mary I. with Philip II. of Spain; and Animadversa et de Coma Commentarius, which is the most applauded of all his works. He died in 1575.

JUNIUS (Francis), professor of divinity at Leyden, was born at Bourges in 1545, of a noble family, and studied at Lyons, under Bartholomew Aneau, principal of the college. He was employed in public affairs by Henry IV., and at last was invited to Leyden to be professor of divinity, which employment he discharged with honor, till he died of the plague, in 1602. Du Pin says, he was a learned and judicious critic. He wrote, in conjunction with Emmanuel Tremellius, a Latin version of the Hebrew text of the Bible. He also published Commentaries on a great part of the Holy Scriptures; and many other works, all in Latin.

JUNIUS (Francis), or Francis du Jon, the son of the professor, was born at Heidelberg in 1589. He came to England in 1620, and lived thirty years in the earl of Arundel's family. He was greatly esteemed for his profound erudition. In 1676 he went to Windsor, to visit Vossius, at whose house he died in 1677. The University of Oxford, to which he bequeathed his MSS., erected a handsome monument to his memory. He wrote, 1. De Picturâ Veterum, which is admired; the best edition is that of Rotterdam in 1694. He published the same work at London in English. 2. An Explication of the old Gothic MS. called the silver MS. This was published with notes by Thomas Mareschal. 3. A large Commentary on the Harmony of the four Gospels, still in MS. 4. A Glossary in five languages, in which he explains the origin of the Northern languages; published at Oxford in 1745, in folio, by Mr. Edward Lee.

JUNIUS. The letters of a distinguished writer who assumed this appellation, in the middle of the last century, have become classical authority in our own language; and will long be connected with the history of the early part of the reign of George III. This is doubtless owing, for the greater part, to their intrinsic excellence, especially in point of style; but the well sustained shadow under which he concealed himself—the truth of his motto Stat nominis umbra—has also largely contributed to keep alive the public interest in his works. To Mr. Woodfall, the son of his original printer, we were a few years ago indebted for a new and valuable edition of these celebrated letters, accompanied with some few private communications

of the author to his father. At the same period appeared a new, and in the judgment of some able critics (at the head of whom stood the Edinburgh Reviewers), a more plausible attempt to identify the author or rather authors of the whole. They have been attributed it is well known to lord Chatham, Burke, Mr. secretary Hamilton, Boyd, Almon, and various inferior writers; this writer attempts to solve 'this most important secret of our times,' by ascribing them to Dr. Francis, the elegant translator of Horace, and his son Sir Philip Francis.

He first considers the circumstances of time and place, and shows that Dr. Francis and his son were in the metropolis or its immediate neighbourhood during the period in which the letters were written, and in situations favorable for obtaining the information which Junius was so remarkable for possessing. The miscellaneous letters of Junius, according to Mr. Woodfall's last edition, extend from April 28th, 1767, to May 12th, 1772; the letters signed Junius, from January 21st, 1769, to January 21st, 1772; the private letters to Mr. Wilkes, from August 21st, to November 9th, 1771: and the private letters to Woodfall commence on April 20th, 1769, and close on January 1773.

Thus the whole of the letters were written between the dates of April 28th, 1767, and January 19th 1773. Now Dr. Francis died at Bath on the 5th of March, 1773. For several years previous to his death he had resided in or near London. His son was born about the year 1748. In 1773 he was appointed one of the Commissioners for the government of India. He sailed from England in the spring of 1774.

'There is nothing, therefore,' says this writer, 'in the time when these letters were written that opposes the opinion we have expressed. Dr. Francis lived three months after the date of the last private communication of Junius, and ten months after the appearance of his last miscellaneous letter. The latest of the acknowledged letters of Junius was published fourteen months before his death. Sir Philip Francis did not leave England until a twelvemonth after the date of the last communication, of any description, that can be traced to Junius.'

'Had Junius written after the death of Dr. Francis, and the departure of Sir Philip, there would be an end of our present enquiry. Or if Sir Philip had continued in England, and Dr. Francis had lived any considerable time after Junius had ceased to write, appearances would not have been so strongly in our favor. Under all the circumstances, we may certainly consider the time and place as affording some proofs of the correctness of our suggestion.'

Mr. Woodfall's Preliminary Essay certainly confirms this reasoning. 'From January, 1769, to January 1772, he (Junius) uniformly,' he says, 'resided in London, or its immediate vicinity, and never quitted his stated habitation for a longer period than a few weeks.'

Lord Barrington, Sir Philip's patron, was appointed secretary at war in 1765. As Sir Philip was introduced into the war-office at an early period of life, it probably took place soon after the appointment of his patron, at which time he was seventeen years of age. He continued in this department until he was expelled by lord Barrington in March 1772.—*Junius*, v. iii. p. 445.

There is reason then to conclude, that so long as Junius was known to be confined to London, or its immediate vicinity, Mr. Philip Francis held a situation at the war-office, which necessarily required his constant residence in town. When the latter was released from this constraint, the letters of Junius immediately evince that he himself indulged in a correspondent relaxation. So completely, indeed, does the parallel hold between the situation and peculiar circumstances of Junius and Mr. Philip Francis, as our author contends, that, when the latter finally quitted the war-office, the former entirely gave up his political lucubrations.

The connexion of Sir Philip with the war-office affords, it is alleged, still stronger evidence of its truth. Junius was distinguished for his particular knowledge of the minor concerns of the army. Malone mentions as a reason why Mr. secretary Hamilton could not have been the author of the letters, that he had none of that minute commissarial knowledge of petty military matters which is displayed in some of the earlier papers of Junius.—*Preliminary Essay*, p. 117.

'These expressions very happily designate that species of knowledge which a chief clerk in the war-office would naturally acquire. Let us see how this applies to the letters of Junius. In his first letter, Junius animadverts on the conduct of the commander-in-chief, for neglecting the merit and services of the rest of the army to heap promotions upon his favorites and dependents.'—'If the discipline of the army be in any degree preserved, what thanks, he asks, are due to a man, whose cares, notoriously confined to filling up vacancies, have degraded the office of commander-in-chief to a broker of commissions?'

In reply to Sir William Draper's vindication of lord Granby, the second letter of Junius contains the following passages:—'You say he has acquired nothing but honor in the field. Is the ordnance nothing? Are the blues nothing? Is the command of the army, with all the patronage annexed to it, nothing? Where he got these nothings I know not; but you at least ought to have told us when he deserved them,' &c.

'The last charge of the neglect of the army, is indeed the most material of all. I am sorry to tell you, Sir William, that in this article your first fact is false: and, as there is nothing more painful to me than to give a direct contradiction to a gentleman of your appearance, I could wish that, in your future publications, you would pay a greater attention to the truth of your premises, before you suffer your genius to hurry you to a conclusion. Lord Ligonier did not deliver the army (which you, in classical language, are pleased to call a palladium) into lord Granby's hands. It was taken from him much against his inclination, some two or three years before lord Granby was commander in chief. As to the state of the army, I should be glad to know where you have received your intelligence. Was it in the rooms at Bath, or at your retreat at Clifton?'

The other letters of Junius to Sir William Draper display many more proofs of this minute commissarial knowledge.

On the subject of the rescue of major-general Gansel, Junius displays the same minute knowledge of military matters: and, indeed, details the affair with a minuteness that proves he was an eye-witness of it. Every little circumstance is marked in his account with the precision of a picture painted on the spot.

We cannot follow this ingenious writer far into these details; but are struck with those relating to the appointment of colonel Luttrell to the adjutant-generalship of the army of Ireland.

'This infamous transaction,' he said, 'ought to be explained to the public. Colonel Gisborne was quarter-master-general in Ireland. Lord Townshend persuades him to resign to a Scotch officer, one Fraser, and gives him the government of Kinsale. Colonel Cunninghame was adjutant-general in Ireland. Lord Townshend offers him a pension to induce him to resign to Luttrell. Cunninghame treats the offer with contempt. What's to be done? poor Gisborne must move once more. He accepts of a pension of £500 a year, until a government of greater value shall become vacant. Colonel Cunninghame is made governor of Kinsale, and Luttrell at last, for whom the whole machinery is put in motion, becomes adjutant-general, and, in effect, takes the command of the army in Ireland.' *Junius*, vol. ii. p. 156.

But Junius, though he had obtained a knowledge of this appointment before it had obtained the royal sanction, prematurely anticipated colonel Luttrell's acceptance of it, and was a few days after compelled to announce that the minister had 'meanly rescinded this detestable promotion.' Yet he is still determined the design shall not be forgotten. 'As very few forms concurred to this appointment,' he says, 'except private commissions to a lord-lieutenant, we shall not be surprised at that effrontery which may hereafter deny the whole transaction; it is not, however, lost in igorance, because the royal fiat had purposely delayed its progress through the offices of the secretaries of state. It never, perhaps, was intended that this circumstance should have been made public, till the destruction of our rights had been at least more easily to be accomplished than it is at present.' Vol. ii. p. 158.

But he relies mainly for proof of its connexion of Junius with the war-office, and of his identity or connexion with Sir Philip Francis on the letters addressed to lord Barrington. In one of them he says, 'Let us suppose a case, which every man acquainted with the war-office will admit to be very probable.' In the second, 'By garbling and new modelling the war-office, you think you have reduced the army to subjection.—Walk in, Gentlemen, business done by Chamier and Co.—To make your office complete, you want nothing now but a paper lantern at the door, and the scheme of a lottery pasted upon the window. With all your folly and obstinacy, I am at a loss to conceive what countenance you assumed, when you told your royal master that you had taken a little Frenchified broker from Change Alley, to intrust with the management of all the affairs of his army. Did the following dialogue leave no impression upon your disordered imagination? You knew where it passed.

'*K.* Pray, my lord, whom have you appointed to succeed Mr. D'Oyly?

'*B.* Please your M——, I believe I have made a choice that will be highly acceptable to the public and to the army.

'*K.* Who is it?

'*C.* Sire, il s'appelle Ragosin. Born and educated in Change Alley, he glories in the name of broker: and, to say nothing of lord Sandwich's friendship, I can assure your M—— he has always kept the best company at Jonathan's.

'*K.* My lord, I never interfere in these matters; but I cannot help telling your lordship, that you might have consulted my honor and the credit of my army a little better. Your appointment of so mean a person, though he may be a very honest man in the mystery he was bred to, casts a reflection upon me, and is an insult to the army. At all events, I desire it may be understood that I have no concern in this ill-judged, indecent measure, and that I do not approve of it.'

'I suppose, my lord, you thought this conversation might be sunk upon the public. It does honor to his majesty, and therefore you concealed it.—In my next I propose to show what a faithful friend you have been to the army, particularly to old worn-out officers.' *Junius*, vol. iii. p. 430, &c.

Another 'Scene. The war-office,' adorns his third letter. The writer had threatened lord Barrington with sixteen letters (Junius v. iii. p. 427) being, however, dismissed at the period of the date of his fourth, this concludes the series; and now he says, that lord Barrington expelled Mr. Francis, 'because his honor and integrity were a check upon his lordship's dark proceedings; because men who do their duty with credit and ability are not proper instruments for lord Barrington to work with; they cannot be brought to connive at his jobs and underhand dealings; and, among other reasons, because lord Barrington feels himself uneasy while men with such qualications are about him.'

It is still, however, the opinion of this writer, that these letters were concocted jointly with Dr. Francis, whose Hibernicisms he traces; his intimacy with lord Holland, and his remarkable tenderness towards that nobleman's reputation: he also ingeniously accounts for Junius's dread of Garrick's enquiries, by showing that Dr. Francis and he were in the habit of meeting at the houses of lord Holland and Foote. Under the head of internal evidence he then ably considers the peculiar expressions and style of composition, and secondly, the general opinions and principles of the writers. But we have already penetrated these arcana sufficiently to excite the attention of such of our readers as feel interested in the question, and must refer for their more complete satisfaction to the work (of, we believe, Mr. Taylor) itself. It is at least the best of all the guesses at Junius.

JUNK, *n.s.* Probably an Indian word. A small ship of China.

America, which have now but *junks* and canoes, abounded then in tall ships. *Bacon's New Atlantis.*

Pieces of old cable.

JUNKSEYLON, a considerable island near the western coast of the Malay peninsula, in the south-east portion of the bay of Bengal. It is separated from the main land by a shallow channel, of about a mile in breadth: the centre of the island being in 8° N. lat. It is fifty-four miles long, by fifteen broad. The harbour, Popra, has a mud bar, which however may be passed in spring tides by vessels drawing twenty feet. Here are some valuable tin mines. The inhabitants, a mixture of Chinese, Malays, Siamese, and Birmans, are subject to the latter, and are governed by a mayoon, sent from Ummerapoora. This island was conquered from the Siamese in 1810.

JUNO, in pagan mythology, the daughter of Saturn and Rhea, the sister and wife of Jupiter, and the goddess of kingdoms and riches. She was styled the queen of heaven, and presided over marriage and child-birth. She married Jupiter; but, according to Homer, that god was sometimes obliged to use all his authority to keep her in subjection; and, on her entering into a conspiracy against him, he punished her by suspending her in the air with two anvils fastened to her feet, and golden manacles on her hands, while all the other deities looked on without being able to help her. Being jealous, she often interrupted her husband in his amours; and punished with unrelenting fury Europa, Semele, Io, Latona, and others of his mistresses. Jupiter himself having conceived Minerva, without any commerce with a female, Juno, in imitation, conceived Vulcan by the wind, Mars by touching a flower pointed out to her by Flora, and Hebe by eating lettuces. Juno, as the queen of heaven, preserved great state; her usual attendants were Terror and Boldness, Castor, Pollux, and fourteen nymphs; but her most faithful attendant was the beautiful Iris. Homer describes her in a chariot adorned with precious stones, the wheels of which were of ebony, and which was drawn by horses with reins of gold. But she is more commonly painted drawn by peacocks. She was represented in her temple at Corinth, seated on a throne, with a crown on her head, a pomegranate in one hand, and in the other a sceptre with a cuckoo on its top. This statue was of gold and ivory. Some suppose that Juno signifies the air; others that she was the Egyptian Isis.

JUNONALIA, a festival observed by the Romans in honor of Juno. It was instituted on account of certain prodigies that happened in Italy, and was celebrated by matrons. In the solemnity two white cows were led from the temple of Apollo in the city through the gate called Carmentalis, and two images of Juno, made of cypress, were carried in procession. Then marched twenty-seven girls, habited in long robes, singing a hymn to the goddess; then came the Decemviri, crowned with laurel, in vestments edged with purple. This pompous train, going through the Vicus Jugarius, danced in the great field of Rome; thence they proceeded through the Forum Boarium to the temple of Juno, where the victims were sacrificed by the Decemviri, and the cypress images were left standing. This festival is fully described by Livy, lib. 7.

JUNOT (Andoche), a modern French general of eminence, was born in low life, in 1771, and entered at the age of twenty into the army. When only a lieutenant he was noticed by Buonaparte; who placed him on his staff, and he became a great favorite of that general in his Egyptian expedition. He was made lieutenant-general, in 1806 governor of Paris, and colonel-general of hussars. The next year he was sent as ambassador to Lisbon, with orders to take possession of Portugal. Here he remained two years, and was further honored with the title of duke of Abrantes. The battle of Vimiera, in which he was opposed to Sir A. Wellesley, put an end to his authority; but Buonaparte afterwards appointed him captain-general and governor of the Illyrian provinces. He died in 1813, having collected a valuable library.

JUN'TO, *n. s.* Ital.; Lat. *junctus*. A cabal; a number of men combined in any secret design.

Would men have spent toilsome days and watchful nights in the laborious quest of knowledge preparative to this work, at length come and dance attendance for approbation upon a *junta* of petty tyrants, acted by party and prejudice, who denied fitness from learning, and grace from morality? *South.*

From this time began an intrigue between his majesty and a *junto* of ministers, which had like to have ended in my destruction. *Gulliver's Travels.*

Unblest by nature, government a league
Becomes a circling *junto* of the great,
To rob by law. *Thomson's Liberty.*

JUNTO, in matters of government, denotes a select council for taking cognizance of affairs of great consequence, which require secrecy. In Spain and Portugal it signifies much the same as convention, assembly, or board among us; thus they have the junto of the three estates, of commerce, of tobacco, &c. See BOARD.

I'VORY, *n. s.* Fr. *ivoire*; Lat. *ebur*.

The ches was all of *ivory*, the meyne fresh and new,
Upulsshed and ypiked of white asure and blew.
Chaucer. The Mrrchantes Second Tale.

Hire throte, as I have nowe memoire,
Seemed as a round tour of *yvoire*,
Of gode gretnesse, and not to grete.
Id. Boke of the Duchesse.

There is more difference between thy flesh and hers, than between jet and *ivory*. *Shakspeare.*

Draw Erato with a sweet and lovely countenance, bearing a heart with an *ivory* key. *Peacham.*

Upon her forehead thousand cheerful graces,
Seated on thrones of spotless *ivory*;
There gentle Love his armed hand unbraces;
His bow unbent disclaims all tyranny.
Fletcher. Purple Island.

From their *ivory* port the cherubim
Forth issued. *Milton.*

Two gates the silent house of sleep adorn,
Of polished *ivory* this, that of transparent horn:
True visions through transparent horn arise,
Through polished *ivory* pass deluding lies.
Dryden.

Ivory is a hard, solid, and firm substance, of a fine white colour: it is the dens exertus of the elephant,

who carries on each side of his jaws a tooth of six or seven feet in length; the two sometimes weighing three hundred and thirty pounds; these *ivory* tusks are hollow from the base to a certain height, and the cavity is filled with a compact medullary substance.
Hill.

Necks whiter than the *ivory* arm bestowed
By Jove on Pelops, or the milky road.
Cowper. Elegy.

IVORY. The tusk, or tooth of defence of the male elephant. It is an intermediate substance between bone and horn, not capable of being softened by fire, nor altogether so hard and brittle as bone. Sometimes it grows to an enormous size, so as to weigh nearly 200 pounds.

The entire tooth is of a yellowish, brownish, and sometimes a dark brown color on the outside; internally white, hollow towards the root, and, so far as was inserted into the jaw, of a blackish-brown color. The finest, whitest, smoothest, and most compact ivory comes from the island of Ceylon. The grand consumption of this commodity is for making ornamental utensils, mathematical instruments, cases, boxes, balls, combs, dice, and an infinity of toys. The workmen have methods also of tinging it of a variety of colors. Merat Guillot obtained from 100 parts of ivory 24 gelatin, 64 phosphate of lime, and 0·1 carbonate of lime. The coal of ivory is used in the arts under the denomination of ivory-black. Particular vessels are used in the manufactory of this pigment, for the purpose of rendering it perfectly black. Some travellers speak of the tooth of the sea-horse as an excellent ivory; but it is too hard to be sawed or wrought like ivory. It is used for making artificial teeth.

IVORY COAST, a country of Africa, in Guinea, on the coast of the Atlantic, which, along with the Grain Coast, extends about 500 miles. See GUINEA, and MALAGUETTA. It is seated between Cape Apollonia and Cape Palmas, and contains several towns. The interior part of the country is little known; the natives not allowing the Europeans to build settlements among them and hardly even to trade with them, except by means of the coast negroes, and even then with the most circumspect caution, for which they have but too just cause. The chief articles of commerce are gold, ivory, and slaves; the former in the greatest plenty. The soil is in general fertile, producing abundance of rice and roots; indigo and cotton thrive without cultivation, and tobacco would be excellent if carefully manufactured: they have fish in plenty: their flocks greatly increase; and their trees are loaded with fruit. They make a cotton cloth, which sells well on the coast. In a word, the country is rich, and the commerce advantageous, and might be greatly augmented by such as would cultivate the friendship of the natives. These are represented by interested writers as a rude, treacherous people; but authors of credit give them a very different character, describing them as sensible, courteous, and the fairest traders of the coast of Guinea, &c. They are said to be averse to drinking to excess, and such as do so are severely punished. Though they are naturally inclined to be kind to strangers, with whom they are fond of trading, yet the frequent injuries done them by Europeans have occasioned their being suspicious and shy; and have even made them sometimes treat strangers ill, who have attempted to trade with them. The trade is carried on by signals from the ships, on the appearance of which the natives usually come on board in their canoes, bringing their gold dust, ivory, &c., which has given opportunity to some villainous Europeans to carry them off with their effects, or retain them on board till a ransom was paid. The mistrust at one time was so great, that it is very difficult to prevail on them to come on board. Great Britain is now happily relieved from the great odium of stimulating and rewarding this cruel conduct: but the slave trade is yet surreptitiously carried on here to a great extent.

JUPITER, the sovereign deity of the ancient Pagans. The theologists, according to Cicero, reckoned up three Jupiters; the first and second of whom were born in Arcadia; of these two, the one sprang from Æther, the other from Cœlus. The third Jupiter was the son of Saturn, and born in Crete, where they pretended to show his sepulchre. Cicero in other places speaks of several Jupiters who reigned in different countries. The Jupiter, by whom the poets and divines understand the supreme god, was the son of Saturn, king of Crete. He would have been devoured by his father as soon as born, had not his mother Rhea substituted a stone instead of the child, which Saturn immediately swallowed. Saturn took this method to destroy all his male children, because it had been foretold by Cœlus and Terra, that one of his sons should deprive him of his kingdom. Jupiter, being thus saved from his father, was brought up by the Curetes in a den on Mount Ida. Virgil tells us that he was fed by the bees; out of gratitude for which he changed their color from that of iron to gold. Some say, that his nurses were Amalthæa and Melissa, who gave him goat's milk and honey; and others, that Amalthæa was the name of the goat which nourished him, and which, as a reward for her great services, was changed into a constellation. According to others, he was fed by wild pigeons, who brought him ambrosia from Oceanus; and by an eagle, who carried nectar in his beak from a steep rock; for which he rewarded the former, by making them the foretellers of winter and summer; and the latter by giving him immortality, and making him his thunder-bearer. When grown up, he drove his father out of heaven, and divided the empire of the world with his brothers. For himself, he had heaven and earth; Neptune had the sea and waters; and Pluto hell. The Titans attempted to dethrone Jupiter, as he had done his father. These Titans were giants, the sons of Titan and Terra. They declared war against Jupiter, and heaped mountains upon mountains, in order to scale heaven: but their efforts were unsuccessful. Jupiter overthrew them with his thunder, and shut them up under the waters and mountains, from which they were not able to get out. Jupiter had several wives: the first of whom, named Metis, he is said to have devoured when big with child, by which he himself became pregnant; and Minerva issued out of his head, com-

pletely armed and fully grown. His second was Themis; the name of his third is not known; his fourth was the celebrated Juno, whom he deceived under the form of a cuckoo, which, to shun the violence of the storm, fled for shelter to her lap. He was the father of the Muses and Graces; and had a prodigious number of children by his mistresses. He metamorphosed himself into a satyr to enjoy Antiope; into a bull, to carry off Europa; into a swan, to abuse Leda; a shower of gold, to corrupt Danae; and into several other forms to gratify his passions. He had Bacchus by Semele, Diana and Apollo by Latona, Mercury by Maia, and Hercules by Alcmena, &c. The wiser part of the heathens believed that there was but one supreme God; but it is certain that the great body of the people believed in a plurality of gods, endued with different powers and attributes, and all of them influenced by human passions and vices. It is in vain to attempt to exculpate them from this folly. The whole history of ancient Greece, Rome, Egypt, &c., with their routine of superstitious ceremonies, prove that they believed all the ridiculous fables of the mythology. They even used different representations of the same deity, and, if they did not consider them as so many different persons, at least regarded each of them in different views: e. g. The Jupiter that showered down blessings was called the Kind Jupiter; and, when punishing, the Terrible Jupiter. There was not only one Jupiter for Europe and another for Africa; but in Europe there was one Jupiter who was the particular friend of the Athenians, and another who was the special protector of the Romans: nay, there was scarcely a town in Italy, that had not a Jupiter of its own; and the Jupiter of Terracina, or Jupiter Anxur, represented in medals as young and beardless, with rays round his head, more resembled Apollo than the great Jupiter of the capitol. In this way Jupiter at length had temples and different characters almost every where; in Carthage he was called Ammon; in Egypt, Serapis; at Athens, the great Jupiter was the Olympian Jupiter; and at Rome, the greatest Jupiter was the Capitoline Jupiter, who was the guardian and benefactor of the Romans, and whom they called Jupiter optimus maximus. This Jupiter was represented in his chief temple, on the Capitoline hill, as sitting on a curule chair, with the fulmen, i. e. thunder, or rather lightning, in one hand, and a sceptre in the other. This fulmen in the figures of the old artists was always adapted to the character under which they were to represent Jupiter. If his appearance was to be mild and calm, they gave him the conic fulmen, or bundle of flames wreathed closely together, held down in his hand: when punishing, he held up the same figure, with two transverse darts of lightning, sometimes with wings added to each side of it, to denote its swiftness; this was called by the poets the three-forked bolt of Jove: and, when he was going to do some exemplary execution, they put in his hand a handful of flames, all let loose in their utmost fury; and sometimes filled both his hands with flames. The superiority of Jupiter was principally manifested in that air of majesty which the ancient artists endeavoured to express in his countenance: particular attention was paid to the head of hair, the eye-brows, and the beard. There are several heads of the mild Jupiter on ancient seals, where his face has a mixture of dignity and ease in it, admirably described by Virgil, Æn. i. v. 256. The statues of the Terrible Jupiter were generally of black marble, as those of the former were of white: the one sitting with an air of tranquillity; the other standing, more or less disturbed. The face of the one is pacific and serene; of the other, angry and clouded. On the heads of the one the hair is regular and composed; in the other it is so discomposed, that it falls half way down the forehead. The face of the Jupiter Tonans resembles that of the Terrible Jupiter; he is represented on gems and medals as holding up the triple bolt in his right hand, and standing in a chariot, which seems to be whirled on impetuously by four horses. Thus he is also described by the poets. Ovid. Dejan. Herc. v. 28. Horace, lib i. od. 4, v. 8. Jupiter, as the intelligence presiding over a single planet, is represented only in a chariot and pair: on all other occasions, if represented in a chariot, he is always drawn by four horses. Jupiter was the chief ruler of the air, and directed the rains, the thunders, and the lightnings. As the dispenser of rain, he was called Jupiter Pluvius; and was exhibited seated in the clouds, holding up his right hand, or extending his arms almost in a straight line each way, and pouring a stream of hail and rain from his right hand upon the earth; whilst the fulmen is held down in his left. The wings that are given him relate to his character of presiding over the air: his hair and beard in the Antonine pillar are all spread down by the rain, which descends in a sheet from him, and falls for the refreshment of the Romans; whilst their enemies are represented as struck with the lightnings, and lying dead at their feet. Some consider a part of the fable of Jupiter to include the history of Noah and his three sons; and that Saturn is Noah, who saw all mankind perish in the waters of the deluge; and who, in some sort, swallowed them up, by not receiving them into the ark: Jupiter is Ham; Neptune, Japheth; and Shem, Pluto. The Titans, it is thought, represent the old giants, or first tyrants, who built the tower of Babel, and whose pride and presumption God had confounded, by changing their language, and pouring out the spirit of discord and division among them. The name of Jupiter, or Jovis Pater, is thought to be derived from Jehovah, pronounced with the Latin termination Jovis instead of Jova; and in medals we meet with Jovis in the nominative, as well as oblique cases: for example, Jovis custos, Jovis propugnator, Jovis stator. To the name Jovis was added pater; and afterwards, instead of Jovis pater, Jupiter was used by abbreviation. The name Jupiter was not known to the Hebrews till the reign of Alexander the Great. Antiochus Epiphanes commanded the idol of Jupiter Olympius to be placed in the temple at Jerusalem; and that of Jupiter, the defender of strangers, in the temple on mount Gerizim. 2 Macc. v. 2.

JUPITER, ♃, in astronomy, one of the superior

planets, and remarkable as being the brightest of them all, except Venus. Jupiter is situated between Mars and Saturn, being the fifth in order of the primary planets from the sun. His diameter is 89,170 miles. He turns round his axis in nine hours and fifty-six minutes; and performs his periodical revolution in eleven years, 315 days, fourteen hours, and thirty nine minutes, at the distance of 490 millions of miles from the sun. The figure of Jupiter is evidently an oblate spheroid, the equatorial being to the polar diameter as fourteen to thirteen. This result was obtained from the accurate observations of Dr. Herschel; and it is a remarkable coincidence between theory and observation, that, from the influence of the equatorial parts of Jupiter upon the motion of the nodes of his satellites, La Place has found the proportion between his equatorial and polar diameters to be as 10,000,000 to 9,286,992; a result which differs only a little from the ratio of fourteen to thirteen, and which should be regarded as the more accurate of the two. According to Cassini, the difference of Jupiter's diameters is $\frac{1}{15}$; Pound made it $\frac{1}{13\cdot 37}$; Short $\frac{1}{14}$; and Newton $\frac{1}{16}$. When we look at Jupiter through a good telescope we perceive several belts or bands extending across his disc, in lines parallel to his equator. These appearances were first observed by two Jesuits, Zuppi and Bartoli. They were afterwards examined in 1633, by Fontana, Rheita, Riccioli, Grimaldi, and Campani; the latter of whom, on the 1st of July 1664, perceived four dark belts, and two white ones. These belts are variable, both in number, distance, and position. Sometimes seven or eight belts have been observed; and, on the 28th of May, 1780, Dr. Herschel perceived the whole disc of Jupiter covered with small curved belts, or rather lines, that were not continuous across his disc. The parallel belts, however, are most common, and in clear weather may be seen by a good achromatic telescope, with a magnifying power of forty. See ASTRONOMY.

JUP'PON, *n. s.* Fr. *juppon*. A short close coat.

Some wore a breast-plate and a light *juppon*
Their horses clothed with rich caparison. *Dryden.*

JURA, one of the Western Islands of Scotland, lying opposite to Knapdale in Argyleshire, is supposed to be about thirty miles long and seven broad. The name is derived by some from Gael. Juar, i. e. yew, as abounding in yew trees: but Buchanan, with more probability, derives it from the Gothic, Dera, or Gael. Diura, a deer, as it formerly abounded with these animals, and there are still a few on the island. It is the most rugged of all the Hebrides; and is composed chiefly of vast mountains, naked, and incapable of cultivation. Some on the south and west sides only are improvable, and in good seasons as much barley and oats are raised as will maintain the inhabitants. Barley produces four or five fold. Sloes are the only fruits of the island. An acid for punch is here made from the berries of the mountain ash; and a kind of spirit is also distilled from them. Necessity has instructed the inhabitants in the use of native dyes. Thus the juice of the tops of heath boiled supplies them with a yellow; the roots of the white water lily with a dark brown; those of the yellow water iris with a black, and the galum verum, rue of the islanders, with a very fine red, not inferior to madder. On the hills is pasture for cattle. There are now in Jura about 100 stags; though these must formerly have been much more numerous, as the original name of the island was Deir ay, or the isle of deer, so called by the Norwegians on account of the abundance of deer found in it. Between the north end of Jura and the small isle of Skarba there is a famous whirlpool, called Cory-vrekan, from Brecan, son of a king of Denmark, who perished in this gulph. See CORY-VREKAN. His body being cast ashore on the north side of Jura, was buried in a cave, and his grave is still distinguished by a tombstone and altar. Jura has many rivulets and springs of excellent water, and the air is remarkably healthy; its salubrity being increased by the high situation, perpetually fanned by breezes.

JURA, or JURA and COLONSAY, a parish of Scotland, in Argyleshire, consisting of the above island which forms by far the greatest part of it, and of other eight islands. Of these nine islands, six are inhabited; Colonsay and Oronsay form the west division of the parish; and Skarba, Lunga, and Balnahuaigh, with three uninhabited isles, lie on the north of Jura. The whole parish, including the intervening arms of the sea, is fifty miles long and thirty broad.

JURA, THE DEPARTMENT OF, in France is formed of part of the former province of Franche-Comté, and derives its name from a chain of mountains, parallel with the Alps, which extends from the southern extremity of the department of Ain, as far as that of the Upper Rhine, separating Switzerland from France. The chief place of this prefecture is Lons-le-Saulnier; it consists of four arrondissements or subprefectures; Lons-le-Saulnier containing 107,993 inhabitants; Dole, 69,792; Poligny, 73,559; and St. Claude 50,404; making a total population of 301,748 souls, having thirty-two justiciaries of the peace, or cantons; 675 communes; and a surface of 2304 square miles. Its revenue amounts to 15,351,000 francs. It is in the sixth military division, has a royal court and bishopric at Besançon, and is divided into two electoral arrondissements, sending three members to the chamber of deputies.

The department of Jura is bounded on the north by that of the Upper Saône; on the north-east by that of Doubs; on the east by that of the Ain; and on the west by those of Saône et Loire, and Côte d'Or. It is intersected by mountains, plains, and marshes; and its productions are consequently very different on account of the nature of the soil. Two-thirds of the whole country lie in that part of the Alps which bears the name of Jura, of which the highest summits rise to 5200 feet. On the east these heights are very accessible, and have many deep valleys between them. The soil is generally rocky, light, of very little depth, and by no means fertile. The harvest, though tolerably abundant in the plains, is by no means sufficient for the support of the inhabitants; the mountains produce nothing but the inferior grains; they are, however, rich in pasturage, which feeds during the

summer great numbers of black cattle and excellent horses. During this season the cheese-houses, erected on the heights, serve as habitations for the herdsmen, and stables for the horned cattle; and they make here great quantities of butter and cheese for exportation. At the beginning of October, the herdsmen descend with their flocks into the lower regions. Vines are very numerous in Jura; they extend over the sides of the hills to a distance of sixty miles, and yield most excellent wines; those of Arbois, Salins, and Lons-le-Saulnier, are the most celebrated. The violent winds, which prevail in these countries, render the winters long and severe; so that the snow continues on the mountains for some months in the year. A great part of the country is covered with forests of fir and box trees, the wood of which is worked within the department; grottoes also are found, adorned with stalactites and curious petrifactions, with fine cascades, and most beautiful scenes along the course of the Ain, the Limon, the Langonnet and the Seille. This department likewise possesses fine salt springs, which yield annually about 60,000 quintals of salt. The soil being rocky, it is mostly cultivated by oxen, and the produce is not very abundant. There are 135,053 hectars of forests (oak, beech, and green wood), and 16,060 hectars of vineyards, producing on an average seventeen francs, twenty-four centimes the hectar.

The productions of this country consist of wheat, rye, barley, oats, maize, buck-wheat, hemp, rape-seed, walnuts, fruits, fine wines, wood, excellent pasturage, medicinal plants, and plants for dyeing in great abundance. There is also plenty of great and small game, such as deer, wild cats, squirrels, heath-cocks, red-breasts, and a small kind of eagles. The rivers and lakes produce great quantities of fish, particularly salmon trout, and crabs. They have large herds of horses, mules, horned cattle, and many fowls; numberless swarms of bees; mines abounding in iron and pit-coal; and quarries of various kinds of marble, beautifully white alabaster, very fine plaster, mill-stones, lime-stone, and inflammable schistus. At Salins and Lons-le-Saulnier there are springs impregnated with salt.

This department is famous for large manufactures of works in horn, bone, ivory, mother of pearl, box and other woods, wooden clocks, copper, iron, and steel. The inhabitants also make quantities of coarse cloth, linens, handkerchiefs, mineral acids, salt, casks, axes, and scythes; they have forges, foundries, nail manufactories, tile-kilns, paper-mills, and celebrated tanneries. They deal largely in the preparation of natural and artificial stones, and make cheeses in the mountains, something like that of Gruyere and Sept Moncel. A considerable number of workmen are continually emigrating; and carriers, with their little carts harnessed to a single horse, travel about into the interior of the kingdom, selling their cheese in great abundance. A considerable trade is carried on in corn, wine, brandy, fowls, honey, deals, hemp, rape, oil, turnery, toys, and clocks and watches of Franche Comté.

The principal rivers in this department are the Doubs, the Ain, the Clause, the Louve, the Grossaue, and the Tacon. In it also is the grand canal; and, it is crossed by the great roads of Lyons, Digon, Besançon, and Geneva.

JURA, a chain of mountains in Switzerland, beginning in the canton of Zurich, extending from thence along the Rhine into the canton of Basle, stretching into that of Soleure and the territory of Neufchatel, and branching out towards the Pays de Vaud; separating that county from the ci-devant Franche Comté and Burgundy, and continued beyond the late Genevan territories as far as the Rhone. Many elevated valleys are formed by different parts of this chain in the Pays de Vaud; among which one of the most remarkable is the valley of the lake of Joux, on the top of that part of the chain named Mount Joux. It contains several populous villages, and is beautifully diversified with wood, arable land, and pasture. It is watered by two lakes; the largest of which is that of Joux. This has one shore of a high rock covered with wood; the opposite banks forming a gentle ascent, fertile, and well cultivated; behind which is a ridge covered with pines, beech, and oak wood. The smaller lake, named Brenet, is bordered with fine corn fields and villages; and the stream which issues from it is lost in a gulf named Entonnoir, or the Funnel, where several mills are turned by the falling current. The Orbe issues from the other side of the mountain, about two miles from this place; and probably owes its origin to the subterraneous stream just mentioned. The largest lake is supplied by a rivulet which issues from the bottom of a rock, and loses itself in it. The valley contains about 3000 inhabitants, remarkable for their industry in making watches and jewellery. The country is much infested with bears and wolves. In ascending to this place there is a very extensive prospect of great part of the Pays de Vaud, the lake of Geneva, and that of Neufchatel, which from that high point of view appears to be nearly on a level; though M. de Luc found the latter to be 159 feet above the level of the lake of Geneva. The Jura mountains are mentioned by Cæsar, Pliny, Strabo, and Ptolemy. In Switzerland they bear the different names of the Lagerberg, the Batsberg, Hauenstein, Freyberg, &c. The most elevated peaks are the Reculet, the Dole, and the Montendre, the respective heights of which are 5200, 5178, and 5170 feet above the level of the sea. These, however, are much lower than the summits of the Alps, nor are there here perpetual snows, or the sources of any great rivers.

JU'RAT, *n. s.*
JU'RATORY, *adj.*
JURID'ICAL, *adj.*
JURID'ICALLY, *adv.*
JURISCON'SULT, *n. s.*
JURISDIC'TION, *n. s.*
JURISPRU'DENCE, *n. s.*
JU'RIST, *n. s.*
JU'ROR, *n. s.*
JU'RY, *n. s.*
JU'RYMAN, *n. s.*

Jurat is from Lat. *juratus*. A magistrate in some corporations. Juratory, comprising an oath. Juridical, Lat. *jus* and *dico*, acting in the distribution of justice; used in courts of justice: juridically, according to the law or forms of justice. Jurisconsult, Lat. *juris* and *consultus*, one who gives legal opinions. Jurisdiction, Lat

jus and *dico*, legal authority in the district to which it extends: jurisprudence, Lat. *juris* and *prudentia*, the science of law: jurist, a civil lawyer: juror, one that serves on the jury: jury, a body of sworn men: juryman, one who is empanelled on a jury.

Than had he, thurgh his *jurisdiction*,
Power to don on hem correction. *Chaucer.*

You wrought to be a legate; by which power
You maimed the *jurisdiction* of all bishops. *Shaks.*

This is not to be measured by the principles of *jurists*. *Bacon.*

As Adam had no such power as gave him sovereign *jurisdiction* over mankind. *Locke.*

According to a *juridical* account and legal signification, time within memory, by the statute of Westminster, was settled in the beginning of the reign of king Richard the First. *Hale.*

A contumacious person may be compelled to give *juratory* caution de parendo juri. *Ayliffe.*

There is mention made in a decision of the *jurisconsult* Javolemus, of a Britannick fleet. *Arbuthnot.*

The hungry judges soon the sentence sign,
And wretches hang that *jurymen* may dine. *Pope.*

JURIEU (Peter), a French Protestant divine, born in 1637, was educated in England under his maternal uncle Peter du Moulin, and took orders in the English church; but returning to succeed his father as pastor to a reformed congregation at Mer, in the diocese of Blois, he was made professor of divinity and Hebrew at Sedan, where he gained great reputation. This university being taken from the Protestants, a professorship of divinity was founded at Rotterdam; where he was also appointed minister of the Walloon church. He died in 1713; and left a great number of esteemed works behind him, particularly a History of Calvinism, and a Commentary on the Revelations.

JURIN (Dr. James), a secretary of the Royal Society in London, as well as president of the College of Physicians there. He had great disputes with Michellotti upon the motion of running water, with Robins upon distinct vision, and with the partizans of Leibnitz upon moving bodies. His Essay upon Distinct and Indistinct Vision is printed in Smith's Optics; and seventeen of his papers on various subjects (of which Dr. Hutton gives a list in his Math. Dict.) are inserted in the Philosophical Transactions. He died in 1750.

JURISCONSULT, jurisconsultus, commonly contracted into Ictus, among the Romans, denoted a person learned in the law; a master of the Roman jurisprudence, who was consulted on the interpretation of the laws and customs, and on the difficult points in lawsuits. The fifteen books of the Digests were compiled wholly from the reports of the ancient jurisconsulti. The jurisconsulti seem to have been a kind of chamber counsellors, who arrived at the honor of being consulted through age and experience, but never pleaded at the bar. Their pleading advocates or lawyers never became jurisconsulti. See ADVOCATE. In the times of the republic, the advocati had by much the more honorable employment, as being in the ready way to attain the highest preferments. They then despised the jurisconsulti, calling them in derision formularii and legulei, as having invented certain forms and monosyllables, to give their answers the greater appearance of gravity and mystery. But in process of time they became so much esteemed, that they were called prudentes and sapientes, and the emperors commanded the judges to follow their advice. Augustus advanced them to the public offices of the empire.

JURISDICTION is a power which a man has to do justice in cases of complaint made before him. There are two kinds of jurisdiction, the one ecclesiastical, the other secular. Ecclesiastical jurisdiction belongs to bishops and their deputies. Bishops, &c., have two kinds of jurisdiction; the one internal, which is exercised over the conscience in things purely spiritual; and this they are supposed to hold immediately of God. The other is contentious, which is a privilege some princes have given them in terminating disputes between ecclesiastics and laymen. Secular jurisdiction belongs to the king and his justices or delegates. The courts and judges at Westminster have jurisdiction all over England; but all other courts are confined to their particular jurisdictions. There are three sorts of inferior jurisdictions; the first is tenere placita, to hold pleas, and the plaintiff may sue either there or in the king's courts. The second is the conusance of pleas, where a right is invested in the lord of the franchise to hold pleas: and he is the only person that can take advantage of it, by claiming his franchise. The third sort is an exempt jurisdiction, as where the king grants to some city that the inhabitants shall be sued within their city, and not elsewhere; though there is no jurisdiction that can withstand a certiorari to the superior courts.

JURISDICTIONS, HEREDITARY, an heriditary right or power, enjoyed for ages by many of the nobility and gentry of Scotland, more especially by those in the Highlands, of exercising the rights of judges in criminal cases, over all the people who resided on their estates. This power extended even to trials for capital crimes, or, what amounted to the same thing, crimes deemed worthy of capital punishment by the chieftain against whom, or within whose jurisdiction, they were committed; and who thus generally monopolised, in his own character, the discordant privileges of prosecutor, judge, and jury, without being amenable to the supreme court in the kingdom. Such an unlimited power of pit and gallows, as it was called, in the hands of even the most enlightened subjects, was liable to be grossly abused; and accordingly there are still two proverbial expressions currently used in Scotland, of Cupar justice, and Jedburgh justice, founded upon traditions, that at these places men had actually been first hanged, and afterwards tried! The natural consequence of such powers was, that every chieftain was an arbitrary sovereign within the jurisdiction of his own property, and could call forth his tenants and other dependents by hundreds, to fight against any neighbouring chieftain. This power of the chieftains was peculiarly serviceable to the cause of the rebels in 1714 and 1745; but it was not till after the last of these rebellions that the British government began to think of abolishing it. The combination of their clans, says

Mr. Heron, their attachments to their chieftains, and the advantages of power, which these chiefs were understood to derive from the union of hereditary civil jurisdictions with patriarchal authority, and with the property of the soil; seemed to be the principal means, or cause, which rendered Highlanders so averse from owning the full authority of the national government; which made them terrible, and perpetuated their Jacobitism. The hereditary jurisdictions were, therefore, by a compulsive sale, and for a stipulated price, purchased from all those of the Scottish gentry and nobles whose families enjoyed such jurisdictions. Hist. of Scotland, vol. v. p. 1233—4. The act was passed in 1748. See CLANS.

JURISPRUDENCE is, strictly, the science of right, and is a term that has been applied to the study of all the laws, statutes, and customs which have been adopted in different nations for securing the personal and social rights of their members. When we find it qualified by the adjective civil, it is synonymous with the term civil law, which (see our article LAW) has been entirely moulded in modern nations by that of the Romans; feudal jurisprudence is a term that has been used to comprehend all the feudal institutions; canonical jurisprudence is that of the canon law.

We must avoid, as Hooker has well said, 'the measuring by one kind of law all the actions of men:' this were to confound, as he afterwards observes, what God has made 'distinct in nature as in degree:' yet the basis of all just legislation for man must be found in certain principles of civil government applicable to all states and stages of society, while it is perfectly clear that what is abstractedly just and perfectly proper for one stage of advancement in the social system, would in many instances be at once unintelligible and unjust, applied to mankind in other stages or degrees of progress. The study of jurisprudence must, therefore, be historical. At one period of the emergence of a nation from barbarism (as in the existing state of the South Sea Islanders), it must be a question mixed up with all the various sanctions and sources of law, divine and human; at another, as in the history of the United States of America, since their independence, it has been held essential to distinguish, and even to separate entirely, questions of a religious and spiritual, from those of a civil and temporal kind. It is singular to observe the missionaries of these very states, however, of necessity engaged in a sort of universal legislation, owing its chief sanctions to religion, for the South Sea Islanders.

Perhaps the greatest question of modern jurisprudence has been thus enunciated—the degree to which religious sanctions must be made to enter directly and permanently into the authority of human laws. Oaths, and all ecclesiastical benefits bestowed by a state, are of this kind: every civilised nation has adopted the former; yet our own legal indulgence in this matter to the Friends or Quakers, and the example of the United States in the latter (to say nothing of the recent admission of all Christian sects to political power in this country), would seem to suggest the possibility of preserving a greater distinctness in the divine and human sanctions of law, than entered into the conception of our forefathers. But we have already stated the main outlines of the various codes that have been hitherto adopted in the article referred to: and it is the duty of an encyclopædiast, we conceive, to be historical, rather than speculative, upon any of these points.

JURY, in English law. Juries are, in these kingdoms, the supreme judges in all courts and in all ordinary causes, in which either the life, reputation, or property, of any man is concerned; this is the distinguishing privilege of every Briton, and one of the most glorious advantages of the British constitution; for, as every one is tried by his peers, the meanest subject is as safe and as free as the greatest.

JU'RYMAST, *n. s.* It seems to be properly durée mast, mâit de duree, a mast made to last for the present occasion. So the seamen call whatever they set up in the room of a mast lost in a fight or by a storm.

For they were forced with steering to dispense,
And never hap as yet a quiet day
On which they might repose, or e'en commence
A *jurymast* or rudder, or could say
The ship would swim an hour. *Byron.*

JUS CIVILE, amongst the Romans, signified no more than the interpretation given by the learned of the laws of the XII Tables, though the phrase now extends to the whole system of the Roman laws.

JUS CIVITATIS signifies freedom of the city of Rome, which entitled those persons who had obtained it to most of the privileges of the Roman citizens; yet it differs from jus quiritum, which extended to all the advantages to which a free native of Rome was entitled. The difference is much the same as betwixt denization and naturalisation with us.

JUS IMAGINIS was the right of using pictures and statues in funeral processions, &c., amongst the Romans, and had some resemblance to the right of bearing a coat of arms in modern times. This honor was allowed to none but those whose ancestors or themselves had borne some curule office. See IMAGE.

JUS PAPIRIANUM, the laws of Romulus, Numa, and other kings of Rome, collected into a body by Sextus Papirius, who lived in the time of Tarquin the Proud.

JUS PATRONATUS is a commission granted by the bishop, to enquire who is the rightful patron of a church. If two patrons present their clerks, the bishop shall determine who shall be admitted by right of patronage, on commission of enquiry by six clergymen and six laymen, living near the church; who are to enquire on articles as a jury. The awarding a jus patronatus is not of necessity, but at the pleasure of the ordinary for his better information who has the right of patronage: for, if he will at his peril take notice of the right, he may admit the clerk of either of the patrons, without a jus patronatus

JUS TRIUM LIBERORUM was a privilege granted to such persons in the city of Rome as had three children, by which they were exempted from all troublesome offices. The same exemption was granted to any persons who lived in other parts of Italy, having four children; and

those that lived in the provinces, provided they had five, or as some say seven, children, were entitled to the same immunities.

JUSSICA, in botany, a genus of the monogynia order, and decandria class of plants; natural order seventeenth, calycanthemæ: CAL. quadripartite or quinquepartite superior; petals four or five: CAPS. quadrilocular or quinquelocular, oblong, opening at the angles; the seeds numerous and small.

JUSSIEU (Anthony de), a celebrated French botanist and physician, born at Lyons, in 1686. After travelling through various parts of Europe, he settled in Paris, and published many works on natural history. He died in 1758.

JUSSIEU (Bernard de), brother of Anthony, whom he resembled in his scientific as well as professional pursuits. He was curator of plants in the royal gardens at Paris and Trianon. He died in 1777.

JUSSIEU (Joseph de), M. D., another learned botanist of the same family with the two preceding, was born at Lyons, in 1704. He accompanied the academicians who were sent to Peru, to measure a degree, as a botanist. He returned to France in bad health, after residing in Peru thirty-six years, and died in 1779.

JUST, *adj.* Fr. *juste*; Lat. *justus*. Upright; incorrupt; equitable in the distribution of justice.

Men are commonly so *just* to virtue and goodness, as to praise it in others, even when they do not practice it themselves. *Tillotson*

Honest; without crime in dealing with others.

Just balances, *just* weights, and a *just* ephah. *Lev.* xix.

It is uncertain whether *just of* has any other authority.

Just of thy word, in every thought sincere,
Who knew no wish but what the world might hear. *Pope.*

Exact; proper; accurate.

Boileau's numbers are excellent, his expressions noble, his thoughts *just*, his language pure, and his sense close. *Dryden.*

These scenes were wrought,
Embellished with good morals and *just* thought. *Granville.*

Just precepts thus from great examples given,
She drew from them what they derived from Heaven. *Pope.*

Just to the tale, as present at the fray,
Or taught the labours of the dreadful way. *Id.*

Once on a time La Mancha's knight, they say,
A certain bard encountering on the way,
Discoursed in terms as *just*, with looks as sage,
As ere could Dennis of the laws o' the stage. *Id.*

Though the syllogism be irregular, yet the inferences are *just* and true. *Watts's Logick.*

You bear a *just* resemblance of my fortune,
And suit the gloomy habit of my soul. *Young.*

Virtuous; innocent; pure.

How should man be *just* with God? *Job.*

A *just* man falleth seven times and riseth. *Prov.*

He shall be recompensed at the resurrection of the *just*. *Matt.*

The *just* the unjust to serve. *Milton.*

True; not forged.

Crimes were laid to his charge too many, the least whereof, being *just*, had bereaved him of estimation and credit. *Hooker.*

Grounded on principles of justice; rightful.

Me though *just* right
Did first create your leader. *Milton.*

Equally retributed.

He received a *just* recompense of reward. *Heb.* ii. 2.

Whose damnation is *just*. *Rom.* iii. 8.

As Hesiod sings, spread water o'er thy fields,
And a most *just* and glad increase it yields. *Denham.*

I would not shrink
From *just* infliction of due punishment
On those who seek your life: wer't otherwise
I should not merit mine. *Byron. Sardanapalus.*

Complete without superfluity or defect.

He was a comely personage, a little above *just* stature, well and straight limbed, but slender. *Bacon's Henry VII.*

Regular; orderly.

When all
The war shall stand ranged in its *just* array,
And dreadful pomp, then will I think on thee. *Addison*

Exactly proportioned.

The prince is here at hand: pleaseth your lordship
To meet his grace, *just* distance 'tween our armies? *Shakspeare.*

Full; of full dimensions.

His soldiers had skirmishes with the Numidians, so that once the skirmish was like to have come to a *just* battle. *Knolles's History.*

There is not any one particular above mentioned, but would take up the business of a *just* volume. *Hale's Origin of Mankind.*

There seldom appeared a *just* army in the civil wars. *Dutchess of Newcastle.*

JUST, *adv.*

Exactly; nicely; accurately.

They go about to make us believe that they are *just* of the same opinion, and that they only think such ceremonies are not to be used when they are unprofitable, or when as good or better may be established. *Hooker.*

There, even *just* there he stood; and as she spoke,
Where last the sceptre was, she cast her look. *Dryden.*

The god Pan guided my hand *just* to the heart of the beast. *Sidney.*

A few understand him right; *just* as when our Saviour said, in an allegorical sense, Except ye eat the flesh of the son of man, and drink his blood, ye have no life in you. *Bentley.*

'Tis with our judgments as our watches, none
Go *just* alike; yet each believes his own. *Pope.*

The diadem, with mighty projects lined
To catch renown by ruining mankind;
Is worth, with all its gold and glittering store,
Just what the toy will sell for, and no more. *Cowper. Table Talk.*

Merely; barely.

The Nereids swam before
To smooth the seas; a soft Etesian gale
But *just* inspired and gently swelled the sail. *Dryden.*

Give me, ye gods, the product of one field,
That so I neither may be rich nor poor;
And having *just* enough, not covet more. *Id.*

It is the humour of weak and trifling men to value themselves upon *just* nothing at all. *L'Estrange.*

On drooping pinions of ambition lowered
Just skim earth's surface, ere we break it up

O'er putrid earth to scratch a little dust
And save the world a nuisance. *Young.*

Nearly; almost; tantùm non.

Being spent with age, and *just* at the point of death, Democritus called for loaves of new bread to be brought, and with the steam of them under his nose prolonged his life. *Temple.*

Why art thou here? There was an hovering angel
Just lighting on my heart, and thou hast scared it.
Maturin. Bertram.

JUST, *n. s.* & *v. n.* Fr. *jouste.* Mock encounter on horseback; tilt; tournament: joust more proper: to engage in a mock fight; to push, drive, or justle. See JOUST.

What news? hold those *justs* and triumphs?
Shakspeare.

None was either more grateful to the beholders, or more noble in itself, than *justs*, both with sword and launce. *Sidney.*

Among themselves the tourney they divide,
In equal squadrons ranged on either side;
Then turned their horses' heads, and man to man,
And steed to steed opposed, the *justs* began.
Dryden.

JUSTS were a sportive kind of combat on horseback, man against man, armed with lances. The word is by some derived from jousti, French, of juxta, Latin, because the combatants fought near each other: others from the modern Greek τζουτρα. Others from justa, which, in the corrupt age of the Latin tongue, was used for this exercise, as it was supposed a more just and equal combat than the tournament. The difference between justs and tournaments consists in this, that the tournament was frequently performed by a number of cavaliers, who fought in a body: the just was a single combat of one man against another. Though the justs were usually made in tournaments after a general rencounter of all the cavaliers, yet they were sometimes singly, and independent of any tournament. Under the title TOURNAMENT it is our intention more particularly to refer to these manly games of ancient chivalry.

JUSTEL (Christopher), a learned counsellor, and secretary to the French king, was born at Paris in 1580, and studied ecclesiastical history. He maintained a correspondence with archbishop Usher, Sir Henry Spelman, and other of the literati of his age, till his death which happened in 1649. He wrote 1. The Code of the Canons of the Church Universal, and the Councils of Africa, with notes; 2. A Genealogical History of the house of Auvergne; and 3. Collections of Greek and Latin Canons, from several MSS., which formed the Bibliotheca Juris Canonici Veteris, published in 2 vols. folio, by William Voet and our author's son.

JUSTEL (Henry), son of Christopher, was born at Paris in 1620. He became secretary and counsellor to the king; and was as distinguished for his own learning as for patronising it in others. He came to London in 1681, on the persecution of the Protestants; and was made keeper of the royal library at St. James's: which office he held till his death in 1693, when he was succeeded by the celebrated Dr. Bentley. He wrote several works, the titles of which may be seen in the catalogue of the Bodleian library.

JUS'TICE, *n. s.* & *v. a.*
JUS'TICEMENT, *n. s.*
JUS'TICER, *n. s.*
JUS'TICESHIP, *n. s.*
JUSTIC'IABLE, *adj.*
Fr. *justice*; Lat. *justitia.* The virtue by which we give to every man what is his due; opposed to injury or wrong. It is either distributive, belonging to magistrates; or commutative, respecting common transactions between men: equity; retributive punishment; assertion of right; a magistrate; a judge, of which there are several orders, as specified below: justice, to administer justice: justicement, procedure in courts: justicer, an administrator of law: justiceship, the magisterial office: justiciable, proper to be examined in courts of justice.

He executed the *justice* of the Lord. *Deut.*

O that I were a judge, I would do *justice.*
2 Sam.

Let *justice* overtake us. *Isa.* lix. 9.

And thou, Esdras, ordain judges and *justices*, that they may judge in all Syria. *1 Esdras.*

But mercy, Lady!—at the gret assise,
When we shall come before the high *justise*,
So little frent shal then in one ben found,
That but thou, or that day, correcten me,—
Of very right, mine werke will be confound.
Chaucer's A, B, C.

The *justice*,
In fair round belly with good capon lined,
With eyes severe, and beard of formal cut,
Full of wise saws and modern instances;
And so he plays his part.
Shakspeare. As You Like It.

Draw thy sword,
That if my speech offend a noble heart,
Thy arm may do thee *justice.* *Id. King Lear.*

The *justices* of peace are of great use; anciently they were conservators of the peace; these are the same, saving that several acts of parliament have enlarged their jurisdiction. *Bacon.*

As for the title of proscription, wherein the emperor hath been judge and party, and hath *justiced* himself, God forbid but that it should endure an appeal to a war. *Bacon.*

Examples of *justice* must be made, for terror to some; examples of mercy, for comfort to others.
Bacon's Advice to Villiers.

He was a singular good *justicer*; and, if he had not died in the second year of his government, was the likeliest person to have reformed the English colonies. *Decay on Ireland.*

Whereas one Styward, a Scot, was apprehended for intending to poison the young queen of Scots; the king delivered him to the French king, to be *justiced* by him at his pleasure. *Hayward.*

The nature and office of *justice* being to dispose the mind to a constant and perpetual readiness to render to every man his due, it is evident, that, if gratitude be a part of *justice*, it must be conversant about something that is due to another. *Locke.*

True fortitude is seen in great exploits
That *justice* warrants, and that wisdom guides,
All else is towering frenzy and distraction.
Addison.

And never meant the rule should be applied
To him that fights with *justice* on his side.
Cowper. Table Talk.

There is no future pang
Can deal that *justice* on the self-condemned,
He deals on his own soul. *Byron.*

Were I to profane these by impertinent criticism, I might with *justice* be accused of avowed enmity to wit; of open apostasy from true feeling, and true taste. *Canning. Microcosm.*

Justice is one of the four cardinal virtues. Civilians distinguish justice into two kinds; communicative and distributive.

1. *Communicative justice* establishes fair dealing in the mutual commerce between man and man: and includes sincerity in our discourse, and integrity in our dealings. The effect of sincerity is mutual confidence, so necessary among the members of the same community; and this mutual confidence is sustained and preserved by integrity of conduct. But there seems to be an essential ingredient in communicative or private justice, which is seldom taken notice of by writers on ethics; we mean mercy. In the present state of human nature strict justice, such as the utmost rigor of law allows, frequently becomes injustice. This truth we often find exemplified in private life, by rigorous creditors against unfortunate debtors. A striking instance of this kind of justice is recorded of Joseph, the husband of the blessed Virgin, in Matt. i. 19, where he is expressly styled a just man, because he would not go to the utmost rigor even of the Divine Law.

2. *Distributive justice* is that by which the differences of mankind are decided, according to the rules of equity. This is the justice of princes and magistrates. Among the numerous examples of this virtue, which might be given from various authors, we shall only call the attention of the reader to two instances recorded of Aristides, who, though in low circumstances, and of mean extraction, obtained the glorious surname of the Just; a title, says Plutarch, truly royal, or rather truly divine: but of which princes are seldom ambitious, because generally ignorant of its beauty and excellence. These are inserted under the article Attica; and the first of them reflects the highest honor, not only upon Aristides, but, upon the Athenians, who by his advice rejected the measure which would have aggrandised their republic to a decided superiority over all the rest of Greece, merely because it would have been unjust.

Justice. In English law, according to Cowel, we have, 1. *A Justice of the common pleas* (justitiarius communium placitorum). He is a lord by his office, and is called dominus justiciarius communium placitorum. He with his assistants originally did hear and determine all causes at the common law; that is, all civil causes between common persons, as well personal as real; for which cause it was called the court of common pleas, in opposition to the pleas of the crown, or the king's pleas, which are special, and appertain to him only. 2. *Justice of the forest* (justiciarius forestæ), is a lord by his office, and has the hearing and determining of all offences within the king's forest, committed against venison or vert: of these there are two, whereof the one has jurisdiction over all the forests on this side Trent, and the other of all beyond. 3. *Justices of assize* (justitiarii ad capiendas assisas) are such as were wont, by special commission, to be sent into this or that country to take assises; the ground of which policy was the ease of the subjects; for, whereas these actions pass always by jury, so many men might not, without great hindrance be brought to London; and therefore justices for this purpose, were by commission particularly authorised and sent down to them. 4. *Justices in eyre* (justiciarii itinerantes) are so termed of the French errer. The use of these, in ancient time, was to send them with commission into divers counties, to hear such causes especially as were termed the pleas of the crown, and therefore I must imagine they were sent abroad for the ease of the subjects, who must else have been hurried to the king's bench, if the case were too high for the country court. They differed from the justices of oyer and terminer, because they were sent upon some one or few especial cases, and to one place; whereas the justices in eyre were sent through the provinces and countries of the land, with more indefinite and general commission. 5. *Justices of gaol delivery* (justitiarii ad gaolas deliberandas) are such as are sent with commission to hear and determine all causes appertaining to such as for any offence are cast into gaol, part of whose authority is to punish such as let to mainprise those prisoners that by law are not bailable. These by likelihood, in ancient time, were sent to counties upon several occasions; but afterwards justices of assise were likewise authorised to this. 6. *Justices of nisi prius* are all one now a-days with justices of assise; for it is a common adjournment of a cause, in the common pleas, to put it off to such a day: nisi prius justitiarii venerint ad eas partes ad capiendas assisas; and upon this clause of adjournment they are called justices of nisi prius, as well as juitices of assise, by reason of the writ or action that they have to deal in. 7. *Justices of peace* (justitiarii ad pacem) are they that are appointed by the king's commission, with others, to attend the peace of the country where they dwell; of whom some, upon especial respect, are made of the quorum, because business of importance may not be dealt in without the presence of them, or one of them.

A Justice, in English law, is a person deputed to administer justice, whose authority arises from his majesty's deputation, and not by right of magistracy. Of these justices there are various kinds in England; viz.

1. *Chief justice of the common pleas*, see the preceding article.

2. *Chief justice of the king's bench*, the capital justice of Great Britain. This officer was formerly not only chief justice, but also chief baron of the exchequer, and master of the court of wards. He usually sat in the king's palace, and there executed that office, formerly performed per comitem palatii; he there determined all differences between the barons and other great men. He was vicegerent of the kingdom when the king went beyond sea, and was usually chosen to that office out of the prime nobility; but his power was reduced by king Richard I. and Edward I. His office is now divided, and his title changed to capitalis justitiarius ad placita, coram rege tenenda, or capitalis justitiarius banci regii.

To the preceding description of our great legal officers from Cowel, may be added that of

Justices of assise. Those pass the circuit by two two twice every year through all England, ex-

cept the four northern counties, where they go only once, despatching their several businesses by several commissions; for they have one commission to take assises, another to deliver gaols, and another of oyer and terminer. In London and Middlesex a court of general gaol-delivery is held eight times a year. All the justices of peace of any county wherein the assises are held are bound by law to attend them. or else are liable to a fine, in order to return recognizances, &c., and to assist the judges in such matters as lie within their knowledge and jurisdiction, and in which some of them have been probably concerned, by way of previous examination. See Assise and Jury.

Justices of gaol-delivery are empowered by the common law to proceed upon indictments of felony, trespass, &c.; to order execution or reprieve; and to discharge such prisoners as upon their trials shall be acquitted; with all such against whom, on proclamation being made, no evidence appears to indict; which justices of oyer and terminer, &c., may not do. 2 Hawk. 24, 25. But these justices have nothing to do with any person not in the custody of the prison, except in some special cases; as if some of the accomplices to a felony may be in such prison, and some of them out of it, the justices may receive an appeal against those who are out of the prison as well as those who are in it; which appeal, after the trial of such prisoners, shall be removed into B. R. and process issue from them against the rest. But if those out of prison be omitted in the appeal, they can never be put into any other; because there can be but one appeal for one felony. In this way the gaols are cleared and all offenders tried, punished, or delivered, in every year. Their commission is now turned over to the justices of assise.

Justices of oyer and terminer were justices deputed on some special occasions to hear and determine particular causes. The commission is directed to certain persons upon any insurrection, heinous demeanor, or trespass committed, who must first enquire, by means of the grand jury or inquest, before they are empowered to hear and determine by the help of the petit jury. It was formerly held, that no judge or other lawyer could act in the commission of oyer and terminer, or in that of gaol delivery, within the county where he was born or inhabited: but it was thought proper, by 12 Geo. II. c. 27, to allow any man to be a justice of oyer and terminer and general gaol-delivery, within any county of England.

Justices of the peace. Of these some for special respect are made of the quorum, so as no business of importance may be despatched without the presence or assent of them or one of them. However, every justice of peace has a separate power, and his office is to call before him, examine, and issue warrants for apprehending, and commit to prison, all thieves, murderers, wandering rogues; those that hold conspiracies, riots, and almost all delinquents, which may occasion the breach of the peace and quiet of the subject; to commit to prison such as cannot find bail, and to see them brought forth in due time to trial; and bind over the prosecutors to the assises. And if they neglect to certify examinations and informations to the next gaol-delivery, or do not bind over prosecutors, they shall be fined. A justice may commit a person that doth a felony in his own view without warrant; but, if on the information of another, he must make a warrant under hand and seal for that purpose. If complaint and oath be made before a justice of goods stolen, and the informer, suspecting that they are in a particular house, shows the cause of his suspicion, the justice may grant a warrant to the constable, &c., to search in the place suspected, to seize the goods and person in whose custody they are found, and bring them before him or some other justice. The search on these warrants ought to be in the day-time, and doors may be broken open by constables to take the goods. Justices of peace may make and persuade an agreement in petty quarrels and breaches of the peace, where the king is not entitled to a fine, though they may not compound offences or take money for making agreements. A justice has a discretionary power of binding to good behaviour; and may require a recognizance, with a great penalty of one, for his keeping of the peace, where the party found is a dangerous person, and likely to break the peace, and do much mischief; and for default of sureties he may be committed to gaol. But a man giving security for keeping the peace in the king's bench or chancery, may have a supersedeas to the justices in the county not to take security; and also by giving surety of the peace to any other justice. If one make an assault upon a justice of peace, he may apprehend the offender, and commit him to gaol till he find sureties for the peace: and a justice may record a forcible entry on his possession; in other cases he cannot judge in his own cause. Contempts against justices are punishable by indictment and fine at the sessions. Justices shall not be regularly punished for any thing done by them in sessions as judges; and, if a justice be tried for any thing done in his office, he may plead the general issue, and give the special matter in evidence; and if a verdict is given for him, or the plaintiff be nonsuited, he shall have double costs, and such action shall only be laid in the county where the offence was committed. 7 Jac. c. 5; 21 Jac. c. 12. But, if they are guilty of any misdemeanor in office, information lies against them in the king's bench, where they shall be punished by a fine and imprisonment; and all persons who recover a verdict against a justice for any wilful or malicious injury are entitled to double costs. By 24 Geo. II., c. 44, no writ shall be sued out against any justice of peace, for any thing done by him in the execution of his office, until notice in writing shall be delivered to him one month before the suing out of the same, containing the cause of action, &c., within which month he may tender amends; and, if the tender be found sufficient, he shall have a verdict, &c. Nor shall any action be brought against a justice for any thing done in the execution of his office, unless commenced within six months after the act committed. A justice is to exercise his authority only within the county where he is appointed by his commission,

not in any city which is a county of itself, or town corporate, having their proper justices, &c., but in other towns and liberties he may. The power and office of justices terminate in six months after the demise of the crown, by an express writ of discharge under the greal seal, by writ of supersedeas, by a new commission, and by accession of the office of sheriff or coroner. The origin of justices of the peace is referred to the fourth year of Edward III. They were first called conservators, or wardens of the peace, elected by the county, upon a writ directed to the sheriff; but the power of appointing them was transferred by statute from the people to the king; and under this appellation appointed by 1 Edw. III. c. 16. Afterwards the statute 34 Edw. III., c. 1, gave them the power of trying felonies, and they acquired the appellation of justices. They are appointed by the king's special commission under the great seal, the form of which was settled by all the judges A. D. 1590; and the king may appoint as many as he shall think fit in every county in England and Wales, though they are generally made at the discretion of the lord chancellor by the king's leave. At first the number of justices was not above two or three in a county, 18 Edw. III. c. 2. Then it was provided, by 34 Edw. III. c. 1, that one lord, and three or four of the most worthy men in the county, with some learned in the law, should be made justices in every county. The number was afterwards restrained first to six, and then to eight in every county, by 12 Rich. II. c. 10, and 14 Rich II. c. 11. But their number has greatly increased since their first institution. As to their qualifications, the statutes just cited direct them to be of the best reputation, and most worthy men in the county; and the statute 13 Rich. II. c. 7, orders them to be of the most sufficient knights, esquires, and gentlemen of the law; and by Hen. V. stat. 1, c. 4. and stat. 2, c. 1, they must be resident in their several counties. And, by 18 Hen. VI. c. 11, no justice was to be put in commission, if he had not lands to the value of £20 per annum. It is now enacted, by 5 Geo. II. c. 11, that every justice shall have £100 per annum, clear of all deductions: of which he must make oath by 18 Geo. II. c. 20. And if he acts without such qualifications he shall forfeit £100. It is also provided by 5 Geo. II. that no practising attorney, solicitor, or proctor, shall be capable of acting as a justice of the peace.

Justices of the peace within liberties are justices who have the same authority in cities or other corporate towns, as the others have in counties; and their power is the same; only that these have the assise of ale and beer, and wood and victuals, &c. Justices of cities and corporations are not within the qualification act, 5 Geo. II. c. 18.

In addition to what we have thus derived from the usual authorities, we may notice;

By 39 Geo. III., c. 110, certain judges' salaries were made up to the following amount in the whole, viz. master of the rolls and chief baron to £4000; puisne judges and barons £3000. By 49 Geo. III., c. 127, the salary of the chief baron was increased to £5000; and that of the puisne judges and barons to £4000.

Pensions may be granted (39 Geo. III. c. 110) by his majesty to the judges in England on resignation. To the lord chancellor £4000; chief justice of king's bench £3000; master of the rolls, chief justice of common pleas, and chief baron, £2500; puisne judges £2000. And, by 53 Geo. III. c 153, £800 a year additional may be granted to the chief justices and chief barons, and master of the rolls: and £600 additional to the puisne judges and barons. Such judges (except the chancellor) must have continued in office fifteen years, unless prevented by ill health.

By 50 Geo. III., c. 31, the salaries of the Scotch judges were increased to the following amount, viz. the lord president of the court of session £4300; lords of session £2000; lord justice clerk £4000; lords of session, being commissioners of justiciary, £2600; lord chief baron £4000; puisne barons £2000.

The salaries and allowances of the judges in Ireland are ascertained by the Irish acts, 36 Geo. III. c. 26, and 40 Geo. III. c. 69. And by statutes 41 Geo. III. c. 25; 42 Geo. III. c. 105; 50 Geo. III. c. 31, § 3, 4; 54 Geo. III. c. 95; and 55 Geo. III. c. 114.

The salary of the lord chancellor is, by 42 Geo. III. c. 105, fixed at £10,000: and by 41 Geo. III. c. 25; 55 Geo. III. c. 114; that of the master of the rolls at £4300. By 36 Geo. III., c. 26, the salary of the chief justice of king's bench is increased to £4000 a year; that of the chief justice of common pleas, and the chief baron, to £3500; and those of the puisne judges and barons to £2500. By 50 Geo. III. c. 31, § 3, £650 are added to the puisne judges and barons.

40 Geo. III., c. 69, further regulates the allowances to the judges on resignation. Lord chancellor £4000 a year; chief justice of king's bench £3000; master of the rolls £2700; chief justice of common pleas, and chief baron of exchequer, £2700; puisne judges and barons £2000. By 54 Geo. III., c. 95, the following sums are added, viz. to the chief justice of king's bench £800; to the chief justice of common pleas, and chief baron, £600; puisne judges and barons £600. And by 55 Geo. III., c. 114, £600 are added to the allowance to the master of the rolls, on resignation.

The king is considered, in this realm, as the fountain of justice, and general conservator of the peace. The original power of judicature, by the fundamental principles of society, is lodged in the society at large; but, as it would be impracticable to render complete justice to every individual by the people in their collective capacity, every nation has committed that power to certain select magistrates, who, with more ease and expedition, can hear and determine complaints; and, in this kingdom, this authority has immemorially been exercised by the king or his substitutes. He, therefore, has alone the right of erecting courts of judicature; for, though the constitution of the kingdom has entrusted him with the whole executive power of the laws, it is impossible, as well as improper, that he should personally carry into execution this great and extensive trust; it is consequently necessary

that courts should be erected, to assist him in executing this power; and equally necessary that, if erected, they should be erected by his authority. And hence it is that all jurisdictions of courts are, either mediately or immediately, derived from the crown; their proceedings run generally in the king's name, they pass under his seal, and are executed by his officers.

Before the constitution arrived at its full perfection our kings, in person, often heard and determined causes. But at present, by the long and uniform usage of many ages, the king has delegated his whole judicial power to the judges of his several courts; which are the grand depositories of the fundamental laws of the kingdom, and have gained a known and stated jurisdiction, regulated by certain and established rules, which the crown itself cannot alter, but by act of parliament.

The king in all cases doth judge by his judges; who ought to be of counsel with prisoners: and if they are doubtful or mistaken in matter of law, a stander-by may be allowed to inform the court, as amicus curiæ. 2 Inst. 178. Our judges are to execute their offices in proper person, and cannot act by deputy, or transfer their power to others; as the judges of ecclesiastical courts may. 1 Rol. Abr. 382. Bro. Judges, 11. Yet, where there are divers judges of a court of record, the act of any one of them is effectual; especially if their commissions do not expressly require more. 2 Hawk. P. C. c. 1. Though what a majority rules when present, is the act of the court; if on a demurrer, or special verdict, the judges are divided in opinion, two against two, the cause must be adjourned into the exchequer chamber. 3 Mod. 156. And a rule is to be made for this purpose, and the record certified, &c. 5 Mod. 335. In fines levied, all the judges of the king's bench ought to be particularly named: except when writs of certiorari to remove records out of that court, &c., are directed to the chief justice, without naming his companions. 1 Henry VII. 27; Jenk. Cent. 167. When a record is before the judges, they ought ex officio to try it; but no judge is compellable to declare opinion of a cause before it comes on.

It is enacted, by the statute 13 Will. III., c. 2, that the commissions of the judges shall be made (not, as formerly, durante bene placito, but) quamdiu se bene gesserint, and their salaries ascertained and established; but that it may be lawful to remove them on the address of both houses of parliament. And by the improvements of that law in the statute of 1 Geo. III., c. 23, enacted at the earnest recommendation of king George III. himself, from the throne, the judges are continued in their offices during their good behaviour, notwithstanding any demise of the crown (which was formerly held immediately to vacate their seats); and their full salaries are secured to them during the continuance of their commissions.

In criminal proceedings, or prosecutions for offences, it would be a still higher absurdity, if the king, personally, sat in judgment; because, in regard to these, he appears in another capacity, that of prosecutor. All offences are either against the king's peace, or his crown and dignity; and are so laid in every indictment. For, though in their consequences they generally seem (except in the case of treason, and a very few others) to be rather offences against the kingdom than against the king, yet, as the public, which is an invisible body, has delegated all its power and rights, with regard to the execution of the laws, to one visible magistrate, all affronts to that power, and breaches of those rights, are immediately offences against him, to whom they are so delegated by the public. Hence also arises the most mild and enviable branch of the prerogative, that of pardoning offences.

In this distinct and separate existence of the judicial power in a peculiar body of men, nominated indeed, but not removeable at pleasure by the crown, consists one main preservative of the public liberty; which cannot subsist long in any state, unless the administration of common justice be, in some degree, separated both from the legislative and also from the executive power. Were it joined with the legislative, the life, liberty, and property of the subject would be in the hands of arbitrary judges, whose decisions would be then regulated only by their own opinions, and not by any fundamental principles of law; which, though legislators may depart from it, yet judges are bound to observe. Were it joined with the executive, this union might soon be an overbalance for the legislative. For which reason, by statute 16 Car. I., c. 10, which abolished the court of star-chamber, effectual care is taken to remove all judicial power out of the hands of the king's privy council. See 1 Comm. 266—269. c. 7.

It is a species of treason under statute 25 Edw. III., c. 2, 'if a man slay the chancellor, treasurer, or the king's justices of the one bench or the other, justices in eyre, or justices of assise, and all other justices assigned to hear and determine, being in their places doing their offices.' But this statute extends only to the actually killing, not to wounding or attempting to kill them. It extends also only to the officers specified; and therefore, the barons of the exchequer, as such, are not within the protection of the act. 1 Hal. P. C. 231. But the lord chancellor and keeper of the great seal seem to be comprehended by 5 Eliz. c. 18, and 1 Will. & Mary, c. 21. See Law.

All the judges of courts of record are freed from prosecutions, and can only be punished in parliament for any thing done by them in such courts as judges; but if a judge so far forget the dignity and honor of his post as to turn solicitor in a cause which he is to judge, and privately and extra-judicially tamper with witnesses, or labor jurors, he may be dealt with according to the capacity to which he so basely degrades himself. 12 Rep. 24. Vaugh. 138. S. P. C. 173. Judges are not in any way punishable for a mere error of judgment.

A judge on his creation swears, 'That he will serve the king, and indifferently administer justice to all men, without respect of persons, take no bribe, give no counsel where he is a party, nor deny right to any, though the king, or any

other, by letters, or by express words, command the contrary, &c.; and in default of duty, to be answerable to the king in body, land, and goods.' Statute 18 Edw. III., statute 4. See also statute 20 Edw. III., c. 1, 2.

The judges have been said to have a private knowledge, and a judicial knowledge, and though they cannot judge of their own private knowedge, they may use their discretion: but where a judge has a judicial knowledge, he shall give judgment according to it. King Henry IV. asked judge Gascoign, If he saw one in his presence kill A. B., and another person, who was not culpable, should be indicted of this, and found guilty before him, what he would do in this case; to which he answered That he ought to respite the judgment against him, and relate the matter to the king, in order to procure him a pardon: for there he cannot acquit him, and give judgment according to his private knowledge.—Plowd. 82.

A judge ought not to judge in his own cause, or in pleas where he is party. If a fine be levied to a justice of bank, he cannot take the conusance; for he cannot be his own judge. 8 Henry VI., 21. Br. Patents, pl. 15, cites S. C. per Martin. If a fine be levied by or to a justice in bank, his name shall not be in the fine. 11 Henry VI. 49, b. So if a justice of bank be sued in bank he cannot record it; it shall be recorded by the other justices. Ibid. If the chief justice of bank be to sue a writ there, the writ shall not be in his name, but in the name of the secondary. 8 Henry VI., 19, b.

Judgment given by a judge, who is party in the suit with another, and so entered of record, is error, although several other judges sit there, and give judgment for the judge who is party. Jenk. 90, pl. 74. And judges are punishable for wilful offences against the duty of their situation; instances of which happily, however, live only in history. A justice cannot rase a record, or embezzle it, nor file an indictment which is not found, nor give judgment of death where the law does not give it; if he does, it is misprision, he shall lose his office, and make fine for misprision: but it is not felony.

By 13 Geo. III., c. 31, offenders against whom warrants are issued by any justice of peace in England, escaping into Scotland, the justices in Scotland may indorse the warrant, and the offender shall be conveyed to the adjacent county of England, and the justices there shall (if that is not the county where the offence was committed) indorse the warrant, &c., according to the directions of stat. 24 Geo. II., c. 55: and by 54 Geo. III., c. 186, the provisions of the act 13 Geo. III., c. 31, are extended to the cases of all warrants issued in England, Scotland, or Ireland, respectively.

JUSTICIA, Malabar nut, a genus of the monogynia order, and diandria class of plants; natural order fortieth, personatæ: COR. ringent: CAPS. bilocular, parting with an elastic spring at the heel; the stamina have only one anthera. There are thirty species, all natives of the East Indies, growing many feet high; some adorned with fine large leaves, others with small narrow ones, and all of them with monopetalous ringent flowers. Only two species are cultivated in our gardens, viz.

1. J. adhatoda the common Malabar nut. It grows ten or twelve feet high, with a strong woody stem, branching out widely all around; having large, lanceolate, oval leaves, placed opposite, and from the ends of the branches short spikes of white flowers, with dark spots, having the helmet of the corolla concave.

2. J. hyssopifolia, the snap-tree. It has a shrubby stem, branching from the bottom pyramidally, three or four feet high; spear-shaped, narrow entire leaves, growing opposite; and white flowers, commonly by threes, from the sides of the branches; succeeded by capsules, which burst open with elastic force for the discharge of the seeds: whence the name of snap-tree. Both species flower here in summer, but never produce any fruit. They are propagated by layers and cuttings, and require the same treatment with other tender exotics.

JUSTICIAR, in the old English laws, an officer instituted by William the Conqueror, as the chief officer of state, who principally determined in all cases civil and criminal. He was called in Latin capitalis justitiarius totius Angliæ.

JUSTIFI'ABLE, *adj.*
JUSTIFI'ABLENESS, *n. s.*
JUSTIFI'ABLY, *adv.*
JUSTIFICA'TION, *n. s.*
JUSTIFICA'TOR, *n. s.*
JUSTIFI'ER, *n. s.*
JUS'TIFY, *v. a.*

Fr. *justifier;* low Lat. *justifico.* To justify is to clear from imputed guilt; to maintain, defend, or vindicate; to absolve from obligation to punishment. Justifiable, defensible by law or reason: justifiableness, rectitude; defensibility: justifiably, rightly, so as to be clear from blame: justification, absolution; proof of innocence; defence; vindication; deliverance by pardon from past transgression: justificator and justifier, one who justifies, absolves, defends, or acquits.

How can man be *justified* with God? Or how can he be clean that is born of a woman? *Job.*

They say, Behold a man gluttonous, a friend of publicans and sinners; but wisdom is *justified* of her children. *Matthew.*

By him all that believe are *justified* from all things, from which ye could not be *justified* by the law of Moses. *Acts.*

That he might be just, and the *justifier* of him which believeth in Jesus. *Rom.* iii. 26.

There is an exquisite subtilty, and the same is unjust; and there is a man that *justifieth* in judgment. *Ecclus.*

I hope, for my brother's *justification,* he wrote this but as an essay of my virtue. *Shakspeare.*

The law hath judged thee, Eleanor;
I cannot *justify* whom law condemns. *Id.*

Men, jealous of the *justifiableness* of their doings before God, never think they have human strength enough. *King Charles.*

'Tis the consummation of that former act of faith by this latter, or, in the words of St. Paul and St. James, the consummation of faith by charity and good works, that God accepteth in Christ to *justifi-*

action, and not the bare aptness of faith to bring forth works, if those works, by the fault of a rebellious infidel, will not be brought forth. *Hammond.*

My unwilling flight the gods inforce,
And that must *justify* our sad divorce.
Denham.

What she did, whatever in itself,
Her doing seemed to *justify* the deed.
Milton.

Just are the ways of God,
And *justifiable* to men. *Id. Agonistes.*

In such righteousness,
To them by faith imputed, they may find
Justification towards God, and peace
Of conscience. *Id. Paradise Lost.*

Although some animals in the water do carry a *justifiable* resemblance to some at land, yet are the major part which bear their names unlike.
Browne's Vulgar Errours.

When we began in courteous manner to lay his unkindness unto him, he seeing himself confronted by so many, like a resolute orator, went not to denial, but to *justify* his cruel falsehood. *Sidney.*

You're neither *justified*, nor yet accused.
Dryden.

Yet still thy fools shall stand in thy defence,
And *justify* their author's want of sense. *Id.*

A man may more *justifiably* throw cross and pile for his opinions, than take them up by such measures.
Locke.

Let others *justify* their missions as they can, we are sure we can *justify* that of our fathers by an uninterrupted succession. *Atterbury.*

Sins may be forgiven through repentance, but no act or writ of man will ever *justify* them.
Sherlock.

Among theological arguments, in *justification* of absolute obedience, was one of a singular nature.
Swift.

There stand, and *justify* the foul abuse
Of sabbath hours with plausible excuse.
Cowper. Progress of Error.

Who, when occasion *justified* its use,
Had wit as bright as ready to produce.
Id. Conversation.

It is a foible which
Was not of mine, but more excuses you,
Inasmuch as it shows that I approach
A dotage which may *justify* this deed
Of yours, although the law does not, nor will.
Byron. Two Foscari.

An amendment has been made, and it has been *justified* by a declaration which I made some years ago, when I stated, that it would be exceedingly onerous for this country to engage in war.
Canning's Speeches.

Justification, in theology, that act of grace which renders a man free from sin in the sight of God. See Theology. Protestants contend for justification by faith alone; the Romanists by good works.

JUSTIN I., emperor of the east, rose gradually from being a swine-herd to the rank of general, and finally became emperor on the death of Anastasius I. in 518. He recalled the orthodox bishops, and published some severe edicts against the Arians. He died A. D. 527, aged fifty-seven.

Justin Martyr, or St. Justin, one of the earliest and most learned writers of the eastern church, was born at Neapolis, the ancient Shechem of Palestine. His father Priscus, a Gentile Greek, brought him up in his own religion, and had him educated in all the Grecian learning. To complete his studies he travelled to Egypt; and followed the sect of Plato, with whose philosophy he was much pleased. But one day walking by the sea-side, wrapt in contemplation, he was met by a grave old man of a venerable aspect: who, falling into discourse with him, turned the conversation by degrees from the excellence of Platonism to the merits of Christianity, and thus created in Justin an ardent curiosity to enquire into that religion; in consequence of which enquiry he was converted about A. D. 132. On his embracing Christianity he quitted neither the profession nor the habit of a philosopher; but, a persecution breaking out under Antoninus, he composed An Apology for the Christians; and afterwards presented another to Marcus Aurelius, in which he vindicated the innocence and holiness of the Christian religion against Crescens, a Cynic philosopher, and other calumniators. He did honor to Christianity by his learning and the purity of his manners; and suffered martyrdom in 167. Besides his two Apologies, there are still extant his Dialogue with Trypho, a Jew; two treatises addressed to the Gentiles, and another on The Unity of God. Other works are also ascribed to him. The best editions of St. Justin are those of Robert Stephens, in 1551 and 1571, in Greek and Latin; that of Morel, in Greek and Latin, in 1656; and that of Don Prudentius Morandus, a learned Benedictine, in 1742, in folio. His style is plain, and void of all ornament.

JUSTINGEN, a town of Suabia, capital of a lordship, purchased in 1715 by the duke of Wurtemburgh, for 300,000 florins. It gives him a seat and vote at the imperial diets. It is sixteen miles N. N. E. of Buchau, and thirty south-east of Stutgard.

JUSTINIAN I., son of Justin I., was made Cæsar and Augustus in 527, and soon after emperor. He conquered the Persians by Belisarius his general, and exterminated the Vandals; regained Africa; subdued the Goths in Italy; defeated the Moors; and restored the Roman empire to its primitive glory. He appointed ten able lawyers to collect the whole Roman laws into one body, entitled Codex Justinianus, or the Justinian Code; which may be called the statute law, as containing the rescripts of the emperors; and reduced the decisions of the judges and other magistrates, which were scattered in 2000 volumes, to the limits of fifty, which were entitled Digests or Pandects, and completed in 555. He also ordered four books of Institutes to be drawn up, containing an abstract of all the ancient laws; and in 541 compiled an abstract of the modern laws under the title of Novellæ, or the New Code. He died in 565, aged eighty-three, in the thirty-ninth year of his reign. He founded the church of Santa Sophia at Constantinople, which is esteemed a masterpiece of architecture. See Western Empire.

JUSTINIANI (Augustin), bishop of Nebo, one of the most learned men of his time, was descended of a noble family, and born at Genoa in 1480. He assisted at the fifth council of Lateran, where he opposed some articles of the concordat between France and the court of Rome. Francis I. of France made him his almoner; and he was for five years regius professor of Hebrew at Paris. He returned to Genoa in 1522, where he discharged the duties of his episcopal office till his death; and learning and piety flourished in his diocese. He perished at sea, in his passage from Genoa to Nebbio, in 1536. He composed several pieces, the most considerable of which is, Psalterium Hebræum, Græcum, Arabicum, et Chaldæum, cum tribus Latinis interpretationibus et glossis. He is also said to have translated Maimonides's More Nevochim.

JUSTINIANI (Bernard), was born at Venice in 1408. He obtained the senator's robe at the age of nineteen, served the republic in several embassies, and was elected procurator of St. Mark in 1474. He was a learned man, and wrote the History of Venice, with some other works of considerable merit; and died in 1498.

JUSTINUS (Marcus Junianus), a celebrated historian, who lived, according to the most probable opinion, in the second century, under Antoninus Pius. He wrote, in elegant Latin, An Abridgment of the History of Trogus Pompeius; containing the actions of almost all nations, from Ninus the founder of the Assyrian empire to Augustus. The original work of Trogus, to the regret of the learned, is lost. The best editions of Justinus are Ad usum Delphini, in 4to; and Cum notis Variorum et Gronovii, in 8vo.

JUS'TLE, *v. n.* & *v. a.* Fr. *jouster*. To encounter, or rush against each other; to push, drive, or force: commonly used with the particle *out* or *off*.

The chariots shall rage in the streets, they shall *justle* one against another in the broad ways. *Nah.* ii. 4.

While injury of chance
Puts back leave taking, *justles* roughly by
All time of pause, rudely beguiles our lips
Of all rejoinder.
Shakspeare. Troilus and Cressida.

Private and single abilities should not *justle out* and deprive the church of the joint abilities of many learned and godly men. *King Charles.*

Argo passed
Through Bosphorus, betwixt the *justling* rocks.
Milton.

Late the clouds
Justling, or pushed with winds, rude in their shock
Tine the slant lightning. *Id. Paradise Lost.*

Many excellent strains have been *justled off* by their intrusions. *Browne's Vulgar Errours.*

Not one starry spark,
But gods met gods, and *justle* in the dark.
Lee.

It is not to be imagined that the incongruous alphabets and abuses of writing can ever be *justled out* of their possession of all libraries. *Holder.*

Courtiers therefore *justle* for a grant;
And, when they break their friendship, plead their want. *Dryden.*

The more remote run stumbling with their fear,
And, in the dark, men *justle* as they meet. *Id.*

When elephant 'gainst elephant did rear
His trunk, and castles *justled* in the air,
My sword the way to victory had shown. *Id.*

The surly commons shall respect deny,
And *justle* peerage *out* with property. *Id.*

Absent good, though thought on, not making any part of unhappiness in its absence, is *justled out* to make way for the removal of those uneasinesses we feel. *Locke.*

We *justled* one another *out*, and disputed the post for a great while. *Addison's Guardian.*

I thought the dean had been too proud
To *justle* here among a crowd. *Swift.*

JUST'LY, *adv.* } Uprightly; honestly; properly;
JUST'NESS, *n. s.* } exactly: justness, reasonableness; equity; accuracy; propriety of adjustment: justness is properly applied to things, and justice to persons; though we now say the justice of a cause, as well as of a judge.

It maketh unto the right of the war against him, whose success useth commonly to be according to the *justness* of the cause for which it is made.
Spenser on Ireland.

We may not think the *justness* of each act
Such and no other than event doth form it.
Shakspeare.

With ignominy scourged, in open sight:
Next view the Tarquin kings; the avenging sword
Of Brutus *justly* drawn, and Rome restored.
Dryden.

Their artful hands instruct the lute to sound,
Their feet assist their hands, and *justly* beat the ground. *Id.*

I value the satisfaction I had in seeing it represented with all the *justness* and gracefulness of action. *Id.*

Nothing can *justly* be despised that cannot *justly* be blamed: where there is no choice, there can be no blame. *South.*

I appeal to the people, was the usual saying of a very excellent dramatick poet, when he had any dispute with particular persons about the *justness* and regularity of his productions. *Addison.*

The goddess, studious of her Grecians' fate,
Taught them in laws and letters to excel,
In acting *justly*, and in writing well. *Prior.*

They thought him, and they *justly* thought him, one
Sent to do more than he appeared to have done.
Cowper. Conversation.

Tears flow, and cease not, where the good man lies,
Till all who knew him follow to the skies.
Tears therefore fall where Chester's ashes sleep;
Him wife, friends, brothers, children, servants weep;
And *justly*, few shall ever him transcend
As husband, parent, brother, master, friend.
Cowper. Epitaph on Mr. Chester

JUSTUS (Jonas), a Protestant divine, born at North Hausen, in Thuringia, in 1493. He was one of Luther's most zealous disciples. He contracted a strict friendship with Melancthon; be-

came principal of the college of Wittemburg, and afterwards dean of the university of that city. He wrote a treatise in favor of the marriage of priests, and other works; and died in 1555.

JUT, *v. n.* } A word supposed to be corrupted from jet, perhaps from
JUT'TY, *v. a.* } shoot. To push or shoot into prominences; to come out beyond the main bulk.

Then lend the eye a terrible aspect;
Let it pry through the portage of the head
Like a brass cannon: let the brow o'erwhelm it
As fearfully as doth a galled rock
O'erhang and *jutty* his confounded base,
Swilled with the wild and wasteful ocean.
Shakspeare.

Insulting tyranny begins to *jut*
Upon the innocent and awless throne. *Id.*

All the projected or *jutting* parts should be very moderate, especially the cornices of the lower orders.
Wotton.

The land, if not restrained, had met your way,
Projected out a neck, and *jutted* to the sea.
Dryden.

Broke by the *jutting* land on either side;
In double streams the briny waters glide. *Id.*

It seems to *jut* out of the structure of the poem, and be independent of it. *Broome.*

Day after day
Sad on the *jutting* eminence he sits
And views the main that ever toils below.
Thomson.

JUTES, in ancient history, were a tribe of the Getæ, the conquerors of various countries: the Jutes inhabited the extremity of the Cimbric Chersonesus, which from them is still called Jutland.

JUTLAND, a peninsula of northern Europe, belonging to Denmark, the ancient Cimbria, and Chersonesus Cimbricus, bounded on the east by the Scaggerac, the Little Belt, and the Baltic; on the south by the duchy of Holstein; and on the west and north by the Northern Sea. It is about 200 miles long, and ninety-five broad, and generally divided into North Jutland or Jutland Proper, and South Jutland, also called the duchy of SLESWICK, which see.

JUTLAND, or NORTH JUTLAND, bounded on all sides by the sea, except towards the south, where its boundary is the duchy of Sleswick, is about 150 miles long, and from sixty to eighty broad. Of all the Danish territories it is the largest, and yields the greatest revenue. The middle part consists of heaths and moors, intermixed with arable land; but these afford good pasture for oxen, sheep, and goats. The other parts, of greater extent, are very fertile, and yield large crops of grain, annually exported to Sweden, Norway, and Holland. The inhabitants also derive considerable trade from their oxen, horses, and hogs. Jutland is commonly called 'the land of bacon and rye bread.' It is also well supplied with fresh water and sea fish. On the east it has fine woods of oak, beech, fir, &c. but on the west side the inhabitants are obliged to use their heath and turf for fuel. Jutland abounds likewise with game. The air is cold, especially towards the North Sea: but the inhabitants are vigorous and robust, and seem to have gained a great degree of practical freedom. Many of them have freeholds, for which they pay a small acknowledgment to the lord of the manor. The Danish language is spoken here with a particular accent. North Jutland is composed of four Lutheran dioceses, or governments, each of which has its bishop and general-governor; and they derive their names from those of their chief cities, viz. Aalbourg, Wibourg, Arrhuus, and Ripen. The population of these four dioceses is stated by Mr. Coxe at 358,136 persons. Jutland yields tripoly and fuller's earth, alum and vitriol.

JUTURNA, in fabulous history, a sister of Turnus, king of the Rutuli. She was ravished by Jupiter, made immortal by him, and afterwards turned into a fountain, the waters of which cured all diseases, and were used in the sacrifices of Vesta.

JUVENAL (Decius Junius), the celebrated Roman satirist, was born about the beginning of the emperor Claudian's reign, at Aquinum in Campania. He was educated for an orator, studied under Quintilian, and made a distinguished figure at the bar in Rome, where he acquired a considerable fortune before he commenced poet. It is said he was above forty years of age when he recited his first essay to a small audience of his friends: but, being encouraged by their applause, he ventured a larger publication, which reaching the ears of Paris, Domitian's favorite at that time, though but a pantomime player, whom our satirist had severely insulted, that minion complained to the emperor, who banished him by giving him the command of a cohort in the army, at Pentapolis. After Domitian's death Juvenal returned to Rome, sufficiently cautioned against attacking living characters and people in power under arbitrary princes; and therefore he thus concludes his first satire:—

Experiar quid concedatur in illos
Quorum Flaminiâ tegitur cinis atque Latinâ.

'I will try what liberties I may be allowed with those whose ashes lie under the Flaminian and Latin ways,' along each side of which the Romans of the first rank used to be buried. It is believed that he lived till the reign of Adrian in 128. There are still extant sixteen of his satires, in which he discovers great wit, strength, and keenness, in his language: but his style is not perfectly natural; and the obscenities with which these satires abound render them improper to be put into the hands of youth.

JUVENAL DE CAVENCAS (Felix), an ingenious writer, born at Pezena in 1679. He wrote, 1. The Principles of History. 2. Essays on the History of the Sciences, the Belles Lettres, and the Arts. He died in 1760.

JU'VENILE, *adj.* } Lat. *juvenilis*. Young
JUVENIL'ITY, *n. s.* } youthful; youthfulness light and careless in air or manner.

Learning hath its infancy when it is almost childish; then its youth, when it is luxuriant and *juvenile;* then its strength of years, when it is solid;

and lastly, its old age, when it waxeth dry and exhausts. *Bacon's Essays.*

Customary strains and abstracted *juvenilities* have made it difficult to commend and speak credibly in dedications. *Glanville.*

The restoration of grey hairs to *juvenility*, and renewing exhausted marrow, may be effected without a miracle. *Id.*

JUVENTAS, in Roman mythology, the goddess who presided over youth. This goddess was long honored in the Capitol, where Servius Tullius erected her statue. Near the chapel of Minerva there was an altar to Juventas.

JUXON (Dr. William), was born at Chichester in 1682, and elected into St. John's College, Oxford, of which he became president. King Charles I. made him bishop of London; and in 1635 lord high treasurer of England. The whole nation, and especially the nobility, were greatly offended at this high office being given to a clergyman; but his conduct soon extinguished all clamor. On the 17th of May 1641, however, he prudently resigned the staff, to avoid the storm which then threatened the court and the clergy. During the civil wars he resided at his palace at Fulham, where his meek, inoffensive, and gentle behaviour, though he continued steady in his loyalty to the king, procured him the respect even of the opposite party. In 1648 he waited on king Charles in the treaty of the Isle of Wight; and, by his particular desire, attended him at Westminster, after tne commencement of his trial. He likewise attended him on the scaffold, where the king taking off his cloak and George, gave him the latter. After the execution the bishop took care of the body, which he accompanied to the royal chapel at Windsor, but was prevented performing the last offices by colonel Whichcot, governor of the castle. He was now thrown into prison for refusing to disclose the particulars of his last conversations with the king; but soon released, and continued in the quiet possession of Fulham palace till 1649, when he was deprived; having been spared longer than any of his brethren. He then retired to his own estate in Gloucestershire, where he lived in privacy till the Restoration, when he was presented to the see of Canterbury; and, in the short time he enjoyed it, expended in buildings and reparations at Lambeth Palace and Croydon House near £15,000. He died in 1663, having bequeathed £7000 to St. John's College, and to other charitable uses near £5000. He published A Sermon on Luke xviii. 31, and Some Considerations upon the Act of Uniformity.

JUXTAPOSITION, *n. s.* Fr. *juxtaposition*; Lat *juxta* and *positio*. Apposition; the state of being placed by each other.

Nor can it be a difference, that the parts of solid bodies are held together by hooks, since the coherence of these will be of difficult conception; and we must either suppose an infinite number of them holding together, or at last come to parts that are united by a mere *juxtaposition*. *Glanville.*

JUXTAPOSITION is used by philosophers to denote that species of growth which is performed by the apposition of new matter to the surface or outside of old: in which sense it stands opposed to introsusception, where the growth of a body is performed by the reception of a juice within it diffused through its canals.

I'VY, *n. s.* Sax. ıƿıᵹ. A plant.

But, Troilus! thou maiest now Est and West,
Pipe in an *ivie* lefe, if that the lest.
Chaucer. Troilus and Cresside.

I have seen them
Like boding owls, creep into tods of *ivy*
And hoot their fears to one another nightly.
Beaumont's Bonduca.

A gown made of the finest wool;
A belt of straw, and *ivy* buds,
With coral clasps and amber studs;
And, if these pleasures may thee move,
Come live with me and be my love.
Raleigh.

Direct the clasping *ivy* where to climb.
Milton.

Wilds horrid and dark with o'ershadowing trees,
Rocks that *ivy* and briars unfold,
Scenes nature with dread and astonishment sees,
But I with a pleasure untold.
Cowper. Scenes favorable to, &c.

Where the Cæsars dwelt,
And dwell the tuneless birds of night, amidst
A grove which springs through levelled battlements,
And twines its roots with the imperial hearths,
Ivy usurps the laurel s place of growth.
Byron. Manfred.

IVY, in botany. See HEDERA.

IWAN BASILOWITZ I., surnamed the Great, czar of Muscovy, was born in 1438, and succeeded his father in 1462. Russia was then divided into a number of petty principalities, some of them nominally subject to the czar, or grand duke; and tributary, together with himself, to the Mogul Tartars. Iwan rendered the petty chiefs dependent on his own power, and emancipated himself from the yoke of the Moguls. During his reign ambassadors arrived at Moscow from the emperor of Germany, the pope, the grand seignior, and most of the other European powers. This prince, who is indeed considered as the founder of the Russian empire, died in 1505.

IWAN BASILOWITZ II., grandson of Iwan I., was born in 1530, and reigned from 1533 to 1584 He was an enlightened prince, but cruel and arbitrary; in a fit of passion he killed his own son. The Tartar province of Kasan was conquered by him in 1552, and that of Astracan in 1554. In 1582 he established the first printing-press at Moscow, and in his reign Thomas Chancellor, an English navigator, visited the Russian port of Archangel, when the czar sent an embassy to queen Elizabeth. The discovery of Siberia also took place in the reign of this sovereign.

IXIA, in botany, a genus of the monogynia order, and triandria class of plants: natural order sixth, ensatæ: COR. hexapetalous, patent, and equal: there are three stigmata, a little upright and petalous. There are several species, consisting of herbaceous, tuberous, and bulbous-rooted flowery perennials, from one to two feet high, terminated by hexapetalous flowers of dif-

ferent colors. They are propagated by off-sets, which should be taken off in summer at the decay of the leaves: but, as all the plants of this genus are natives of warm climates, few of them can bear the open air of this country in winter.

IXION, in fabulous history, king of the Lapithæ, married Dia the daughter of Deionius, to whom he refused to give the customary nuptial presents. Deionius, in revenge, took from him his horses; when Ixion, dissembling his resentment, invited his father-in-law to a feast, and made him fall through a trap-door into a burning furnace, in which he was immediately consumed. Ixion, being afterwards stung with remorse for his cruelty, went mad; on which Jupiter, in compassion, not only forgave him, but took him up into heaven, where he had the impiety to endeavour to corrupt Juno. Jupiter, to be the better assured of his guilt, formed a cloud in the resemblance of the goddess, upon which Ixion begat the Centaurs; but, boasting of his happiness, Jove hurled him down to Tartarus, where he lay fixed on a wheel encompassed with serpents, which turns without ceasing.

IXORA, in botany, a genus of the monogynia order, and tetrandria class of plants; natural order forty-seventh, stellatæ: COR. monopetalous, funnel-shaped, and long, superior: the stamina above the throat: the berry tetraspermous. Species twelve; found in both East and West Indies.

JYENAGUR, or JYEPORE, a fertile and populous principality and city of Hindostan, situated between the twenty-fifth and twenty-ninth degrees of northern latitude, and in the eastern extremity of the province of Ajmeer. It may be estimated at 150 miles in length, by seventy in breadth. This territory produces sugar, cotton, tobacco, and all the grains of the East. It has also a salt-water lake, which produces large portions of that article. It contains the strong fortresses of Rantampore and Jyenagur, and under the title of Ambeer, or Abnir, is said to have existed as a state for nearly 1200 years. Its princes were, however, compelled to unite their daughters in marriage with the Mahommedan princes, and to serve in the armies of the Mogul empire. The inhabitants are of the Rajpoot tribe.

JYENAGUR, the capital, was founded in the end of the seventeenth, or beginning of the eighteenth century, by rajah Jyesing, celebrated for his encouragement of the arts and sciences. He built an observatory here, and formed a set of astronomical tables, still known by his name. This is reckoned one of the handsomest and most regular towns of India; being chiefly built of stone: the streets, which are large and spacious, intersect each other at right angles. The fortifications are carried round the whole city, a distance of nearly four miles, and are crowned by a citadel on a steep rock. The place is a great mart for horses, and carries on a considerable traffic with all parts of India.

JY'MOLD, *adj.* See GIMAL.

> Their poor jades
> Lob down their heads, dropping the hide and hips,
> And in their pale dull mouths the *jymold* bit
> Lies, foul with chewed grass, still and motionless.
>
> *Shakspeare.*

JYNX, in ornithology, a genus of birds belonging to the order of picæ; the characters of which are, that the bill is slender, round, and pointed; the nostrils are concave and naked; the tongue is very long, very slender, cylindric, and terminated by a hard point; and the feet are formed for climbing. There is only one species, viz.

J. torquilla. The colors of this bird are elegantly pencilled, though its plumage is marked with the plainest kinds: a line of black and ferruginous strokes divides the top of the head and back; the sides of the head and neck are ash-colored, and beautifully traversed with fine lines of black and reddish-brown; the quill-feathers are dusky, but each web is marked with rust-colored spots; the chin and breast are of a light and yellowish brown, adorned with sharp-pointed bars of black; the tail consists of ten feathers, broad at their ends and weak, of a pale ash-color powdered with black and red, and marked with four equidistant bars of black; the irides are of a yellowish color. The wry-neck, Mr. Pennant apprehends, is a bird of passage, appearing with us in the spring before the cuckoo. Its note is like that of the kestril, a quick repeated squeak; its eggs are white, with a very thin shell; it builds in the hollows of trees, making its nest of dry grass. It has a very whimsical way of turning and twisting its neck about, and bringing its head over its shoulders, whence it had its Latin name torquilla, and its English one of wry-neck: it has also the faculty of erecting the feathers of the head like those of the jay. It feeds on ants, which it very dexterously tranfixes with the bony and sharp end of its tongue, and then draws them into its mouth; and, while the female is sitting, the male has been observed to carry these insects to her. These birds inhabit Russia, Sweden, Lapland, Greece, Italy, Babylon, and Bengal.

K.

K, A letter borrowed by the English from the Greek alphabet. It has before all the vowels one invariable sound: as, keen, ken, kill. It is used after c at the end of words; as, knock, clock, crack, back, brick, stick, pluck, check, which were written anciently with e final: as, clocke, checke, tricke. It is also in use between a vowel and the silent e final: as, cloke, broke, brake, pike, duke, eke. It likewise ends a word after a diphthong: as, look, break, shook, leek. K is silent before n; as, knife, knee, knell.

K is the tenth letter of our alphabet, and the seventh consonant. It is formed by the voice, by a guttural expression of the breath through the mouth, together with a depression of the lower jaw and opening of the teeth. K, borrowed from the Greek kappa, was but little used among the Latins: Priscian says, it was never used except in words borrowed from the Greek. Dausquius, after Sallust, says, it was unknown to the ancient Romans.—Indeed we seldom find it in any Latin authors, excepting in the word kalendæ, where it sometimes stands in lieu of c.—Carthage, however, is often spelt on medals with a K: SALV. AUG. ET CAES. FEL. KART. and sometimes in poetry, as in this line, which contains all the letters of the alphabet:

Gazifrequens Lybicos duxit Karthago triumphos.

See C. Lipsius observes that K was a stigma anciently marked on the foreheads of criminals with a red hot iron. The French never use k, excepting in a few terms of art, and proper names, borrowed from other countries. As an abbreviation K has various significations in old charters and diplomas; e. g. K R. stood for chorus, K R. C. for cara civitas, K R M. for carmen, KR. AM. N. carus amicus noster, K S. chaos, K. T. capite tonsus, &c. Sometimes K alone stood for Carthage.—M. Berger observes, that a capital K, on the reverse of the medals of the eastern emperors, signified Konstantinus; and on the Greek medals he considers it to signify ΚΟΙΛΗ ΣΥΡΙΑ, Cœlesyria. K on the ci-devant French coin denoted money coined at Bourdeaux. K as a numeral signified 250, according to the verse; 'K quoque ducentos et quinquaginta tenebit.' When it had a stroke at top ($\bar{K}$) it stood for 250,000.

KAARTA, a considerable kingdom of Western Africa, bounded on the east by Bambarra; on the south by the Ba Woolima, which separates it from Fooladoo; on the west by Kasson; and on the south by Ludamar. It produces the lotus in great abundance; and is in extent about 200 miles long, by eighty broad. Kemmoo is the capital; but the chief fortresses are Joko and Gedingooma.

KABARDA, a territory of the Caucasus, in Asiatic Russia, extending along the southern bank of the Terek.

KABRUANG, a well cultivated island in the Eastern seas, about eighteen miles in circumference. It may seen about eighteen leagues off, being remarkable for a peaked hill. It lies to the south-east of Salibabo Island, from which it is separated by a strait about four miles wide; in long. 126° 30′ E., lat. 3° 50′ N.

KADESH, KADESH-BARNEA, or En-Mishpat, in ancient geography, a city in the wilderness of Zin, where Miriam the sister of Moses died (Num. xx. 1), and where Moses and Aaron disobeying the Lord, when they smote the rock at the waters of strife, were condemned to die without entering the promised land (xxvii. 14).

The king of Kadesh was one of the princes killed by Joshua (xii. 22). This city was given to the tribe of Judah, and was situated about eight leagues from Hebron on the south. This Kadesh appears to have been a different place from Kadesh-barnea in the wilderness of Paran.

KADMONÆI, or CADMONÆI, an ancient people of Palestine, said to dwell at the foot of mount Hermon; which lies east with respect to Libanus, Phœnicia, and the north parts of Palestine; called also Hevæi.

KÆMPFERIA, zedoary, in botany, a genus of the monogynia order and monandria class of plants; natural order, eighth, scitamineæ: cor. sexpartite, with three of the segments larger than the rest, patulous; and one only bipartite.

1. K. galanga, common galangal, or long zedoary, has tuberous, thick, oblong, fleshy roots; crowned with oval, close sitting, leaves, by pairs, four or five inches long, without foot-stalks; and between them close sitting white flowers, with purple bottoms, growing singly.

2. K. rotunda, the round zedoary, has thick, fleshy, swelling, roundish, clustering roots, sending up spear-shaped leaves, six or eight inches long, near half as broad, on upright foot-stalks; and between them, immediately from the roots, rise whitish flowers, tinged with green, red, yellow, and purple centres. Both these are perennial roots; but the leaves rise annually in spring, and decay in winter. They flower in summer: each flower is of one petal, tubulous below, but plain above, and divided into six parts; they continue three or four weeks in beauty, but are never succeeded by seeds in this country. Both these species must be potted in light rich mould, and always kept in the hot-house, giving plenty of water in summer, but more sparingly in winter. They are propagated by parting the roots in the spring, just before they begin to push forth new leaves. They are cultivated with great care by the inhabitants of Siam for the sake of the roots; the use of which, says Kæmpfer, is to remove obstructions of the hypochondria, to warm the stomach, discuss flatulencies, and to strengthen the bowels and the whole nervous system. The root was formerly used in this country in bitter infusions; but is now laid aside, on account of its flavor being disagreeable.

KAFFRARIA and KAFFER. See CAFFRARIA.

KAHLEN-GEBIRGE, a branch of the Noric Alps, commencing near Kloster-Neuberg, on the Danube, a few miles above Vienna, and extending, under a variety of names, as far as Wippach, in Carniola. It was the Mons Cetius of the ancients, which separated the provinces of Noricum from Pannonia, and includes the rugged track called the Forest of Vienna. Its basis is calcareous rock.

KAHLORE, the name of two towns in the province of Lahore, Hindostan, which belong to the Seiks.

KAIN (Henry Lewis le), a modern French actor of eminence, was born at Paris April 14th, 1728, and originally a maker of surgeons' instruments. Voltaire, struck with his talents for the stage, drew him from his shop, and gave him important advice and instruction; but never saw him perform in public. Le Kain made his debut in the character of Brutus, September 4th, 1750, while the poet was in Prussia, and succeeded admirably in exhibiting the more violent emotions of the mind. He was, however, addicted to those vicious indulgences, which destroyed his respectability and his constitution, and at length occasioned his death, by inflammation of the bowels, in 1778, at the age of forty-nine. He is said to have left behind him 100,000 crowns.

KAIRWAN, or KAIROAN, a city of Africa in the kingdom of Tunis, second only to the capital. Its name is probably derived from the extensive inland commerce by caravans, of which it is the centre. The great mosque Dr. Shaw was not allowed to enter, but was told that the pillars of granite by which it was supported were not less than 500 in number, and considers it in the great variety of its ancient materials the most magnificent structure of Northern Africa; but a single inscription could not be discovered. It is supposed to be the Vicus Augusti of the ancients, and lies in a sandy and barren district, supplied with water only by rain collected in a large pond. It often suffers severely from drought. Long. 9° 57′ E., lat. 35° 36′ N.

KAISARIEH, a city of Asia Minor, the ancient Cæsarea and capital of Cappadocia. It stands on the south side of a long fertile plain, at the foot of the high mountain called Argish. Two branches of this ridge advance a short distance into the plain, and form a small recess, in which the city stands. The houses, though built of stone, are mean in appearance; but the place is the emporium of an extensive trade with all parts of Asia Minor and Syria. Cotton is here cultivated in great quantities, and sold both as a raw material and manufactured into cloth. The inhabitants who, amount to 25,000, consist of Armenians, Greeks, and Jews. About a quarter of a mile eastward is Eski Shehr, or the Old Town, which contains a number of ruined structures, and gateways, mingled and covered with modern buildings. It is remarkable for its filth and stench. Near it is a castle, falling into decay. Long. 35° 18′ E., lat. 38° 41′ N.

KAISERSLAUTERN, or LAUTERN, a fortified town of the Bavarian province on the Rhine, in the Lower Palatinate. It has on one side a marsh, formed by the Lauter; on the other a wood. It is the chief place of a district; and the seat of one of the three lyceums or provincial schools lately erected in the circle of the Rhine; commanding the passage of the Vosges both to Mentz and Landau. In 1792 and 1793 it was the scene of much hard fighting, and suffered severely. Inhabitants 2360. Thirty-four miles W. N. W. of Spire, and forty-two S. S. W. of Mentz.

KAJAAGA, a kingdom of Africa, called also Gallam, bounded on the south and south-east by Bambouk, north by the Senegal, and west by Bondou and Foota Torra. Mr. Park says, the air is more pure and salubrious than at any settlement on the coast, and the surface is beautiful and picturesque. The inhabitants are called Serawoollies, or Seracolets, and carry on trade in slaves with the factors on the Gambia.

KAKETI, the most easterly and mountainous province of Georgia, now subject to Russia. It has been exposed to numerous wars; and the country is covered with ruins. The Russians, however, have lately exerted themselves to restore its population and fertility.

KAKUNDY, a town of Western Africa, near the head of the Rio Nunez, bordering on the Foulah kingdom of Foota Jallo. It was fatal to the British expedition destined to explore the Niger, both major Peddie and captain Campbell dying here. It is 160 miles north of Sierra Leone.

KALEIDOSCOPE (of Gr. καλος, beautiful, and ειδος, form or likeness), an optical instrument, the invention of Dr. Brewster of Edinburgh, which, combining mirrors in a particular manner, produces a symmetrical reflection of beautiful images, which may be varied indefinitely.

Some earlier philosophers have suggested polygonal speculums, particularly B. Porta and Kircher; but the practical application of the principle to reflectors inclined towards each other at small angles was wholly a suggestion of Dr. Brewster's. It first occurred to him in 1814, in the course of his examination into the polarisation of light. Repeating, at a later period, some experiments of Mr. Biot on that subject, and extending them to some other fluids, Dr. Brewster, for his greater convenience, placed them in a triangular trough, formed by two plates of glass, cemented together at their sides, so as to form an acute angle. The ends being closed up with plate glass, cemented to the other plates, the trough for the reception of the fluids was fixed horizontally: and his eye being now placed at one end without the trough, some of the cement which had been pressed through between the plates at the object end, appeared to be arranged in a remarkably regular and striking manner. This led him to form an instrument with a view to producing this effect, which he showed, with more of the liberality of science than the prudence of this world, to several members of the Royal Society of Edinburgh. The result was, that the instrument became known in London, before he could avail himself of a patent for it; and, being simple in principle it was at once largely manufactured.

Dr. Brewster calculates that in London and

Paris together, not less than 200,000 were sold in three months: though, out of this immense number, there was perhaps not 1000, he adds, constructed upon scientific principles, or capable of giving any thing like a correct idea of the power of the kaleidoscope; and of the millions who have witnessed its effects, there are perhaps not 100 who have any idea of the principles upon which it is constructed, and of the mode in which those effects are produced. For these principles we must refer, according to our plan, to the article OPTICS.

KA'LENDAR, *n. s.* Lat. *calendæ*. Now written calendar. An account of time.

A KALENDAR is a distribution of time, accommodated to the uses of life; or a table or almanac, containing the order of days, weeks, months, feasts, &c. happening throughout the year. See CHRONOLOGY, MONTH, YEAR, &c. It is called kalendar, from the word kalendæ, anciently written in large characters at the head of each month. See KALENDS. The days in kalendars were originally divided into octoades, or eights; but afterwards, in imitation of the Jews, into hebdomades, or sevens; which custom, Scaliger observes, was not introduced among the Romans till after the time of Theodosius. There are divers kalendars, according to the different forms of the year and distributions of time established in different countries. The Jewish kalendar was fixed by rabbi Hillel about the year 360, from which time the days of their year may be reduced to those of the Julian kalendar.

The Gregorian kalendar is that which, by means of epacts, rightly disposed through the several months, determines the new and full moons, and the time of Easter, with the moveable feasts depending thereon, in the Gregorian year. The Gregorian kalendar, therefore, differs from the Julian, both in the form of the year, and in that epacts are substituted in lieu of golden numbers: for the use and disposition whereof see EPACT. Though the Gregorian kalendar is far preferable to the Julian, yet it is not without its defects. For, first, according to the Gregorian intercalation, the equinox sometimes comes after the 21st of March as far as the 23d; and sometimes anticipates it, falling on the 19th; and the full moon, which falls on the 20th of March, is sometimes the paschal; yet not so accounted by the Gregorians. On the other hand, the Gregorians account the full moon of the 22d of March the paschal; which yet, falling before the equinox, is not paschal. In the first case, therefore, Easter is celebrated in an irregular month; in the latter there are two Easters in the same ecclesiastical year. In like manner, the cyclical computation being founded on mean full moons, which yet may precede or follow the true ones by some hours, the paschal full moon may fall on Saturday, which is yet referred by the cycle to Sunday: whence, in the first case, Easter is celebrated eight days later than it should be; in the other, it is celebrated on the very day of the full moon, with the Jews and Quartodeciman heretics; contrary to the decree of the council of Nice. Scaliger and Calvisius show other faults in the Gregorian kalendar, arising from the negligence and inadvertency of the authors; yet this kalendar is adhered to by the Romanists throughout Europe, &c., and used wherever the Roman breviary is used.

The Roman kalendar owed its origin to Romulus; who only divided the year into ten months, making it begin in the spring, on the 1st of March; imagining the sun made his course through all the seasons in 304 days. Romulus's kalendar was reformed by Numa, who added two months more, January and February; placing them before March: so that his year consisted of 355 days, and began on the 1st of January. He chose, however, in imitation of the Greeks, to make an intercalation of 45 days, which he divided into two parts; intercalating a month of twenty-two days at the end of each two years; and, at the end of each two years more, another of twenty-three days; which month, thus interposed, he called Marcedonius, or the intercalary February. But these intercalations being ill observed by the pontiffs, to whom Numa committed the care of them, occasioned great disorders in the constitution of the year; which Cæsar, when sovereign pontiff, endeavoured to remedy. To this end, he consulted Sosigenes, a celebrated astronomer of those times; who found, that the dispensation of time in the kalendar could never be settled on any sure footing without having regard to the annual course of the sun. Accordingly, as the sun's yearly course is performed in 365 days, six hours, he reduced the year to the same number of days: the year of this correction of the kalendar was a year of confusion; they being obliged, in order to swallow up the sixty-five days that had been imprudently added, and which occasioned the confusion, to add two months besides the Marcedonius, which chanced to fall out that year: so that this year consisted of fifteen months, or 445 days. This reformation was made A. U. C. 708, and A. A. C. 42, or 43.

The Roman kalendar, called Julian, from its reformer Julius Cæsar, is disposed into quadriennial periods; whereof the first three years, which he called communes, consist of 365 days; and the fourth, bissextile, of 366; by reason of the six hours, which in four years make a day, or somewhat less, for in 134 years an intercalary day is to be retrenched. On this account pope Gregory XIII., with the advice of Clavius and Ciaconius, appointed that the hundredth year of each century should have no bissextile, excepting in each fourth century: that is, a subtraction is made of three bissextile days in the space of four centuries, by reason of the eleven minutes wanting in the six hours whereof the bissextile consists. The reformation of the kalendar, or the new style, commenced on the 4th of October 1582, when ten days were thrown out at once, so many having been introduced into the computation since the time of the council of Nice in 325, by the defect of eleven minutes.

The following table exhibits a view of the Roman Kalendar, with an account of the deities to which the several days are consecrated:—

Januarius.		
1	Kal.	Junoni, Jano, Jovi, Æsculapio.
2	IV. Non.	
3	III. Non.	
4	Prid. Non.	
5	Nonæ.	
6	VIII. Id.	
7	VII. Id.	
8	VI. Id.	
9	V. Id.	Agonalia.
10	IV. Id.	
11	III. Id.	Carmentalia.
12	Prid. Id.	Compitalia.
13	Idus,	Jovi Statori.
14	XIX. Kal. F.	
15	XVIII. Kal.	
16	XVII. Kal.	
17	XVI. Kal.	
18	XV. Kal.	
19	XIV. Kal.	
20	XIII. Kal.	
21	XII. Kal.	
22	XI. Kal.	
23	X. Kal.	Sementinæ feriæ.
24	IX. Kal.	
25	VIII. Kal.	
26	VII. Kal.	
27	VI. Kal.	Castori et Polluxi.
28	V. Kal.	
29	IV. Kal.	Equiria.
30	III. Kal.	Paci.
31	Prid. Kal.	Diis Penatibus.

Februarius.		
1	Kal.	Lucaria. Junoni.
2	IV. Non.	
3	III. Non.	
4	Prid. Non.	
5	Nonæ.	
6	VIII. Id.	
7	VII. Id.	
8	VI. Id.	
9	V. Id.	
10	IV. Id.	
11	III. Id.	
12	Prid. Id.	
13	Idus,	Fauni Fest. et Jov.
14	XVI. Kal. M.	
15	XV. Kal.	Lupercalia.
16	XIV. Kal.	
17	XIII. Kal.	Quirinalia, Fornacalia. Diis manibus sacra feralia.
18	XII. Kal.	
19	XI. Kal.	Deæ Mutæ.
20	X. Kal.	Charistia.
21	IX. Kal.	Terminalia.
22	VIII. Kal.	
23	VII. Kal.	Regifugium
24	VI. Kal.	
25	V. Kal.	
26	IV. Kal.	
27	III. Kal.	Equiria.
28	Prid. Kal.	

Martius.		
1	Kal.	Matronalia Junonis Lucinæ. Ancylia Martis.
2	VI. Non.	
3	V. Non.	
4	IV. Non.	
5	III. Non.	
6	Prid. Non.	Vestæ.
7	Nonæ.	
8	VIII. Id.	
9	VII. Id.	
10	VI. Id.	
11	V. Id.	
12	IV. Id.	
13	III. Id.	
14	Prid. Id.	Equiria altera.
15	Idus.	Annæ Perennæ.
16	XVII. Kal. A.	
17	XVI. Kal.	Liberalia, Agonia.
18	XV. Kal.	
19	XIV. Kal.	Quinquatria Minervæ.
20	XIII. Kal.	
21	XII. Kal.	
22	XI. Kal.	
23	X. Kal.	Tubilustrium.
24	IX. Kal.	
25	VIII. Kal.	Hilaria. Matris Deûm Festa.
26	VII. Kal.	
27	VI. Kal.	
28	V. Kal.	Megalesia.
29	IV. Kal.	
30	III. Kal.	Jano, Concordiæ, Saluti, Paci.
31	Prid. Kal.	Dianæ.

Aprilis.		
1	Kal.	Veneri et Fortunæ virili.
2	IV. Non.	
3	III. Non.	
4	Prid. Non.	
5	Nonæ.	Megalesia.
6	VIII. Id.	Fortunæ publicæ. Dinæ natalis.
7	VII. Id.	Natalis Apol.
8	VI. Id.	
9	V. Id.	Cerealia, Ludi Circenses.
10	IV. Id.	
11	III. Id.	
12	Prid. Id.	Magna Mater Romam adducta.
13	Idus,	Jovi Victori, et Libertati.
14	XVIII. Kal. M.	
15	XVII. Kal.	Fordicidia.
16	XVI. Kal.	
17	XV. Kal.	
18	XIV. Kal.	Equiria in Cir. Max.
19	XIII. Kal.	
20	XII. Kal.	
21	XI. Kal.	Palilia, Agonalia, Romæ natalis.
22	X. Kal.	
23	IX. Kal.	Vinalia. Jovi et Veneri.
24	VIII. Kal.	
25	VII. Kal.	Robigalia.
26	VI. Kal.	Latinæ Feriæ.
27	V. Kal.	
28	IV. Kal.	Floralia.
29	III. Kal.	
30	Prid. Kal.	Vestæ Palatinæ.

	Maius.		Junius.
1	Kal. Bonæ Deæ. Laribus præstitibus ara posita.	1	Kal. Marti. Carnæ Deæ.
2	VI. Non.	2	IV. Non.
3	V. Non.	3	III. Non. Bellonæ.
4	IV. Non.	4	Prid. Non.
5	III. Non.	5	Nonæ.
6	Prid. Non.	6	VIII. Id. Sponsoris Jovis.
7	Nonæ.	7	VII. Id. Ludi piscatorii.
8	VIII. Id.	8	VI. Id.
9	VII. Id. Lemuria.	9	V. Id. Vestæ, Asinus Coronatur.
10	VI. Id.	10	IV. Id. Matralia.
11	V. Id.	11	III. Id. Forti Fortunæ.
12	IV. Id. Martis bisultoris.	12	Prid. Id. Matris Matutæ.
13	III. Id.	13	Idus, Jovis invicti. Quinquatrus minusculæ.
14	Prid. Id.	14	XVIII. Kal. J.
15	Idus, Mercurii natalis. Mercatorum dies festus.	15	XVII. Kal.
16	XVII. Kal. J.	16	XVI. Kal.
17	XVI. Kal.	17	XV. Kal.
18	XV. Kal.	18	XIV. Kal.
19	XIV. Kal.	19	XIII. Kal. Minervæ in Avent.
20	XIII. Kal.	20	XII. Kal. Summanalia.
21	XII. Kal. Agonalia Vejovi.	21	XI. Kal.
22	XI. Kal.	22	X. Kal.
23	X. Kal. Vulcano. Maiæ. Tubilustrium.	23	IX. Kal.
24	IX. Kal. Regifugium Alterum.	24	VIII. Kal. Fortis Fortunæ.
25	VIII. Kal.	25	VII. Kal.
26	VII. Kal.	26	VI. Kal.
27	VI. Kal.	27	V. Jovis Statoris, et Laris.
28	V. Kal.	28	IV. Kal.
29	IV. Kal.	29	III. Kal.
30	III. Kal.	30	Prid. Kal. Herculis et Musarum.
31	Prid. Kal.		

	Julius.		Augustus.
1	Kal.	1	Kal. Spei.
2	VI. Non.	2	IV. Non.
3	V. Non.	3	III. Non.
4	IV. Non.	4	Prid. Non.
5	III. Non. Populifugium.	5	Nonæ. Saluti.
6	Prid. Non,	6	VIII. Id.
7	Nonæ. Caprotinæ. Ancillarum festum.	7	VII. Id.
		8	VI. Id. Soli Indigeti.
8	VIII. Id.	9	V. Id.
9	VII. Id.	10	IV. Id. Opi et Cereri.
10	VI. Id.	11	III. Id. Herculi magno custodi.
11	V. Id. Ludi Apollinares.	12	Prid. Id.
12	IV. Id. Fortunæ muliebris.	13	Idus, Dianæ, Vertumno.
13	III. Id.	14	XIX. Kal. S.
14	Prid. Id.	15	XVIII. Kal.
15	Idus, Castoris et Pollucis.	16	XVII. Kal.
16	XVII. Kal. A.	17	XVI. Kal. Portumnalia.
17	XVI. Kal. Alliensis dies atra.	18	XV. Kal. Consualia. Sabinarum raptus.
18	XV. Kal.	19	XIV. Kal.
19	XIV. Kal.	20	XIII. Kal. Vinalia secunda.
20	XIII. Kal.	21	XII. Kal. Vinalia rustica.
21	XII. Kal.	22	XI. Kal.
22	XI. Kal.	23	X. Kal. Vulcanalia.
23	X. Kal.	24	IX. Kal.
24	IX. Kal.	25	VIII. Kal. Opi Consivæ.
25	VIII. Kal. Furinalia.	26	VII. Kal.
26	VII. Kal.	27	VI. Kal.
27	VI. Kal.	28	V. Kal. Aræ Victoriæ.
28	V. Kal. Neptunalia.	29	IV. Kal.
29	IV. Kal.	30	III. Kal.
30	III. Kal.	31	Prid. Kal.
31	Prid. Kal.		

September.		
1	Kal.	Vulcani tutela Septemb.
2	IV. Non.	
3	III. Non.	Dionysia.
4	Prid. Non.	
5	Nonæ.	
6	VIII. Id.	Erebo.
7	VII. Id.	
8	VI. Id.	
9	V. Id	
10	IV. Id	
11	III. Id	
12	Prid. Id.	
13	Idus,	Jovi Capitolii Dedic. Prætor Clavum pangit
14	XVIII. Kal.	
15	XVII. Kal.	Ludi Romani sive Magni per 4 dies.
16	XVI. Kal.	
17	XV. Kal.	
18	XIV. Kal.	
19	XIII. Kal.	
20	XII. Kal.	Romuli natalis.
21	XI. Kal.	
22	X. Kal	
23	IX. Kal	
24	VIII. Kal.	
25	VII. Kal.	Veneri. Saturno. Maniæ.
26	VI. Kal.	
27	V. Kal.	Fortunæ reduci.
28	IV. Kal	
29	III. Kal.	
30	Prid. Kal.	Meditrinalia, Epulum Minervæ.

October.		
1	Kal.	Martis tutela Oct.
2	VI. Non.	
3	V. Non.	
4	IV. Non.	
5	III. Non.	
6	Prid. Non.	
7	Nonæ.	
8	VIII. Id.	Pyænepsia Apoll.
9	VII. Id.	
10	VI. Id.	Oscophoria.
11	V. Id.	
12	IV. Id.	Augustalia.
13	III. Id.	Fontinalia.
14	Prid. Id.	
15	Idus,	Mercurio Mercatores sacr.
16	XVII. Kal.	
17	XVI. Kal.	
18	XV. Kal.	Jovi Liberatori.
19	XIV. Kal.	Armilustrium.
20	XIII. Kal.	
21	XII. Kal.	
22	XI. Kal.	
23	X. Kal.	Hoc mense Libero sacr. fiebat.
24	IX. Kal.	
25	VIII. Kal.	Vertumni feriæ.
26	VII. Kal.	
27	VI. Kal.	Ludi Victoriæ.
28	V. Kal.	
29	IV. Kal.	
30	III. Kal.	
31	Prid. Kal.	

November.		
1	Kal.	Dianæ tutela hic mensis.
2	IV. Non.	
3	III. Non.	
4	Prid. Non.	Jovis epulum.
5	Nonæ.	Neptunalia.
6	VIII. Id.	
7	VII. Id.	
8	VI. Id.	
9	V. Id.	
10	IV. Id.	
11	III. Id.	Maria clauduntur usque ad VI. Id. Mart.
12	Prid. Id.	
13	Idus,	Pithægia, Lectisternia.
14	XVIII. Kal.	
15	XVII. Kal.	Ludi Plebeii.
16	XVI. Kal.	
17	XV. Kal.	
18	XIV. Kal.	
19	XIII. Kal.	Cœna Pontificum in honorem Magnæ Matris.
20	XII. Kal.	
21	XI. Kal.	
22	X. Kal.	Plutoni et Proserpinæ.
23	IX. Kal.	
24	VIII. Kal.	Brumalia.
25	VII. Kal.	
26	VI. Kal.	
27	V. Kal.	
28	IV. Kal.	
29	III. Kal.	
30	Prid. Kal.	

December.		
1	Kal.	Fortunæ Muliebris festum.
2	IV. Non.	
3	III. Non.	Neptuno et Minervæ.
4	Prid. Non.	
5	Nonæ.	Faunalia.
6	VIII. Id.	
7	VII. Id.	Junoni Jugali.
8	VI. Id.	
9	V. Id.	
10	IV. Id.	Agonalia.
11	III.	Alcyonii dies.
12	Prid. Id.	Equiria.
13	Idus,	
14	XIX. Kal.	Brumalia.
15	XVIII. Kal.	
16	XVII. Kal.	
17	XVI. Kal.	Saturnalia.
18	XV. Kal.	
19	XIV. Kal.	Opalia.
20	XIII. Kal.	Sigillaria.
21	XII. Kal.	Angeronalia. Herculi et Cereri.
22	XI. Kal.	Feriæ dict. Compitalia.
23	X. Kal.	Feriæ Jovis. Laurentinalia.
24	IX. Kal.	Juvenalis dies.
25	VIII. Kal.	
26	VII. Kal.	
27	VI. Kal.	
28	V. Kal.	Hic mensis Saturno sacer.
29	IV. Kal.	Vestæ verò tutela.
30	III. Kal.	
31	Prid. Kal.	

Kalendar is also applied to divers other compositions respecting the twelve months of the year. In this sense Spencer has given the Shepherd's Kalendar; Evelyn and Miller the Gardener's Kalendar, &c.

Kalendar, kalendarium, originally denoted, among the Romans, a book containing an account of moneys at interest, which became due on the kalends of January, the usual time when the Roman usurers let out their money.

KALENDARIUM Festum, a festival among the ancient Romans, held on the kalends of January, or new year's day. The Christians retained much of the ceremony and wantonness of this feast, which for many ages was celebrated by the clergy, under the names of festum kalendarium, or hypodiaconorum, or stultorum, that is, the feast of fools; sometimes also libertas decembrica. The people met masked in the church; and in a ludicrous way proceeded to the election of a mock pope, or bishop, who exercised a jurisdiction over them suitable to the festivity of the occasion. Fathers, councils, and popes, long labored to restrain this license to little purpose. The feast of the kalends was in use as late as the close of the fifteenth century.

KAL'ENDS, *n. s.* The first day of every month amongst the Romans; more correctly written Calends.

> And wotest well that *kalender* is she
> To any woman that wol lover be
> For she taught all the craft of trewe living.
> *Chaucer. Prologue to the Legende of Good Women.*
>
> This se, clepe I the tempestuous matere
> Of depe dispaire, that Troilus was in;
> But now of hope the *kalendes* begin.
> *Id. Troilus and Creside.*
>
> Let this pernicious hour
> Stand as accursed in the *kalender*.
> *Shakspeare. Macbeth.*

Kalends, Kalendæ, or **Calends**, in the Roman chronology, the first day of every month. The word is formed from καλεω, I call or proclaim; because, before the publication of the Roman fasti, it was an office of the pontifices to watch the appearance of the new moon, and give notice thereof to the rex sacrificulus; upon which a sacrifice being offered, the pontiff summoned the people together in the Capitol, and there with a loud voice proclaimed the number of kalends, or the day whereon the nones would be; which he did by repeating this formula as often as there were days of kalends, Calo Juno Novella. Whence the name calendæ, from calo, calare. This is Varro's account. Others derive the appellation hence, that the people being convened on this day, the pontifex proclaimed the several feasts or holidays in the month; a custom which continued till A. U. C. 450, when C. Flavius, the curule ædile, ordered the fasti or kalendar to be set up in public places, that every body might know the difference of times, and the return of the festivals. The kalends were reckoned backwards, or in a retrograde order. Thus, e. g. the first of May being the kalends of May, the last or the 30th of April was the pridie kalendarum, or 2d of the kalends of May; the 29th of April, the 3d of the kalends, or before the kalends; and so back to the 13th, where the ides commence: which are likewise numbered invertedly to the fifth, where the nones begin; which are numbered after the same manner to the first day of the month, which is the kalends of April. See Ides and Nones. The rules of computation by kalends, nones, and ides, are contained in the following verses:

> Prima dies mensis cujusque est dicta kalendæ.
> Sex Maius nonas, October, Julius, et Mars;
> Quatuor at reliqui: habet idus quilibet octo.
> Inde dies reliquos omnes dic esse kalendas;
> Quas retro numerans dices a mense sequente.

Kalends are also used in church history to denote conferences anciently held by the clergy of each deanery, on the first day of every month, concerning their duty and conduct, especially with regard to the imposition of penance.

Kalends of January, in Roman antiquity, a solemn festival consecrated to Juno and Janus; wherein the Romans offered vows and sacrifices to those deities, and exchanged presents among themselves as a token of friendship. But it was a melancholy day to debtors, who were then obliged to pay their interest, &c. Hence Horace calls it tristes kalendæ.

KA'LI, *n. s.* An Arabic word. Sea-weed, of the ashes of which glass was made; whence the word alkali.

> The ashes of the weed *kali* are sold to the Venetians for their glass works. *Bacon.*

KALM (Peter), a celebrated naturalist, and pupil of Linnæus. He was a native of Finland, and was born in the year 1715. Having imbibed a taste for the study of natural history, he pursued his inclination with much zeal and industry. His first researches were rewarded by the discovery of many new plants in Sweden, of which he gave some account to the botanical world between the years 1742 and 1746. He was particularly anxious to explore the properties of plants, both with respect to their uses in medicine, and in the useful arts; so that planting and agriculture occupied some portion of his attention. His reputation as a naturalist caused him to be appointed professor at Abo, and in October, 1747, he set out upon his travels, sailing from Gottenburg for America; but on account of a violent hurricane was obliged to take shelter in a port of Norway, whence he could not depart till the ensuing February, when he proceeded immediately for London. From hence he went to North America, as we learn from his book; and, having spent two or three years in exploring whatever was worthy of observation in that country, he returned to his professorship at Abo in 1751. The expenses of this undertaking appear to have exceeded what was allowed him by the Academy of Sciences, so that our author was obliged to live rather penuriously upon his return. Yet he found means to cultivate, in a small garden of his own, several hundred plants, for the use of the university, as there was no public botanical garden at Abo.

His discoveries in botany very materially enriched the Species Plantarum of his great master, and the Linnæan Herbarium abounds with speci-

mens brought home by him, distinguished by the letter K. Haller enumerates a long list of tracts published by Kalm, and his inaugural dissertation appeared in the Amænitates Academicæ of Linnæus. He was originally intended for the ecclesiastical profession, but was drawn aside from this pursuit by attending the lectures of Linnæus on natural history, given in the university of Upsal. Indeed, it was through the recommendation of Linnæus that professor Kalm was fixed upon to undertake the voyage to North America. He afterwards made, at his own expense, a very extensive tour into Russia, the history of which never appeared in print, but which is supposed to have furnished considerable matter for the work of a Swedish writer, who published a book of travels in that kingdom. Kalm was a member of the Royal Swedish Academy of Sciences, and departed this life in the year 1779, aged sixty-four.

KALMIA, in botany, a genus of the monogynia order, and decandria class of plants; natural order eighteenth, bicornes: CAL. quinquepartite: COR. salver-shaped, formed with five nectariferous horns on the under or outer side; CAP. quinquelocular. Of this genus there are two species, viz.

1. K. angustifolia, which rises to about sixteen feet, producing ever-green leaves, in shape like the lauro-cerasus, but small, and of a shining dark green. The flowers grow in clusters, the buds of which appear in autumn wrapped up in a conic scaly perianthium, on which is lodged a viscous matter, which protects them from the severe cold in winter. These buds, dilating in the following spring, break forth into twenty or more monopetalous flowers, divided into five segments, and set singly on pedicles half an inch long. These flowers, when blown, appear white: but on a near view are of a faint bluish color, which, as the flower decays, grow paler. One of the five petals is longer and more concave than the rest, and is blended with purple, green, and yellow specks, being a viscous matter on the extremities of very fine hairs. The convex side of the same petal is also speckled with yellowish green. The pointal rises from the centre of the flower, and has its head adorned with scarlet, and surrounded by ten stamina, whereof three are long and seven short, whose farina issues out at a small round hole at its top. This elegant tree adorns the western and remote parts of Pennsylvania, always growing in the most sterile soil, or on the rocky declivities of hills and river banks, in shady moist places.

3. K. latifolia, a most beautiful shrub, rises usually to five or six feet, and sometimes twice that height in its native places. The stems of some are as big as the small of a man's leg, and covered with a brown rough bark. The wood is very close grained, heavy, and hard like box. The limbs in general are crooked, and grow irregular; but are thickly clothed with stiff smooth leaves of a shining bright green. The flowers grow in bunches on the tops of the branches to foot-stalks of three inches long: they are white, stained with purplish-red, consisting of one leaf in form of a cup, divided at the verge into five sections; in the middle is a stylus and twelve stamina; which, when the flower first opens, appear lying close to the sides of the cup at equal distances, their apices being lodged in ten little hollow cells, which, being prominent on the outside, appear as so many little tubercles. The flowers are succeeded by small round capsules; which when ripe open in five parts, and discharge their small dust like seeds. This species is a native of Carolina, Virginia, and other parts of the northern continent of America; yet it is not common, but found only in particular places; it grows on rocks hanging over rivulets and running streams, and on the sides of barren hills. It blossoms in May, and continues in flower the greatest part of the summer.

KALMUCS, a tribe of Tartars, called also Eluths, inhabiting the larger half of what the Europeans call Western Tartary. See TARTARY. They are in general, says professor Pallas, of a middle size, and it is even rare to see among them a person that is tall; the women especially are of low stature, and have very agreeable features. Their limbs are neatly turned, and very few have any defects contracted in infancy. Their education, being left solely to nature, procures for them a well formed body and sound constitution. Their skin is pretty fair, especially when young; but the lower sort allow their male children to go quite naked, both in the heat of the sun and in the smoky atmosphere of their felt huts; the men too sleep naked, covered only with their drawers; and thus they acquire that yellowish-brown color which characterises them. The women, on the contrary, have a very delicate complexion; among those of a certain rank are found some with the most beautiful faces, the whiteness of which is set off by the fine black of their hair: and in this as well as in their features they perfectly resemble the figures in Chinese paintings. The physiognomy of the Kalmucs is peculiar. Strangers are made to believe that it is frightfully deformed; and, though indeed there are very ugly men to be found, yet, in general, their countenance has an openness that bespeaks a mild, frank, and social disposition. In many it is of a roundish shape, and exceedingly agreeable; among the women some would be thought beauties even in those European cities where the taste is most scrupulous. The characteristic features of a Kalmuc or Mongul countenance are the following:—the interior angle of the eye is placed obliquely downwards towards the nose, and is acute and fleshy; the eye-brows are black, narrow, and much arched; the nose is of a structure quite singular, being generally flat and broken towards the forehead; the cheek-bone is high, the head and face very round; the eye is dark, the lips thick and fleshy, the chin short, and the teeth exceeding white, continuing so to old age; the ears are of an enormous size, standing out from the head. These characters are more or less visible in each individual; but the person that possesses them all in the highest degree is considered as the most beautifully formed. Among all the Mongul nations the men have much less beard than in our European countries, and among the Tartars it appears much later. The Kalmucs

have most of it; and yet even with them the beard is very scanty and thin, and few have much hair on any other part of the body. They enjoy the bodily senses in the greatest perfection. They find the subtilty of their sense of smell very useful in their military expeditions; by it they perceive at a great distance the smoke of a fire, or the smell of a camp. Many of them can tell by applying the nose to the hole of a fox, or any other quadruped, if the animal be within or not. They hear at a great distance the trampling of horses, the noise of an enemy, of a flock of sheep, or strayed cattle; they have only to stretch themselves on the ground, and to apply their ear close to the turf. But nothing is more astonishing than the acuteness of their sight, and the extraordinary distance at which they often perceive very minute objects, such as the dust raised by cattle or horses, and this from places very little elevated, in immense level deserts, though the particular inequalities of the surface, and the vapors which in fine weather are seen to undulate over the soil in great heats, considerably increase the difficulty. They are also accustomed to trace the print of a foot in these deserts by the sight alone. The Kalmucs possess many good qualities, which give them a very great superiority over the wandering Tartars. A certain natural sagacity, a social disposition, hospitality, eagerness to oblige, fidelity to their chiefs, much curiosity, and a certain vivacity accompanied with good humor, which hardly ever forsakes even the most wretched among them, form the fair side of their character. On the other hand, they are careless, superficial, and want true courage; they are credulous, and yet cunning and distrustful; and they have a great inclination, authorised by custom, for drunkenness and debauchery. They are less indolent than most other Asiatics. Those among them who exercise any trade, or who hire themselves to the Russians for labor or for fishing, are very assiduous and indefatigable. They sleep but little, going to rest late and rising with the sun. But their extreme dirtiness can neither be disguised nor justified, and proceeds much more from their education. With regard to their intellectual faculties, notwithstanding their want of instruction and information, they possess good natural parts, an excellent memory, and a strong desire to learn. They acquire the Russian language with facility, and pronounce it well; in which last article they very much surpass the Chinese. Though generally of a sanguine and choleric temperament, they live more amicably together than could be expected in a people that lead so independent a life. They seldom come to blows even over their cups, and their quarrels are hardly ever bloody. A murder very rarely happens, though their anger has something in it exceedingly fierce. The Kalmucs are very affable; and of so social a disposition, that they will go several miles to salute a traveller, and to enquire into the object of his journey. When a troop of Kalmucs perceive any person at a distance, it is customary for them to detach one of their number to the next eminence, whence he makes a signal with his cap for the person to draw near; if this signal is not obeyed, the person is considered as an enemy or a robber, and is often pursued as such. They enter willingly into friendships: but these connexions are not quite disinterested; for to give and to receive presents are with them essential articles. A mere trifle, however, is sufficient to induce them to do you all manner of service; and they are never ungrateful as far as they are able. Adversity cannot deprive them of courage, nor alter their good humor. A Kalmuc will never beg if he be in the extremest misery, but rather endeavour to acquire a subsistence by labor, or even by robbery. But they are very hospitable. A Kalmuc provided with a horse, arms, and equipage, may ramble through the country for months together, without taking with him either money or provisions. Wherever he comes he finds friends, from whom he meets with the kindest reception, and is entertained in the best manner their circumstances afford. His wants are supplied with the most affectionate cordiality. Every stranger, of whatsoever nation, is well received by a Kalmuc; and he may depend upon having his effects in the greatest security the moment he has put himself under the protection of his host: for to rob a guest is considered by the Kalmucs as the worst of crimes. When the master of the house sits down to meat, in company with others of inferior rank, he begins indeed by serving himself and his family, but whatever remains is distributed among all present. When any one receives a present of meat or drink, he divides it faithfully with his companions, even though of inferior rank. But they are much more niggardly of their other effects, and especially of their cattle, and do not willingly give these away, unless a friend has accidentally suffered the loss of his flocks, when he is sure to be most willingly assisted. Perhaps too it may be related, as an article of their hospitality, that they abandon their wives to their friends with the greatest facility, and in general are very little inclined to jealousy. Their robberies are never committed upon their equals, and even the greater part of the rapine exercised on other tribes is founded on hatred or national quarrels; neither do they willingly attempt this by open force, but prefer the machinations of cunning. It must also be confessed, that it is only those that live with princes, and in camps where these hold their courts, or their priests, that are most addicted to these practices; while the common people, satisfied with the pleasures of the pastoral life, spend their days in innocent simplicity, and never attack the property of another till forced by necessity, or led by their superiors, who show them the example. The Kalmucs are very faithful to their princes; they endure every sort of oppression, and yet are with difficulty induced to revolt; but, if they belong to a prince who has not become so by right of succession, they very easily rebel. They honor old age. When young men travel with such as are older than themselves, they take upon them the whole care of the cattle, as well as of the feast. They are exceedingly prudent in matters that relate to their sovereign or their nation, or which are recommended to their direction by the priests, to

whom they yield an unreserved obedience. The moveable habitations of the Kalmucs are those felt huts with a conical roof in use among all the roaming Asiatics. The truly ingenious invention of these tents was undoubtedly conceived in the eastern parts of Asia, and most probably by the Mongul nations. As they can be entirely taken to pieces, and folded in a small compass, they are very useful, and perfectly agree with the migratory life of these people, who are ignorant of the use of carriages. The frame of these huts, and the felt they are covered with, though made as light as possible, yet are a sufficient load for a camel or two oxen. But the capacity of these huts, their warmth in winter, their strength in resisting tempests and excluding rain, abundantly compensate for this inconvenience. The wood endures many years; and though the felt begins to break into holes in the second year, yet, as they do not consider it disgraceful to have them patched, they make them serve a good deal longer. The huts are in general use from the prince down to the meanest Kalmuc, differing only in size and in the embellishments within. In winter they are warm, even when heated with the dried excrements of their cattle, to which they are often obliged to have recourse, for want of other combustibles, in many places of the deserts which are destitute of wood. In summer they remove the felt to enjoy the fresh air. The master of the tent has his bed placed opposite to the door behind the fire-place. The bedsteads are low and made of wood. The rich adorn their beds with curtains, and spread carpets of felt upon the ground. When a Kalmuc possesses an idol, he places it near the head of his bed, and sets before it several small consecrated cups full of water, milk, or other food. On festivals the idol is decorated, the lamps are lighted, and perfumes burnt before it. The riches of the Kalmucs, and their whole means of subsistence, depend on their flocks, which many of them reckon by hundreds and even by thousands. A man is thought capable of living on his possessions when he is master of ten cows with a bull, eight mares with a stallion. The animals they have in greatest abundance are horses, horned cattle, and sheep. Camels, which require time and pains to rear, cannot multiply much with them: they are besides too delicate; and it is only the rich or the priests who possess any of them. Their horses are small, too weak for the draught, and too wild; but they are very swift, and support with ease the weight of a man. They may be made to gallop for several hours successively without injury; and can pass two days without drinking. They have a little hoof, but very hard; and may be used at all times without being shod. They perpetuate their species without any assistance from man. The Kalmucs castrate the greater part of their male foals, and slit their nostrils, that they may breathe more freely wnen they run. The stallions are never separated from their mares, that there may always be plenty of milk. Their horned cattle are of a beautiful shape, they keep more bulls than are necessary for the cows, and employ a great number of them as beasts of burden for carrying their houses and furniture from place to place. They think a bull equal to fifty cows. Their sheep have large tails, exceedingly fat, and which furnish a suet as soft as butter. They have also large pendant ears, and their heads are much arched. Their wool is coarse, and the ewes seldom have horns: one ram is sufficient for 100 ewes: the wool is only fit to make felt for tents. Many sheep die during winter, and a greater number still of the early lambs; the skins of which are wrought into those fine furs so much esteemed in Russia and foreign parts. The rich Kalmucs only have camels; for they are very dear, multiply slowly, and are subject to many diseases. They are guarded with much care in winter, yet many of them die of consumptions and diarrhœa, occasioned probably by the moisture of their pasture. No animal is so much tormented with insects; and they often die in summer of those they swallow in eating the leaves of the oak and birch. The meloe proscarabæus, which covers all the plants in many places where they feed, is generally fatal to them. In spring, when they cast their hair, and which falls at once from every part of their body, they are exposed to the bite of the spider scorpion, whose wound is so venomous, that the camel dies of it in less than eight days, sometimes in three. Camels' milk is thick, unctuous, and of a saltish taste, and this last property makes the Kalmucs fond of it to tea. They use the hair for stuffing cushions, and for making ropes, pack-thread, felt, and very beautiful camlets. The camels with two bunches afford a very uneasy seat to the person who rides them; their trot is so heavy, and even their walk so rude, that he receives the most violent shocks at every step. When a Kalmuc horde intends to remove in search of fresh pasture, which in summer happens every four, six, or eight days, people are despatched to reconnoitre the best place for the khan or prince, for the lama, and for the hut containing the idols. These begin the march, and are followed by the whole troop. On these days the women paint and dress themselves in their best clothes. The Kalmucs are supplied by their flocks with milk, cheese, butter, and flesh, which are their chief articles of food. They also eat the roots and stalks of many wild plants; such as the bulbous-rooted chervil, dandelion, &c. Their ordinary drink is the milk of mares or cows. The former when fresh has a disagreeable taste of garlic; but it takes, as it grows sour, a very agreeable vinous flavor; it neither yields cream nor curd, but furnishes a very wholesome refreshing beverage, which inebriates when taken to excess. They never use new milk, nor milk or water that has not been boiled. Their milk is boiled as soon as it is taken from the animal; when cold it is poured into a large leathern bag, in which there remains as much of the old milk as is sufficient to turn the new sour. This communicates to the milk a vinous fermentation. As often as the Kalmucs procure much milk from their flocks, they intoxicate themselves with the spirituous liquor which they distil from it. Mares' milk is the most spirituous; and the quantity meant to be distilled remains twenty-four hours in summer, and three or four

days in winter, in those corrupted bags, to prepare it for the operation. Cows' milk yields one-thirtieth part, and mares' milk one-fifteenth of spirit. This liquor is limpid and very watery, and consequently does not take fire, but is capable of being long kept in glass-bottles. The rich Kalmucs increase its strength by a second distillation. These people are exceedingly fond of tea and tobacco. The former is so dear, as it comes to them from China by the way of Russia, that the poor people supply its place with various wild plants; such as liquorice, the seed of the sharp-leaved dock, and Tartarian maple, the roots of wild angelica, &c. The Kalmucs are excellent horsemen. Their arms are lances, bows and arrows, poniards, and crooked sabres; the rich have fire-arms. They wear, when at war, coats of mail, and their helmets are gilt at top. Falconry and hunting are their chief amusements. Their passion for play, especially cards, is carried to as great excess as in any nation. The greater part of their time is spent in diversions; and however miserable their manner of life may seem to us, they are quite happy with it. They cannot endure for any time the air of a close room; and think our custom of living in houses insupportable. The greatest part of them arrive at a vigorous old age; their diseases are neither frequent nor dangerous. Men of eighty or 100 years old are not uncommon; and at that age they can still endure the exercise of riding. Simple food, free air, a hardy constitution, continual exercise, and a mind free from care, are the causes of their health and longevity. It is remarkable, that a migratory people, whose manner of life seems so congruous to the natural liberty of mankind, should have been subjected from time immemorial to the unlimited authority of an absolute sovereign. Neither written records nor traditions have preserved any trace of their ever having enjoyed a state of independence. On the contrary, they say, they have always been subject to khans, whose authority has been transmitted to them by succession, and is considered as a right perfectly sacred and divine.

KALUGA, a large and fertile government of the Russian empire, formerly a province of Moscow, containing twelve districts. It is bounded by the governments of Moscow, Smolensko, Tula, and Orel, lying between 35° 48′ and 37° 52′ of E. long., and 51° and 54° 30′ of N. lat. Its territorial extent is 8500 square miles. The chief rivers are the Oka, the Upa, and the Schisdra. The climate is healthy, the soil is a mixture of sand and loam, and in part a black rich mould. The products are corn, hemp, and flax. It also contains iron mines; and the manufactures are important for Russia, the larger establishments being nearly fifty in number, and the capital employed being estimated at £1,000,000 sterling. The population is about 860,000 Russians of the Greek church. The exports consist of lamb-skins, Russia leather, hemp, canvas, wax, and honey.

Kaluga, the capital of the foregoing government, lies on the Oka, and has some respectable public buildings, such as the government house, the high church, &c.; but is irregularly built; and most of the houses are of wood. The population amounts to 17,000, employed largely in manufacturing woollen, canvas, cotton, hats, paper, and leather. It is 107 miles south-west of Moscow, and 437 south-east of St. Petersburg.

KAM, *adj.* Crooked. Fr. *cam;* in Erse *kam* is squint eyed, and applied to any thing awry: clean kam signifies crooked, athwart, awry, across from the purpose. Ital. *a-schembo:* hence our English, *a-kimbo* Clean kam is, by vulgar pronunciation, brought to kim, kam.

This is clean *kam;* merely awry.
Shakspeare.

KAMA, in Hindoo mythology, is the god of love. 'The Hindoo god,' says Sir W. Jones, 'appears evidently the same with the Grecian Eros, and the Roman Cupid; but the Indian description of his person and arms, his family, attendants, and attributes, has new and peculiar beauties. According to the mythology of Hindostan, he was the son of Maya, or the general attracting power, and married to Reti, or Affection; and his bosom friend is Vasanta, or Spring. He is represented as a beautiful youth, sometimes conversing with his mother and consort in the midst of his gardens and temples; and sometimes riding by moonlight on a parrot, or luri, and attended by dancing girls or nymphs, the former of whom bear his colors, which are a fish on a red ground. His favorite place of resort is a tract of country round Agra, and principally the plains of Matra; where Krishna also and the nine Gopea, who are clearly the Apollo and Muses of the Greeks, usually spend the night, in music and dancing. His bow of sugar-cane or flowers, with a string formed of bees, and his five arrows, each pointed with an Indian blossom of a heating quality, are equally new and beautiful. He has more than twenty names; that of Kam, or Kama, signifies desire, a sense which it also bears in ancient and modern Persian.' Kandeo is a more popular way of expressing his name. He is also called Makara-ketu, alluding to the fish in his banner, which is said to be the name of the horned shark; Makara is also the zodiacal sign Capricorn: Kandurpa, meaning love, is another of his names; and Pushpa-danva, or with a bow of flowers. Mara is another. Ananga means the incorporeal, derived from a very popular fable of Kama having been reduced to a mental essence by Siva; thus related in the Ramayana, book i. sect. 22. 'Kandarpa, the wily one, wounding St'hanu, the lord of the gods, while, with uplifted arm, he was engaged in sacred austerities, met the desert of his crime from the eye of the great Rudra; all his members being scorched with fire, fell from his body; he was thence called Ananga, bodiless, and the place where it happened Kama, desire.' His name of Smara, the ideal, may refer to his mother Maya, meaning illusion. Madan, Madamat, and Makadamat, major Moor, from whose Hindoo Pantheon this article is taken, deems derived from a root signifying sweetness and intoxication, or pleasurable merriment, but not approaching to drunkenness. Kama is said to have been the son of Krishna and Rukmeni, that is, incarnated in a son of theirs.

KAMINIECK, a strong old town of Poland, the capital of Podolia, with a castle and a bishop's see. It was taken by the Turks in 1672, who restored it in 1690, after the treaty of Carlowitz. When the Russians forcibly seized part of the Polish territories, in the beginning of 1793, this fortress held out a long time, but at last surrendered. The castle is seated on a craggy rock, 110 miles west of Bracklau, and 120 south-east of Lemburg.

KAMIS, or CAMIS, in the Japanese theology, denotes deified souls of ancient heroes, who are supposed still to interest themselves in the welfare of the people over whom they anciently commanded. The principal one is Tensio Dai Sim, the common father of Japan, to whom are paid extraordinary devotions and pilgrimages.

KAMP FIGHT, in old law writers, denotes the trial of a cause by duel, or a legal combat of two champions in the field, for decision of some controversy. In this mode of trial the person challenged must either accept, or acknowledge himself guilty of the crime whereof he was accused. If it was a crime deserving death, the camp fight was for life and death: if the offence deserved only imprisonment, the camp fight was accomplished when one combatant had subdued the other, so as either to make him yield or take him prisoner. The accused had liberty to choose another to fight in his stead, but the accuser was obliged to perform it in his own person, and with equality of weapons. No women were permitted to be spectators, nor men under the age of thirteen. The priest and the people, who looked on, were engaged silently in prayer, that the victory might fall to him who had right. None might cry, shriek, or give the least sign; which in some places was executed with so much strictness, that the executioner stood ready with an axe to cut off the right hand or foot of the party that should offend herein. He that, being wounded, yielded himself, was at the other's mercy to be killed or suffered to live. But if life was granted he was declared infamous by the judge, and disabled from ever bearing arms, or riding on horseback. See BATTEL.

KAMTSCHATKA, or KAMPTCHATKA is a peninsula of an irregular elliptical figure, at the south-east extremity of Siberia. It forms a part of the Russian government of Irkoutsk, and district of Okhotsk, extending from 51° to 62° N. lat., and from 155° to 165° E. long. It is bounded west by the sea of Okhotsk; east and south by the Pacific Ocean; and north by the Koriak country.

A chain of mountains traverses this peninsula from north to south, and many traces of volcanoes have been observed. One in particular, of which remarkable eruptions are recorded in 1737, 1762 and 1767; is said to be still active. It is called the Nijni Kamtschatsk, and can be seen at a distance of 180 miles. Its eruption lasts sometimes for a fortnight, and covers the whole country for thirty miles with ashes to the depth of several inches. The climate is remarkably cold for the latitude; having but three months of imperfect summer.

Here is but one navigable river, called the Kamtschatka. It has a long north and north-east course, and falls into the Eastern Ocean in lat. 56° 30′ N. Vessels of 100 tons may navigate it 150 miles: but the lakes are numerous; and form, in their frozen state, the chief means of intercourse between the inhabitants.

Timber for ship-building is amongst the most valuable of the products of Kamtschatka: it principally consists of beach and dwarf pine. Here also are found the willow and cedar. Corn and vegetables seldom arrive to any perfection.

Furs and skins are the chief articles of trade: the sable is common, but not so beautiful as in the northern parts of Siberia; several varieties of the Arctic fox are also found. The bear is the most formidable wild animal: to hunt which is a chief pursuit, and to imitate his gambols the chief amusement of the Kamtschatdales. The coast and rivers swarm with fish; among which the salmon, shell fish, and herrings, are all excellent. Woodcocks, snipe, grouse, and wild ducks and geese are also plentiful; the natives preserve the eggs of the last in the fat of their fish.

Beautiful shrubs are occasionally seen: such as the mountain ash, wild rose, and raspberry; there is also a variety of berries: but the most valuable common production is a wild root called saranne, which generally supplies the place of bread: to which may be added a plant called sweet grass, used in various preparations of cookery, and capable of yielding a strong distilled liquor. Sulphur abounds; and many mineral sources are found in the mountains; but no mines have been worked, except one small iron one.

The natives are considered a different race from the other inhabitants of Siberia: they are short and broad, but with slender arms and legs, black hair, round face, high cheek bones, and sunken eyes. The population has diminished under the Russian government from 12,000 or 15,000 to less than half that number. Epidemic disorders are frequent, and commit great devastations. The number of real Kamtschatdales, retaining their ancient usages, do not amount to 4000, and are chiefly scattered on the northern coast. Their character is mild and hospitable, and they live together in great harmony, and to a good old age. But they are very indolent and sensual. Formerly they carried on frequent wars; never indeed engaging in regular battle, but attacking at night, and by ambuscade. Sometimes a party thus surprised would kill first their women, and then themselves, rather than fall into the hands of the enemy; for the women were generally carried off. Their arms were clubs, lances, and arrows, pointed with bone: but, since they have been subject to Russia, these wars are no longer permitted.

In winter their habitations are sunk into the ground. They dig a hole five feet deep, the breadth and length proportioned to the number of its inhabitants, and in the middle fix four or five thick wooden pillars; over these they lay balks, upon which they form the ceiling, leaving in the middle an oblong square. The fire is in one of the long sides of this square: between the pillars round the walls they make benches,

upon which each family lies separately; but on that side opposite to the fire there are no benches, it being designed for their kitchen, in which they dress their victuals. They adorn the walls with mats made of grass. The entrance is by ladders, placed near the fire hearth; so that, when they are heating their huts, the steps of the ladder become so hot, and the smoke so thick, that it is almost impossible for a stranger to go up or down.

Their summer dwellings are reared on eight or nine pillars, about two fathoms long, or more, fixed in the ground, and bound together with balks laid over them, which they cover with rods and grass: fastening spars and a round sharp roof at top, which they cover with brambles. They fasten the lower ends of the spars to the balks with ropes and thongs, and have a door on each side directly opposite to each other. The fine southern Kamtschatkans build their villages in thick woods and other places which are naturally strong, twenty versts from the sea; their summer habitations are near the mouths of the rivers.

They generally make their boats of poplar; but the Kuriles, not having any wood of their own, make use of what is thrown on shore by the sea. The northern inhabitants of Kamtschatka also make boats of the skins of sea-animals, which they sew together with whales' beards, and caulk them with moss or nettles beaten small. These boats hold two persons; one of whom sits in the prow, and the other in the stern. They push them against the stream by poles: when the current is strong they can scarcely advance two feet in ten minutes: notwithstanding which they will carry these boats, fully loaded, sometimes twenty, and, when the stream is not very strong, even thirty or forty versts. When the goods are not very heavy, they lay them upon a float or bridge resting upon two boats joined together.

Their principal food is fish, which they devour without many scruples as to cleanliness or delicacy. Having caught a fish, they begin with tearing out the gills, which they suck; they cut out, at the same time, some slices of the fish, which they devour raw; the fish being then gutted, and the entrails given to the dogs, the rest is dried, and afterwards eaten, sometimes dressed, but more commonly raw. The dish, however, which is reckoned most delicious, is salmon, dressed in a peculiar manner, called tchaouitcha. As soon as it is caught, they bury it in a hole in the ground, where it remains till it is sour; or, in fact, becomes perfectly putrid. In this state, when a European would scarcely approach, the Kamtschatdale feeds upon it, as upon the most delicious morsel. Their plates are never washed, and serve both the dogs and their masters: ablution, in like manner, is never practised upon the face, hands, or any part of their persons.

Their manners are cheerful: they possess the talent of mimicry in a remarkable degree, and have songs full of gay images. They are passionately fond of dancing, and imitate the motions of the bear to the life. At a particular season the women go out to collect roots and vegetables for winter consumption. This is high holiday with them; and they celebrate it with unbounded license.

The Kamtschatdales commonly travel in sledges drawn by dogs. The animals used for this purpose are of a middling size, of various colors, though most are white, black, or gray. In travelling they make use of those that are castrated, and generally yoke four to a sledge. They drive and direct their dogs with a crooked stick about four feet long, which they sometimes adorn with different colored thongs. They drive their sledge sitting upon their right side, with their feet hanging down; for it would be looked upon as a disgrace for a man to sit down at the bottom of the sledge, or to allow any person to drive him. It is very difficult to travel in these sledges; for, unless a man keeps an exact balance, he is liable every moment, from the height and narrowness of them, to be overturned. The highest achievement is to drive standing on one foot. In a rugged road this would be very dangerous, as the dogs never stop till they come to some house, or are entangled by something upon the road: in descending any great declivity they unyoke all the dogs except one, and lead them softly down. They walk up hills; for it is as much as the dogs can do to drag up the sledge empty. After a deep snow, before it has been hardened by a frost, a man goes before upon snow shoes, whom they call brodovskika. The snow shoes are made of two thin boards, separated in the middle, bound together at the ends, and with the fore part bent a little upwards. The brodovskika, having one of these shoes upon each foot, leaves the dogs and sledge, and going on clears part of the road; then returning, leads forward the dogs and sledge so far as the road is made. When a storm of driven snow surprises them, they take the shelter of some wood, and stay there as long as the tempest lasts. If they are a large company, they dig a place for themselves under the snow, and cover the entry with wood or brambles. Sometimes they hide themselves in caves or holes, wrapping themselves up in their furs; and, when thus covered, lie as warm as in their huts; they only require a breathing place, and their clothes not to be tight about them; for then the cold is insufferable. The best travelling is in March or April, when the snow is hard or frozen a little at top; however, there is still this inconvenience, that travellers are sometimes obliged to lodge two or three nights in desert places; and it is difficult to prevail upon the Kamtschatkans to make a fire either for warming themselves or dressing victuals, as they and their dogs eat dried fish, and find themselves as warm wrapped in their furs, and sleep in the open air as sound, as others in a warm bed. In summer, when the services of their dogs are not required, they are left to provide for themselves, by ranging over the country: at the approach of winter they return home in the most punctual manner.

Kamtschatka is said to have been discovered by a body of Cossacks in 1696; it was finally subdued by the Russians in 1711, but did not attract much attention until the discovery of the Aleutian, and Fox Islands. It is divided into the four districts of Bolcheretsk, Tiguilok, Nijni

Kamtschatk, and Versck nei Kamtschatk, all of which are said to be protected by a force of 500 men. The Russian settlements are small. St. Peter and St. Paul's, which is the chief, containing only about thirty houses. It stands in lat. 53° 0′ 15″ N., and in long. 158° 4′ 9″ E.

The introduction of ardent spirits, their eagerness for which knows no bounds, has been here productive of the most pernicious effects. The Russian traders, who are well aware of this, sell it at an extravagant price, and inveigle from them their most valuable effects in exchange. The trade with Russia chiefly flows through Okhotsk.

KANDAHAR, a considerable province of AFGHAUNISTAUN, which see. It lies between 31° and 34° of N. lat. and 64° and 68° of E. long., being inhabited by Nomade tribes, and having few towns. Perhaps the inhabitants amount to 50,000, who are chiefly Douranies, or of the sovereign's tribe: but Hindoo shopkeepers and bankers reside among them. In the summer they reside in the mountains and during winter in the plains; living in tents of black woollen cloth (Kiyhdes) about twenty-five feet long by twelve broad and eight feet high, supported generally by three poles and divided in the middle. At the west of their encampment, which consists of from fifty to 100 of these tents, a space is marked out with stones for a mosque; and at a little distance is a tent for the reception of strangers. Hyenas, leopards, bears, wolves, jackals, boars, foxes, deer, hares, and the wild ass, abound on these mountains. The tame animals are camels, horses, mules, cattle, asses, sheep, goats, dogs, and cats; and a few buffaloes. Their grapes and melons are fine; but they have no mines, or manufactures. The road from India to Persia however insures here a considerable transit trade. The province is governed by a prince or noble, deputed by the king of the Afghauns. In former times this province was alternately subject to Persia and Hindostan. The rivers Helmund and Argandab traverse this province; the principal town of which, beside Kandahar, is Suffa, or Sufta; it has also innumerable castles or fortresses. Kandahar was long thought in Europe to be generally a mountainous province, and a complete barrier on the side of Persia. But it is now known to be comparatively level, and easily entered from the west.

KANDAHAR, a celebrated fortress and town, the capital of the above province, stands in lat. 39° 20′ N., long. 65° 30′ E. The fortress is two miles north of the city, on the top of a precipitous rock. In early times it was the residence of a Hindoo prince, and in the beginning of the eleventh century is said to have been in possession of the Afghaun tribe of Khilfgee, or Ghiljee. It was taken by the emperor Baber in 1507, who found in it considerable wealth; but it was shortly after recovered by the Afghauns. In the year 1521 Baber regained possession of it, after a long siege, and of all the district of Gurmseir, to the government of which he appointed his son Kamran. When Homayon, another son of Baber, about the middle of the sixteenth century, was driven from the throne of Hindostan, into Persia, he agreed, in return for the assistance given him by Shah Tahmasp, to make over the fort and district of Kandahar to him; but forgot or repented of his promise, and afterwards took possession of the fortress. It remained an appendage of Hindostan till 1625, when it was taken by Shah Abbas. Twelve years subsequently, Aly Murdan Khan, the governor of Kandahar, delivered it up to Shah Jehan. Since this event it has often been the cause of a war with Persia. In 1649 Shah Abbas II., succeeded in again getting possession of it, and garrisoned it with 10,000 musqueteers and artillery-men, who defended it against the prince Aurungzebe, with an army of 50,000 men, for several months, and till winter obliged him to raise the siege. Three years after Aurungzebe renewed the siege; but was compelled again to retreat from it, and the fort remained in the quiet possession of the Persians, till, in 1709, it was taken by Meer Veis, of the Afghaun tribe of Ghiljee. Nadir Shah invested Kandahar with 80,000 men, and after a siege of nearly two years succeeded in carrying it: but on his assassination, in 1747, Ahmed, the chief of the Abdallies, surprised it, and thus laid the foundation of the present kingdom of Afghaunistaun. During his reign it continued the capital; but his son Timour Shah, being dissatisfied with the Dourany tribe, removed his residence in 1774 to Cabul. It is at this time about three miles in circumference; and is said to be a flourishing and populous place, chiefly inhabited by persons of Persian or Hindoo descent; but the natives of all countries of the east are to be met with here. It stands on the great road into Persia, and is in general governed by one of the king's sons. The environs are well cultivated, and abound with gardens and orchards. At a short distance are the ruins of a large city, said to be the native place of the Ghorian sovereigns.

KANGRAH, a district and fortress of the province of Lahore, Hindostan, situated about the thirty-second degree of north latitude. The modern territory is limited on the north and north-west by Hurreepoor; on the east by Chambay; on the south by Calowr; and on the west by Punjab. In 1783 its revenue was estimated at seven lacks of rupees. On the conquest of Serinagur by the Nepaulese, in 1803, their army was stopped in its progress to Nepaul by this fortress, which then belonged to Rajah Sansar Chund. It is situated on a steep mountain, about thirty miles to the west of the Beyah, and is well supplied with water: the ground it contains, it is said, will subsist a garrison of 3000 or 4000 men. It now belongs, we believe, to the Seiks. In the vicinity of this fortress, upon a lofty mountain, Abul Fazel describes a place called Maham-ey, 'which they (the Hindoos) consider as one of the works of the divinity, and come in pilgrimages to it from great distances, thereby obtaining the accomplishment of their wishes. It is most wonderful,' he says, that, in order to effect this, they cut out their tongues, which grow again in the course of two or three days, and sometimes in a few hours. Physicians believe, that when the tongue is cut

it will grow again; but nothing except a miracle can effect it so speedily as is here mentioned!'

KANKHO, or KANKIANGHO, a considerable river of China, flowing from north to south, in the province of Kiangsee, and falling into the Poyang Lake. It forms the termination of the great water communication from Pekin southwards: and its waters are clear, its bed rocky, and the navigation sometimes dangerous.

KANGAROO ISLAND, an island on the south coast of New Holland, discovered and named by captain Flinders, who found a great number of kangaroos here. They were so tame that they suffered themselves to be shot in the eyes with small shot, and, in some cases, to be knocked on the head with spikes: there is little doubt that they had never before seen any of the human species. All that part of the island visible from the ship was covered with a thick wood; and captain Flinders examined a part of the soil which he thought very superior to that of the neighbouring islands. The cliffs and the loose stones scattered over the surface of Kangaroo Head had the appearance of being calcareous. But the basis seemed to be brown slate. Long. of Kangaroo Head, 137° 58′ 31″ E., lat. 35° 43′ 0″ S.

KANSAS, or KANZAS, or KANSEZ, a river of North America, which rises in the Rocky Mountains, and, after an easterly course of about 1200 miles, unites with the Missouri, 340 miles from the Mississippi, in long. 94° 20′ W., lat. 38° 31′ N.

KANT (Immanuel), the celebrated metaphysician, was born the 22d of April 1724 at Konigsberg, in Prussia. His parents held a respectable, though not high, rank in life, his father being a saddler, of the name of John George Kant, and originally descended from a Scotch family, who spelt their names with C. His father died in 1746.

Of the first years of Kant's life little is known. From his mother, a woman of sense and uncommon piety, he is said to have imbibed warm sentiments of devotion, which left most reverential impressions of her memory upon his mind. He received his first instruction in reading and writing at the free school of his parish; and his early indications of talent induced a maternal uncle, named Richter, to defray the expense of his farther education at the college Fridericianum, under the well known puritan, Schiffert. Here he contracted his intimacy with Rhunken. In the year 1740 he entered the University of Konigsberg. Here his first tutor was Martin Knutzen, then in high repute, who devoted himself with zeal to the instruction of his pupil, and contributed very greatly to the unfolding of his talents. He attended also the lectures of Teske, on philosophy and the mathematics, and those of Dr. Schultz, another famous puritan, on theology. On the completion of his studies he accepted a situation as tutor in a clergyman's family, some distance from Konigsberg, and afterwards a similar one in the house of count de Hulleson, in Arnsdorf. He fulfilled his duty as a tutor, by no means to his own satisfaction He was too much occupied, he tells us, with acquiring and digesting knowlege in his own mind, to be able to communicate the rudiments of it to others. After being thus engaged for nine years, he returned to Konigsberg, and maintained himself by private tuition, ready to embrace the first opportunity that offered of re-entering the university. In 1746, when only twenty-two years of age, he began his literary career with Thoughts on the Estimation of the Animal Powers, containing strictures on the proofs advanced by Leibnitz and other mathematicians on this point; to which were annexed various reflections on the powers of bodies in general. He sets out with maintaining and justifying his right of opinion as an independent thinking being, and follows up this principle with differing from Leibnitz, Wolf, Hermann, Bulfinger, &c., on this particular. In 1754 appeared An Examination of the Prize Question of the Berlin Society—whether the earth, in turning round its axis, by which the succession of day and night was produced, had undergone any change since its origin? what could be the causes of it? and how we could be assured of it? The judicious treatment of these two subjects gained him the reputation of a philosopher, and paved the way to his long desired promotion to a degree. In 1755, and at the age of thirty, he was chosen M. A. and entered upon the task of lecturing before crowded audiences. He continued, during fifteen years, to publish every year something on the abstruse branches of science. These works were, in the year 1755, An Examination of the Question—whether the earth has decayed? A universal Natural History and Theory of the Heavens; or, an Essay on the Constitution and Mechanical Structure of the whole Globe, according to the Newtonian System. It was the singular fate of this work, which was dedicated to his Prussian majesty, never to come before the public or his majesty; the publisher failing at the period of its publication, and all his MSS. and effects being put under seal; in consequence of which, six years after, the famous Lambert unintentionally plucked the laurels of invention from the brow of our philosopher, by advancing the very same principles, and having the credit of originality. The justness of Kant's theory was, thirty years afterwards, evinced by the practical investigation of Herschel.

In 1756 appeared Principiorum primorum Cognitionis Metaphysicæ nova Dilucidatio; History and philosophical description of the earthquake in the year 1755; and in another work, farther considerations on this subject. Monadologia, Physica, Metaphysica cum Geometricæ Junctæ usus in Philosophiæ Naturali Specimen Primum, an academical piece. Remarks for the Elucidation of the Theory of the Winds. In 1757 Sketch and Annunciation of Lectures on Physical Geography. In 1758 New Principles of Motion and Rest, and the results connected with them in the fundamentals of Natural Philosophy; to which an Annunciation of Lectures on those subjects is affixed: a small work which, at the time, excited great notice, and was afterwards inserted more at large in his later writings. In 1759 Considerations on Optimism, with which likewise Lectures were announced. In 1760 Thoughts on the early death of Mr. John

Frederic Von Funk, in a letter to his mother. A Trial to introduce the Idea of Negative Sizes in Philosophy, the only possible grounds for the Demonstration of a Deity.

Kant wished, in this latter work, to show, that without presupposing the independent existence of ourselves, or that of other spirits, something is possible; and on that proof alone rests the grounds by which to demonstrate the existence of a Deity. It contributed as much as any work to establish his literary character. In 1764 Reflexions on an adventurer named Jan Pawlis Rowiez Idomozyrskich Komonoraki. This was a fanatic, who was then deluding the country people by pretences to a prophetic spirit. Kant was a decided but rational enemy to all fanaticism. In another pamphlet, entitled An Essay on the Disorders of the Head, he examined this subject philosophically. Soon after which, in the same year, appeared his Observations on the Sublime and Beautiful, which acquired him the title of the German Bruyere; also, A Treatise on Evidence in Metaphysical Sciences, which obtained the accessit of the Royal Academy in Berlin.

In this treatise he points out the principles of certainty which the mathematical and philosophical sciences have in common with each other, and those which are peculiar to them. He strikes out a new path for himself in metaphysics, and often criticises the usual philosophical methods of argumentation. His ideas are here often similar to those of Mendelsohn, but he no less frequently elucidates with great originality. In 1765 he published, under the simple title of Intelligence respecting the Arrangement of Lectures for the Winter Half-year, a beautiful and striking system of metaphysics, logic, and ethics; and, in 1766, attacks Swedenberg, who pretended to converse with spirits, in his Dreams of a Ghostseer, illustrated by the Dreams of Metaphysics. He here defines what he understands by metaphysics, as a science resulting from the exercise of human reason, totally unconnected with any thing immaterial. In this same year he obtained the second place of Inspector to the Royal Library in the palace. He undertook also the management of the beautiful collection of natural curiosities, and cabinet of arts, belonging to Mr. Saturgus, minister of the commercial department, which afforded him an opportunity of studying mineralogy. He however gave up both these situations some years after.

Kant's reputation and literary productions did not long remain unknown to the Prussian monarch, who had made him repeated offers of a professorship in the Universities in Jena, Erlangen, Mitau, and Halle, and invested him with the character of privy-counsellor. But he declined all these honors, from an attachment to his native place. He might indeed have received the professorship for poetry in his own university much sooner; but, not thinking himself adequate to the task, he would not accept of it, and waited patiently till 1770, when the situation of professor for the metaphysical department became vacant, and was immediately bestowed on him.

On the 31st of March this year he entered upon his new and long wished-for office, by an inaugurative disputation, which he afterwards published under the title of De Mundi sensibilis atque intelligibilis Forma et Principiis; in which he maintained his favorite principle of purifying metaphysics from confounding the sensual with the spiritual, by prescribing the limits of each. Thus, for example, when speaking of time and space, he traces their origin, not from the sense, but the soul. He maintains, 'they are not any thing objective and real; neither substances, accidents, and relations, but a necessary qualification flowing out of the nature of our souls.'

His situation now called his whole attention to metaphysical subjects, and he pursued them with the most unremitting ardor, in order to unfold the rational powers of man, and deduce thence his moral duties. In 1775 appeared his Tract on the various sorts of Human Beings. In 1780 he became a member of the Academical Senate. In 1781, besides his Correspondence with Lambert, he published his Criticism on Pure Reason, in which he maintains that the doctrine of materialism was limited by external objects. This publication, which subjected him to much misinterpretation, occasioned a second part in 1783, entitled Prolegomena, for future Metaphysics, which are to be considered as a science; in this he illustrated his former doctrine, and entirely abstracted from the definition of metaphysics any thing supernatural. In 1784 he wrote the tracts entitled Considerations on the Origin of Powers, and the Methods of Judging them. Ideas on a Universal History, as a Citizen of the World. Answer to the question, what is Illumination? On Volcanoes in the Moon. A Definition of the Idea of a Race of Men. On the Injustice of Pirating Books. Elements of Metaphysics and Morals; all of which went off so rapidly that a second edition was printed in the following year. In 1786 the three following: Supposed Commencement of the Human Race. What he understood by representing to one's self the Nature and Qualities of Things. Metaphysical Elements of Natural Philosophy; in which latter work he entered at large into the exercise of the reasoning powers with regard to material objects. In the same year he was appointed rector of the university.

During his first rectorate he had the task of addressing, in the name of the university, Frederick II. The king replied in a manner which did the philosopher and the monarch equal honor. Not long after this, without any solicitation on his part, he received a considerable addition to his salary from the foundation of the upper college. In 1787 he roused the public curiosity by his Criticism on Practical Reason, in which he enlarged on the moral, as he had done before on the metaphysical, principles of his philosophy. In the summer of 1788 he was chosen rector of the university a second time, and, after a short space, senior of the philosophical faculty.

Though now advanced in life, Kant presented the public with several useful publications; as in 1793, Religion within the bounds of Plain Reason; wherein he endeavours to show the consistency between reason and revelation. On the common proverb, what may be good in Theory is bad in Practice. In 1794 Something respect-

ing the influence of the Moon on the Weather. In 1795 The end of all Things. An Eternal Peace. A Philosophical Sketch, elucidating his Free Sentiments on Politics. In 1796 To Sömmering on the Organ of the Soul. On the Modern High Tone in Philosophy. Metaphysical Elements of the Civil Law. In 1797 Upon the Justification of Lying from Good Motives. Metaphysical Elements of the Moral Law. Declaration upon Mr. Schlettwine's Challenge in a Letter from Griefswalde. On the Power of the Mind in Subduing the Sensations of Pain. In 1798, On Book-making, in two Letters to Mr. Frederick Nicolai, &c. Explanatory Observations on the Civil Law, for the possessors of the first edition, and The Dispute of the Faculties.

At last, in A Pragmatical View of Anthropology, he takes leave of the public as an author, consigning his papers over to the revision of others. After which he gave up all his official situations, and, amidst growing infirmities, retired into solitude. He afterwards, however, collected from his papers (in 1801), Logic, or, a Guide to Lecturing. (1802), Physical Geography. (1803), On Giving Instruction. (1804) Upon the Prize Question of the Royal Academy at Berlin, What is the Actual Progress made in Metaphysical Sciences since Leibnitz and Wolf? Kant had enjoyed for seventy years an almost uninterruptedly good state of health, but, early in May 1800, he was confined to his room in consequence of a fall he had received; and in the winter was unable to leave his bed-chamber. Shortly after he experienced a fit of the apoplexy; and towards twelve at noon, on the 12th of February 1804, tranquilly breathed his last.

Kant's intellectual qualifications were of no ordinary stamp. He possessed a prodigious memory, and often cited long passages from ancient and modern writers, particularly his favorite poets, Horace and Virgil, Hagedorn and Burger. He could describe objects that he had read of in books even better than many who had seen them; thus, for example, he once gave a description, in the presence of an Englishman, of Westminster Bridge, its form and structure, length, breadth, height, and dimensions of all its parts, so that his auditor enquired how many years he had been in London, and whether he had dedicated himself to architecture; upon which he was assured that Kant had never passed the boundaries of Prussia. A similar question was put to him by Brydone, to whom he unfolded in conversation all the relative situations of Italy.—A consequence of having such a memory was, that he set no value on an extensive library. The contents of books were his only object of desire; and he acquired them by once or twice reading. The books themselves were then rather burdensome to him than otherwise. He accordingly made a contract with the bookseller, Nicolovius, in this town, to send all new books in sheets, which he read in that form, and generally returned afterwards. But the most prominent feature in Kant's intellectual character was the accuracy with which he analysed the most complex ideas. Nothing escaped the scrutiny of his intellectual eye. He discovered at once the incongruities of other men's sentiments, and traced, with unspeakable precision, their errors to their true source.—He had likewise an astonishing faculty of unfolding the most abstruse principles, and digesting single and individual sentiments into a systematic order. Herein consisted the originality of his mind. All his philosophical conceptions flowed from the inexhaustible source of his own reason. The facility with which he deduced every thing from his own reflexions gave him at length such an habitual familiarity with himself, that he could not properly enter into the sentiments of others. He found all in his own mind which answered his purpose, and had therefore no occasion for foreign resources. No task was so hard for him as to leave the current of his own thought, in order to follow the chain of another's reasoning; and, when compelled to investigate the argument of his adversaries, he frequently begged of his friends to compare the sentiments of the former with his, and communicate the results to him, or even to undertake the defence of his doctrines instead of himself.

With all this depth of reflection, Kant was notwithstanding a wit. He had frequent and sudden strokes of repartee at hand, and was a general admirer of all that polishes and beautifies the graver topics. On moral subjects he could move his audience to tears. He united, in the happiest degree, the greatest acuteness of reasoning with the polish of the gentleman. His charities, particularly to indigent scholars, were unbounded. Kant was never married; was of a remarkably slender and delicate make; and had so little flesh, that his clothes could never be made to fit by artificial means. His nervous and muscular system was no less tender. His face, when young, must have been handsome; he had a fresh color, and fine large blue eyes, as expressive of goodness as talent.

KAN-TCHEOU, or Kan-choo-foo, a flourishing town of China, in the province of Kiang-si. Its rivers, port, riches, and population, all contribute to attract strangers. A day's journey from this city there is a very rapid current, almost twenty leagues in length, which flows with great impetuosity over a number of scattered rocks that are level with the water. Travellers here are in great danger of being lost, unless conducted by a guide. Near the walls of the city there is a very long bridge, composed of 130 boats joined together by strong iron chains. The custom-house is upon this bridge, where a receiver constantly resides to visit all barks. Two or three moveable boats are so placed that by their means the bridge can be opened or shut, at pleasure. In the territory belonging to this city a great number of those valuable trees grow, from which varnish distils. Its district is extensive, and contains twelve cities of the third class. It seems to be the Campion of Marco Paulo.

KAOLIN, an earth which is used as one of the two ingredients in oriental porcelain. Some of this earth was brought from China, and examined by Mr. Reaumur. He found that it was perfectly infusible by fire, and believed that it is a talc earth; but M. Macquer observes, that it is more probably of an argillaceous nature,

from its forming a tenacious paste with the other ingredient called petuntse, which has no tenacity. Mr. Bomare says, that by analysing some Chinese kaolin, he found it was a compound earth, consisting of clay, to which it owed its tenacity; of calcareous earth, which gave it a mealy appearance; of sparkling crystals of mica; and of small gravel, or particles of quartz crystals. He says, that he has found a similar earth upon a stratum of granite, and conjectures that it may be a decomposed granite. This conjecture is the more probable, as kaolins are frequently found in the neighbourhood of granites. See PORCELAIN.

KAO, called also Aghao, or Oghao, and Kaybay, one of the Friendly Islands in the South Pacific. It is a mountainous conical rock, and about two miles in diameter at the base, and was discovered by the Dutch navigator Tasman. It is two miles north-east of Toofoa, and uninhabited.

KAOTCHEOUFOU, a city of the first rank in China, in the province of Quangtong. It is thirty-six miles from the sea, and situated on a navigable river. The surrounding district is fertile, and produces a figured marble or jasper, 200 miles E. S. E. of Canton.

KARAITES, or CARAITES, an ancient religious sect among the Jews, whereof there are still some subsisting in Poland, Russia, Cairo, and other parts of the Levant; whose distinguishing tenet is, to adhere closely to the letter of the scripture, exclusive of allegories, traditions, and the like. Aben Ezra, and some other rabbies, treat the Karaites as Sadducees; but Leo de Juda calls them, Sadducees reformed; because they believe the immortality of the soul, paradise, hell, resurrection, &c., which the ancient Sadducees denied. But he adds, however, that they were doubtless originally real Sadducees. Josephus and Philo make no mention of them; which shows them to be more modern than either of those authors. This sect was probably not formed till after the collection of the second part of the Talmud, or the Gemara; perhaps not till after the compiling of the Mischna in the third century. The Karaites themselves pretend to be the remains of the ten tribes. Wolfius, from the Memoirs of Mardocheus, a Karaite, refers their origin to a massacre among the Jewish doctors, under Alexander Jannæus, about A. A. C. 100; when Simeon, son of Schetach, the queen's brother, making his escape into Egypt, there forged his pretended traditions; and, at his return to Jerusalem, published his visions; interpolating the law after his own fancy. He gained many followers, and was opposed by others, who maintained, that all which God had revealed to Moses was written. Hence the Jews became divided into Karaites and Traditionaries: among the first, Judah, son of Tabbai, distinguished himself; among the latter, Hillel. The Karaites are little known; their works being in very few hands, even among the greatest Hebraists. Selden, who is very express on this point, in his Uxor Hebraica, observes, that besides the mere text, they have certain interpretations, which they call hereditary, and which are proper traditions. Caleb, a Karaite, reduces the difference between them and the rabbinists to three points. 1. They deny the oral law to come from Moses, and reject the Cabbala. 2. They abhor the Talmud. 3. They observe the feasts, the sabbaths, &c., much more rigorously than the rabbins do. To this may be added, that they greatly extend the degrees of affinity, wherein marriage is prohibited.

KARAK, an island of the Persian Gulf, containing about twelve or thirteen square miles, and affording a safe anchorage at all seasons, but more particularly during the gales which blow here from the north-west. The eastern side alone is capable of being cultivated. Sir John Malcolm, in 1808, recommended the British to occupy and fortify Karak, as a defensive position, and the Dutch are said at one time to have increased its inhabitants to 2000 or 3000. At present it is in the possession of the Persians. The best pilots for Bassorah may be procured here, and there is a good supply of water Lat. 29° 14′ N.

KARAMAN, or CARAMAN, a town of considerable size, but decayed appearance in Caramania, and standing at the foot of the Bedlerin Dag mountains, a branch of Mount Taurus. It was formerly defended by a castle, now in ruins; and the population is said to amount to 3000 families of Turks, Turkmans, Armenians, and Greek. The water is good and plentiful, and the climate healthy. It trades with Cæsarea, Smyrna, and Tarsus, and has an extensive manufacture of blue cotton cloth. There are in the city twenty-two khans, a number of mosques, and six public baths. Fifty-five miles south of Konich. See CARAMANIA.

KARANG SAMBONG, a large inland town of Java, situated on a fine navigable river, which runs through Indramayo into the sea. The Dutch had a large factory at this place, and a shorter inland communication to Batavia is now establishing from hence by means of a new road, by the way of Crawang. It is 168 miles south-east of Batavia.

KARAVANSERA, or more commonly CARAVANSERA, a place in the East appointed for receiving the caravans. It is commonly a large square building, in the middle of which there is a very spacious court; and under the arches or piazzas that surround it there runs a bank, raised some feet above the ground, where the merchants, and those who travel with them in any capacity, take up their lodgings; the beasts of burden being tied to the foot of the bank. Over the gates that lead into the court there are sometimes little rooms, which the keepers of the karavanseras let out at a very high price to such as wish to be private. The karavanseras in the east are something of the nature of the inns in Europe; only that you meet with little accommodation either for man or beast, but are obliged to carry almost every thing with you. Every karavansera has a well. These buildings are chiefly owing to the charity of the Mahommedans; they are esteemed sacred dwellings, where it is not permitted to insult any person, or to pillage any of the effects that are deposited there. There are also karavanseras where most things may be had for money; and, as the profits

of these are considerable, the magistrates of the cities to whose jurisdiction they belong, take care to store them well. There is an inspector, who, at the departure of each caravan, fixes the price of the night's lodging, from which there is no appeal.

KARLE, a Saxon word used in English law, sometimes simply for a man; and sometimes, with an addition, for a servant or clown. Thus the Saxons call a seaman buscarli, and a domestic servant buscarle. Hence the modern word churl.

KARLSBURGH, called also Lower Weissenberg, a palatinate of Transylvania, belonging to Hungary, and lying along the Marosch and the Kockel. Its area is about 1800 square miles, chiefly pasturage, but producing also corn and wine. Its minerals are salt, mercury, and silver; gold also is found, and its forests are extensive. Population 100,000.

KARLSBURG ALBA CAROLINA, or BELGRAD, a town of Transylvania, on the Marosch, the chief town of the palatinate of Karlsburg, and the former residence of the princes of Transylvania. It stands at the foot of a chain of mountains, bounded by a fertile valley on the east, and is the only regular fortress of the country. The principal gate of the town is handsome, and the cathedral, for it is a bishop's see, is a majestic edifice, containing the tombs of John Corvinus, his son Ladislaus, queen Isabella, and duke Sigismond. The episcopal palace, the residence of the chapter, the barracks, the arsenal, the mint, and observatory, are also worth notice: the church of Bathory contains a splendid mausoleum, erected by the king of Poland of that name, to his brother, a prince of Transylvania. Karlsburg has a Calvinist and a Lutheran church, and two Greek churches, and two synagogues. It was a Roman colony of the names of Apulum and Alba Julia, and stands thirty-two miles north-west of Hermanstadt, and forty-nine south by west of Clausenburg.

KARLSRUHE, or CARLSRUHE, a handsome town of Germany, in Suabia, in the territory of Baden Durlach, having a magnificent palace. The town is built on a regular plan, and the houses are all uniform. It is twelve miles north by east of Baden.

KARLSTADT, a government of Sweden, comprising almost the whole of the ancient province of Warmeland. Its superficial extent is 4267 square miles, with 140,000 inhabitants The capital is Carlstadt. See WARMELAND.

KARNATA, an ancient Hindoo kingdom, which comprehended all the high table land in the south of India, above the Ghauts. The principal rivers of this part of the country have their sources in this region; and it was governed by the Belala rajahs, whose capital was Balgami, in the district of Mysore.

KAROULY, a town, citadel, and district of Agra, Hindostan, situated on the banks of the Putchpuree. The rajah is of the military tribe of the Rajpoots, and his ancestors formerly reigned at Biana; but they have been stripped of their possessions by the Afghauns, Moguls, and Mahrattas; their revenues are now not above £15,000 per annum.

KARSHAGNI, in Hindoo mythology, a fiery kind of expiation of sin among that people; the following account of which is given in Moor's Hindoo Pantheon:—'Cow-dung is a great purifier on several occasions. It is related in the Agni-purana, that a most wicked person, named Chanyaka, had exceeded every known possibility of salvation. At the court of Indra were assembled gods and holy men; and, as they were discoursing on such enormities, Indra, in answer to a pointed question, said that nothing certainly could expiate them except the karshagni. It happened that a crow, named, from her friendly disposition, Mitra-kaka, was present; and she immediately flew and imparted the welcome news to the despairing sinner, who immediately performed the karshagni, and went to heaven. This expiation consists in the victim covering his whole body with a thick coat of cow-dung, which, when dry, is set on fire, and consumes both sin and sinner. Until revealed by the crow, this potent expiation was unknown; and it has since been occasionally resorted to, particularly by the famous Sankara-Charya. The friendly crow was punished for her indiscretion; and forbidden, and all her tribe, ascension to heaven, and was doomed on earth to live on carrion.'

KASAN, a large country of the Russian empire, lying on both sides of the Volga, or between 46° 20′ and 49° 40′ E. long., and 54° and 57° N. lat. It was formerly an independent kingdom, subject to the Kalmuc Tartars, to whom the great dukes of Muscovy, with the other petty princes of Russia, were tributary. But John Basiliowitz I., the founder of the Russian greatness, about the end of the fifteenth century, rescued his country from the Tartar yoke; and in 1552 John II. conquered Kasan, which now comprises a territorial extent of 22,000 square miles. It is divided into twelve circles, and watered by the Wolga, Sura, Viatka, and Kasarka rivers, besides smaller streams. The country is flat, except towards the east, where a branch of the Ural Mountains diversifies its appearance. The soil, a clay or black mould of considerable fertility, is ill cultivated and chiefly occupied with the breeding of cattle; but corn, hemp, hops, and fruit, are grown. In the towns are a few manufactures of cloth, soap, and leather. The climate is temperate for the latitude, the rivers not freezing before November, and being open again about April.

KASAN, a city of Russia, long the capital of the old kingdom of Kasan, is situated on the Kasanka, about four miles above its junction with the Wolga, on elevated ground. The streets are wide but irregular. The town consists of three parts; an antique Tartar fortress, the town proper, and the villages or suburbs around. The fort only is built of stone, the rest of wood. It is a bishop's see, and the seat of a small university, founded in 1803. It has also a theological seminary, two gymnasia, a school for the children of Tartar converts, and one for those of soldiers. It has manufactures of woollen, cotton, lace, and earthenware, and large soapworks and tanneries. In these articles, and corn, wax, honey, skins, tallow, &c., it carries

on an active trade with St. Petersburgh, Archangel, Tobolsk, Orenburg, and Moscow. The great fair of Macariev is an important channel for the merchandise of this place. At a little distance is a new admiralty establishment, with a navigation school, magazines, and dock-yard. 208 miles east by south of Niznei-Novgorod, and 345 E. S. E. of Kostroma. Inhabitants 18,000.

KASKASKIA, a river of Illinois, which runs south-west into the Mississippi, below the town of Kaskaskia, sixty-three miles below the Missouri. It is navigable for boats 150 miles. Its general course is south-west and south. It flows through a very fertile country, abounding in natural meadows. There are high banks through a part of its course, on the east side, composed of lime-stone and free-stone; in some places from 100 to 150 feet. The land on the west side of this river is described as the best in the whole of Illinois.

KASSON, a kingdom of Central Africa, on the Senegal, having Kaarta on the east, and Kajaaga on the west. It is fifty miles from north to south, and about the same from east to west; a beautiful level country, surpassing in population and culture any which Park saw in coming from the coast: Kooniakarg is the capital.

KATADEN, or KATAHDIN, Mountain Maine, North America, seventy miles north of Bangor. It is situated east of Chesuncook Lake, between the eastern and western branches of the Penobscot, and is the highest and southernmost of a cluster of eight or ten mountains: it may be seen in a clear day at Bangor, and also at Dixmont, eighty miles distant. In August, 1805, a party of eleven persons ascended this mountain. They had no means of ascertaining its height, but estimated it at 13,000 feet. They describe the prospect from the top as very enchanting, affording a view of sixty-three lakes of various extent, and all the mountains between Maine and Canada.

KATTEGATE, or CATEGATE, a noted sea lying between part of Jutland and the coast of Sweden, towards the latter, interspersed with a great number of isles. It is almost closed at the extremity by the low Danish islands of Zealand and Funen, which had in old times been (with Sweden) the seat of the Suiones. Between the first and the coast of Sweden is the famous Sound, the passage tributary to the Danes by thousands of ships. These islands were called Codanonia, and gave to the Kattegate the name of Sinus Codanus. Its greatest depth is thirty-five fathoms. It decreases as it approaches the sound; which begins with sixteen fathoms, and near Copenhagen becomes shallow to even four. The Roman fleet, under the command of Germanicus, sailed, according to Pliny, round Germany, and even doubled the Cimbricum Promontorium, and arrived at the islands which fill the bottom of the Kattegate; either by observation or information, the Romans were acquainted with twenty-three. One they called Glessaria, from its amber, a fossil abundant to this day on part of the south side of the Baltic. A Roman knight was employed by Nero's master of the gladiators to collect in these parts that precious production, by which he became perfectly acquainted with this country.

KAUFFMAN (Mary Angelica), a lady who possessed the talents and taste of a painter in a degree very unusual among her sex. She was a native of Coire, the capital of the Grisons, and born in 1740. Her father was an artist, who, perceiving the extraordinary talents of his daughter, conducted her, at the age of fourteen, to Milan, and afterwards to Rome; where her talents and accomplishments soon acquired her the most distinguished attention. It was the happy lot of lady Wentworth, the wife of the British resident at Venice, to be the instrument of conveying Angelica to England in the year 1764. Here she was received in a very flattering manner; her works eagerly sought for; and her company solicited by the learned, the great, and the polite. She was honored with royal attentions, and was esteemed and courted by artists of the first reputation. She was very industrious, and painted the lighter scenes of poetry with a grace and taste entirely her own; and happily formed to meet that of an engraver (Bartolozzi) whose labors highly contributed to the growth and perpetuity of her fame; and who almost entirely devoted his talents between Angelica and Cipriani. After some years residence here, she was unhappily deceived by a footman of a German count, who, coming to England, personated his master, contrived to be presented at court, and persuaded Angelica to marry him. The cheat was soon discovered, and the villain had not the humanity to endeavour to soothe her disappointment by kindness, but treated her very ill. At last, however, by a payment made to him of £300, he was induced to return to Germany, and bind himself never to molest her any more. He kept his engagement; and the lady not hearing of him for seven years, and concluding him dead, then married an Italian painter of the name of Zucchi, and, having spent seventeen years in England, returned with him to her native country, and thence to Rome; where her house became the resort of genius and taste; all artists and cognoscenti taking pleasure in being admitted to her conversazioni; while amateurs, endowed with rank and wealth, were happy in finding employment for her talents. She lived to the age of sixty-seven, and then fell by a gradual decay, under that dominion which is alike regardless of the great, the learned, the virtuous, and the profligate. She died in 1807, universally regretted, and was honored by splendid public obsequies. The talents of this lady were of a pleasing rather than of a splendid kind. She excelled most in the representation of female characters. Her figures of men want form and energy, and their faces and characters are all of the same mould. Grace, ease, and suavity of expression, generally mark her women; and to single figures, such as Calypso watching the Departure of Ulysses, or Penelope weeping over his Bow, she imparted the true interest of the story.

KAURZIM, a circle of Bohemia, belonging to Austria, and lying between the Elbe and the Muldau. It is traversed by the Sazawa, and is 1030 square miles in extent. It is in general

level; and, though partly covered with forests, is fertile in corn and fruit. The breeding of cattle is also followed up with attention. Some gold mines were formerly wrought, but appear to be exhausted. Population 142,000. The capital is Kaurzim, an old and inconsiderable town, having a population of 1550. Twenty-eight miles E. S. E. of Prague, and forty-three W.S.W. of Konigingratz.

KAW, *v. n.* & *n. s.* Teut. *kaw;* Belg. *kauuw.* From the sound, probably. To cry as a raven, crow, or rook.

The dastard crow that to the wood made wing.
With her loud *kaws* her raven kind doth bring,
Who, safe in numbers, cuff the noble bird.
Dryden.

Jack-daws *kawing* and fluttering about the nests, set all their young ones a-gaping: but, having nothing in their mouths but air, leave them as hungry as before. *Locke.*

KAYE, KEYE, or CAIUS (Dr. John), the founder of Caius College in Cambridge, was born at Norwich in 1510. He was admitted very young a student at Gonville Hall, and at twenty-one translated into English Erasmus's Paraphrase on Jude, &c. He travelled to Italy, and at Padua studied physic under Montanus. In 1543 he travelled through part of Italy, Germany, and France; and, returning to England, commenced M. D. at Cambridge. He practised first at Shrewsbury and afterwards at Norwich; but, removing to London in 1547, he was admitted fellow of the college of physicians, of which he was several years president. In 1557, being physician to queen Mary I. (as he was to Edward VI. and queen Elizabeth), he obtained a license to advance Gonville Hall into a college; which he endowed with several considerable estates, adding an entire new square at the expense of £1834. Of this college he was master till near his death. He died in July, 1573, aged sixty-three; and was buried in the chapel of his own college. In 1557 Dr. Kaye erected a monument in St. Paul's to the memory of the famous Linacre. He wrote, 1. Annals of the College from 1555 to 1572. 2. Translation of several of Galen's Works; printed abroad. 3. Hippocrates de Medicamentis, first discovered and published by our author; also De ratione victus, Lov. 1556, 8vo. 4. De Medendi Methodo, Basil, 1554; London, 1556, 8vo. 5. Account of the sweating sickness in England, entitled De Ephemerâ Britannicâ, London, 1556, 1721. 6. History of the University of Cambridge, London, 1568, 8vo.; 1574, 4to. in Latin. 7. De Thermis Britannicis. 8. Of some rare Plants and Animals, London, 1570. 9. De Canibus Britannícis, 1570, 1729. 10. De Pronunciatione Græcæ et Latinæ Linguæ, London, 1574. 11. De Libris Propriis, London, 1570.

KAYE'S, or KAY'S ISLAND, an island in the North Pacific Ocean, whose south-west point is a naked rock, considerably elevated above the land within it. Some parts of the shore are interrupted by small valleys filled with pine trees, which also abound in other parts of the island. It was discovered by captain Cook in 1778, who found the inhabitants possessed of iron. Water-fowls, humming-birds, and beautiful king-fishers abound in it. Long. 216° 48' W., lat. 59° 50' N.

KAYLE, *n. s.* Dan. *kegle;* Swed. *kægla;* Fr. *quille.* Ninepin; kettlepins, of which skittles seems a corruption; a kind of play very common in Scotland.

KAZEROON, a town of Farsistan, in Persia, situated in a valley about thirty miles long, and seven or eight broad, bounded on the north by a salt lake. It has a well watered neighbourhood, and its crops are therefore abundant, unless when destroyed by locusts, to which Persia is much subject. Its inhabitants do not at present exceed 3000 or 4000.

KEAN, Edmund, a celebrated English tragedian, born in London, 1787, died at Richmond in 1833. He possessed a high order of ability for the profession he adopted, has been compared with Garrick, and attained such excellence in Shylock, Sir Giles Overreach, and Richard III., as no actor ever exceeded. In private, he was benevolent, but given to habits of irregularity which occasioned his early death.

KAZY, in the East Indies, a Mahommedan judge or magistrate, appointed originally by the court of Delhi to administer justice according to their written law; but particularly in matters relative to marriages, the sales of houses, and transgressions of the Koran. He attests or authenticates writings, which, under his seal, are admitted as the originals in proof.

KEACH (Benjamin), a Baptist minister, was born at Stoke Hammond, Buckinghamshire, in 1640. He was sentenced, in 1664, to stand in the pillory for the publication of the Child's Instructor, after which he was chosen pastor of a Baptist congregation in Southwark. He died in 1704. Other two of his works were entitled The Travels of Godliness, and The Travels of Ungodliness. He is best known, however, by his Tropologia, or Key to open Scripture Metaphors, folio, 1682, reprinted in 1778; and his Exposition of Parables.

KEATE (George), esq., F.R.S. and F.A.S., a celebrated English writer, born at Trowbridge, Wilts, in 1729, and educated at Kingston. After completing his education he travelled through France and Italy, and resided some years at Geneva, where he contracted an intimacy with the celebrated Voltaire. Having finished the tour of Europe, he commenced student in the Inner Temple, was called to the bar, and sometimes attended Westminster Hall, but did not practise. His first literary performance was Ancient and Modern Rome, a poem, written at Rome, in 1755, and published in 1760 with merited applause. Soon after he printed A short Account of the Ancient History, present Government, and Laws, of the Republic of Geneva; dedicated to Voltaire. In 1762 he produced an Epistle from Lady Jane Grey to Lord Guildford Dudley; and, in 1763, The Alps, a Poem, which, for truth of description, elegance of versification, and vigor of imagination, greatly surpasses all his other poetical productions. In 1764 he produced Netley Abbey; and, in 1765, The Temple Student, an Epistle to a Friend; in which he smartly and agreeably rallies his own want of application in the study of the law, and intimates his irresistible penchant for the Belles Lettres. In 1769 he published Ferney, an epistle to

M. Voltaire, in which he introduced a fine eulogium on Shakspeare, which procured him, soon after, the compliment, from the mayor and burgesses of Stratford, of a standish mounted with silver, made out of the mulberry tree planted by that illustrious bard. In 1773 he published The Monument in Arcadia, a dramatic poem, founded on a picture of Poussin. In 1781 he collected his poetical works into 2 volumes, with a dedication to Dr. Heberden, including a number of new pieces, and an excellent portrait of himself. In 1781 he published An Epistle to Angelica Kauffman. Having been engaged in a tedious and vexatious law-suit, he, in 1787, laid the principal circumstances of his case before the public, in a performance entitled The Distressed Poet, a serio-comic poem, in three cantos. The last, and perhaps best, of all his compositions, was the Account of the Pelew Islands, which he drew up and published in 1788, from the papers of captain Wilson. His life passed without any great changes of fortune, as he inherited a large patrimonial estate. He died June 27th, 1797.

KEATS (John), a young English poet, of humble origin, was born October 29th, 1796, at a livery-stable, kept by his grandfather, in Moorfields. He was sent to Mr. Clarke's school at Enfield, where he remained till the age of fifteen, and was then bound apprentice to a surgeon, in Church Street, Edmonton. On leaving this situation, he attended St. Thomas's Hospital; but his inclination to poetry having been cultivated by his teachers, and meeting when he came out in the world with encouragement, he gave way entirely to the passion of becoming a great poet. He was introduced to Mr. Leigh Hunt, who was struck with admiration at the specimens of his genius, and took him into his house for a time. Keats's first volume of poems made its appearance in 1817, when he was in his twenty-first year, and was followed by Endymion, a Poetic Romance, in 1818; in the year 1820 he published his last and best work, Lamia, Isabella, and other poems. After languishing for some time under a pulmonary attack, he was prevailed upon to try the climate of Italy, where he arrived in the month of November, 1820, accompanied by Mr. Severn, a young artist; and in Rome, on the 27th of December following, in the arms of this gentleman, who attended him with undeviating zeal, he expired, completely worn out. The fragment of Hyperion, which was his last performance, and extorted the admiration of lord Byron, has been compared to those bones of enormous creatures which are occasionally dug up, and remind us of extraordinary and gigantic times.

KEBLA, an appellation given by the Mahommedans to that part of the world where the temple of Mecca is situated, towards which they are obliged to turn their faces when they pray.

KECK, *v.n.* Teut. *kecken;* Belg. *kucken.* To heave the stomach; to reach at vomiting.

All those diets do dry up humours and rheums, which they first attenuate, and while the humour is attenuated it troubleth the body a great deal more; and therefore patients must not *keck* at them at the first. *Bacon's Natural History.*

The faction, is it not notorious?
Keck at the memory of glorious. *Swift.*

KECK'SY, *n.s.* Commonly *kex;* Fr. *cigue,* Lat *cicuta,* Skinner. Skinner seems to think kecksy or kex the same as hemlock. It is used in many parts of England both for hemlock, and any other hollow-jointed plant.

Nothing teems
But hateful docks, rough thistles, *keckies,* burs,
Losing both beauty and utility.
Shakspeare. Henry V.

KECK'Y, *adj.* From *kex.* Resembling a kex.

An Indian sceptre, made of a sort of cane, without any joint, and perfectly round, consisteth of hard and blackish cylinders, mixed with a soft *kecky* body; so as at the end cut transversely, it looks as a bundle of wires. *Grew.*

KEDAR, in ancient geography, a district in the desert of the Saracens, on the north of Arabia Felix; so called, according to Jerome, from Kedar, the son of Ishmael.

KEDARENI, the people of Kedar, who dwelt in tents like the other Scenites (Psal. cxx.), were rich in cattle (Isaiah lx.), of a swarthy complexion (Canticles i.), and excellent at the bow (Isaiah xxi.).

KEDES, in ancient geography, a city of refuge, and Levitical city in the tribe of Naphthali, on the confines of Tyre and Galilee. Jerome calls it a sacerdotal city on a mountain, twenty miles from Tyre, near Paneas, and called Cidissus, taken by the king of Assyria.

KEDGE, *v. a.* & *n. s.* Belg. *kaghe,* a small vessel: kedger, a small anchor used in a river.

In bringing a ship up or down a narrow river, when the wind is contrary to the tide, they set the foresail, or foretop-sail and mizen, and so let her drive with the tide. The sails are to flat her about, if she comes too near the shore. They also carry out an anchor in the head of the boat, with a hawser that comes from the ship; which anchor, if the ship comes too near the shore, they let fall in the stream, and so wind her head about it; then weigh the anchor again when she is about, which is called kedging, and from this use the anchor a *kedger.* *Harris.*

KEDGE, a small anchor used to keep a ship steady whilst she rides in a harbour or river, particularly at the turn of the tide, when she might otherwise drive over her principal anchor, and entangle the stock or flukes with her slack cable, so as to loosen it from the ground. This is accordingly prevented by a kedge-rope that hinders her from approaching it. The kedges are particularly useful in transporting a ship; i. e. removing her from one part of the harbour to another, by means of ropes, which are fastened to these anchors. They are generally furnished with an iron stock, which is easily displaced for the convenience of stowing them.

KEDINGEN, a small fertile district of Hanover, in the province of Bremen, on the Elbe. It consists of a rich track of alluvial marsh-land, and produces abundance of corn and pasturage. The inhabitants are also employed in navigation and fishing. Population 6500.

KEDRON, or CEDRON, in ancient geography, a town which, from the defeat and pursuit of the Syrians (1 Mac. xvi.), appears to have stood on the road which led from the Higher India to Azotus: in this war it was burnt by the Jews.

KEDRON, or CEDRON, in ancient geography, a brook or rivulet of Judæa, between Jerusalem and Mount Olivet, on the east. St. John calls it a brook, but Josephus a deep valley. Maundrel says it was a brook only in winter, or in rainy weather.

KEE. A provincial plural of cow, properly kine.

A lass that Cicely hight had won his heart,
Cicely the western lass that tends the *kee*. *Gay.*

KEEL, *n. s.* & *v. a.* KEELS, *n. s.* KEEL'FAT, KEEL'SON, *n. s.* KEEL'HALE, *v. a.* Saxon cæle, cœlan; Dut. *kiel;* Fr. *quille.* The bottom of a ship: keels, see KAYLE. Keel: this word, which is preserved in Shakspeare, Hanmer explains thus: to keel seems to mean to drink so deep, as to turn up the bottom of the pot, like turning up the keel of a ship. In Ireland, to keel the pot is to scum it: keelfat, Sax. cœlan, to cool, and fat or vat, a vessel. Keelfat, tub in which liquor is set to cool: keelson, the next piece of timber in a ship to her keel, lying right over it next above the floor timber: keelhale, to punish in the seamen's way, by dragging the criminal under water on one side of the ship and up again on the other.

And down on knees full humbly gan I knele,
Besechyng hire my fervent wo to *kele.*
Chaucer. The Court of Love.

He hearkned, and his armes about him tooke
The while the nimble bote so well her sped,
That with her crooked *keele* she strooke.
Spenser. Faerie Queene.

While greasy Joan doth *keel* the pot. *Shakspeare.*

Portunus
Heaved up his lightened *keel*, and sunk the sand,
And steered the sacred vessel. *Dryden.*

Her sharp bill serves for a *keel* to cut the air before her, her tail she useth as a rudder. *Grew.*

Your cables burst, and you must quickly feel
The waves impetuous entering at your *keel*. *Swift.*

With cheerful sound of exhortation soon
Their voyage they begin; the pitchy *keel*
Slides through the gentle deep, the quiet stream
Admires the unwonted burthen that it bears,
Well polished arms, and vessels painted gay.
Cowper. Translation, &c.

Under the vessel's *keel* the sail was past,
And for the moment it had some effect;
But with a leak, and not a stick of mast,
Nor rag of canvas, what could they expect?
Byron. Don Juan.

A KEEL is the principal piece of timber in a ship, which is usually first laid on the blocks in building. If we compare the carcase of a ship to a skeleton, the keel may be considered as the backbone, and the timbers as the ribs. It therefore supports and unites the whole fabric, since the stem and stern-post, which are elevated on its ends, are in some measure a continuation of the keel, and serve to connect and inclose the extremities of the sides by transoms; as the keel forms and unites the bottom by timbers. The keel is generally composed of several thick pieces placed lengthways, which, after being scarfed together, are bolted, and clenched upon the upper side. When these pieces cannot be procured large enough to afford a sufficient depth to the keel, there is a strong thick piece of timber bolted to the bottom thereof, called the false keel, which is also very useful in preserving the lower side of the main keel. In our largest ships of war, the false keel is generally composed of two pieces, which are called the upper and the lower false keels. See NAVAL ARCHITECTURE. The lowest plank in a ship's bottom, called the garboard-streak, has its inner edge let into a groove or channel cut longitudinally on the side of the keel: the depth of this channel is therefore regulated by the thickness of the garboard-streak.

KEEL is also a name given to a low flat-bottomed vessel, used in the river Tyne to bring the coals down from Newcastle and the adjacent parts, in order to load the colliers for transportation.

KEEL-HAULING, a punishment formerly inflicted for various offences in the Dutch navy. It is performed by plunging the delinquent repeatedly under the ship's bottom on one side, and hoisting him up on the other, after having passed under the keel. The blocks or pulleys by which he is suspended are fastened to the opposite extremities of the main-yard, and a weight of lead or iron is hung upon his legs, to sink him to a competent depth. By this apparatus he is drawn close up to the yard-arm, and thence let fall suddenly into the sea, where, passing under the ship's bottom, he is hoisted up on the opposite side of the vessel. As this extraordinary sentence is executed with a serenity of temper peculiar to the Dutch, the culprit is allowed sufficient intervals to recover the sense of pain, of which indeed he is frequently deprived during the operation. This punishment is peculiarly severe in winter, whilst the flakes of ice are floating on the stream; and it is continued till the culprit is almost suffocated for want of air, benumbed with the cold of the water, or stunned with blows by his head striking the ship's bottom.

KEELSON, in ship-building, may be properly defined the interior or counter part of the keel; as it is laid upon the middle of the floor-timbers, immediately over the keel, and like it composed of several pieces scarfed together. To sit with more security upon the floor-timbers and crotches, it is notched about an inch and a half deep, opposite to each of those pieces, and thereby firmly scored down upon them to that depth, where it is secured by spike nails. The pieces of which it is formed are only half the breadth and thickness of those of the keel. It serves to bind the floor-timbers to the keel; and is fixed to it by long bolts, which, being driven from without through several of the timbers, are clenched upon rings on the upper side of the keelson.

KEEN, *adj.* & *v. a.* KEEN'LY, *adv.* KEEN'NESS, *n. s.* Sax. cene; German *kuhn;* Belgic *koen.* Sharp; well edged; not blunt. We say keen of an edge, and sharp either of edge or point; severe; piercing; eager; vehement; acrimonious. Keen, to sharpen, an unauthorised word. Keenly, sharply. Keenness, sharpness; rigor: asperity.

And thus I am, only for my trouth, alas,
Murdered and slayn, with wordes sharpe and *kene*
Although gyltelesse. God wote, of al trespas—
And lye, and blede, upon this coldé grene.
Chaucer. Complaint of the Blacke Knighte.

Never had shepheard so *keene* a cur,
That waketh and if but a leafe stur.
Spenser. Shepheard's Calender.

Here is my *keen*-edged sword,
Decked with fine flower-de-luces on each side.
Shakspeare.

Never did I know
A creature, that did bear the shape of man,
So *keen* and greedy to confound a man. *Id.*

Come, thick night,
That my *keen* knife see not the wound it makes.
Id.

Good father cardinal, cry thou, Amen,
To thy *keen* curses. *Id. King John.*

No, not the hangman's ax bears half the *keenness*
Of my sharp envy. *Id. Merchant of Venice.*

That they might keep up the *keenness* against the court, his lordship furnished them with informations, to the king's disadvantage. *Clarendon.*

The winds
Blow moist, and *keen*, shattering the graceful locks
Of these fair spreading trees, which bids us seek
Some better shroud. *Milton's Paradise Lost.*

Keen dispatch of real hunger. *Milton.*

To me the cries of fighting fields are charms,
Keen be my sabre, and of proof my arms. *Dryden.*

A sword *keen*-edged within his right he held,
The warlike emblem of the conquered field. *Id.*

The sheep were so *keen* upon the acorns, that they gobbled up a piece of the coat. *L'Estrange.*

Those curs are so extremely hungry, that they are too *keen* at the sport, and worry their game. *Tatler.*

The sting of every reproachful speech is the truth of it; and to be conscious is that which gives an edge, and *keenness* to the invective. *South.*

I have known some of these absent officers as *keen* against Ireland, as if they had never been indebted to her. *Swift.*

This was a prospect so very inviting, that it could not be easily withstood by any who have so *keen* an appetite for wealth. *Id.*

Nor when cold Winter *keens* the brightening flood,
Would I weak shivering linger on the brink.
Thomson.

So when remote futurity is brought
Before the *keen* inquiry of her thought
A terrible sagacity informs
The poet's heart; he looks to distant storms.
Cowper. Table Talk.

KEEN, or KAYNDUEM, a considerable river, the second in the Birman empire in point or size, is supposed to have its source in the mountains which divide Assam from Ava. It enters the latter country from the north-west, and falls into the Irrawaddy at Miondap, in lat. 21° 45 N. Its mouth is obstructed by sand, which is covered with long grass and reeds, except in the rainy season. It is only navigable therefore for flat-bottomed boats. On its banks are a rude but inoffensive tribe, called Kayns, who speak a different dialect from the Birmans. This country is mountainous, and covered with wood; but it has never been fully explored.

KEEP, *v. a.* Sax. cepan; old Dutch *kepen*. To retain; not to lose.

Keep in memory what I preached unto you.
1 *Corinthians.*

We have examples in the primitive church of such as by fear being compelled to sacrifice to strange gods, repented, and *kept* still the office of preaching the gospel. *Whitgifte.*

This charge I *keep* till my appointed day
Of rendering up. *Milton.*

His loyalty he *kept*, his love, his zeal. *Id.*

I *kept* the field with the death of some, and the flight of others. *Sidney.*

You have lost a child; but you have *kept* one child, and are likely to do so long. *Temple.*

If we would weigh and *keep* in our minds, what we are considering, that would instruct us when we should, or should not, branch into distinctions.
Locke.

They warn and teach the proudest would they learn,
Keep wisdom, or meet vengeance in your turn.
Cowper. Expostulation.

To have in custody.

The crown of Stephanus, first king of Hungary, was always *kept* in the castle of Vicegrade. *Knolles.*

She *kept* the fatal key. *Milton.*

To preserve; not to let go.

The Lord God merciful and gracious, *keeping* mercy for thousands, forgiving iniquity.
Exod. xxxiv. 7.

I have spared it greatly, and have *kept* me a grape of the cluster, and a plant of a great people.
2 *Esdr.* ix. 21.

To preserve in a state of security.

We passed by where the duke *keeps* his gallies.
Addison.

To protect; to guard.

Behold I am with thee to *keep* thee. *Gen.* xxviii.

To restrain from flight.

Paul dwelt with a soldier that *kept* him.
Acts xxviii.

To detain; to hold as a motive.

But what's the cause that *keeps* you here with me?
—That I may know what *keeps* me here with you.
Dryden.

To hold for another.

A man delivers money or stuff to *keep*.
Exod. xxii. 7.

Reserved from night, and *kept* for thee in store.
Milton.

To tend; to have care of.

God put him in the garden of Eden to *keep* it.
Gen. ii. 15.

While in her girlish age she *kept* sheep on the moor, it chanced that a merchant saw and liked her.
Carew.

Count it thine
To till and *keep*, and of the fruit to eat. *Milton.*

To preserve in the same tenor or state.

To know the true state, I will *keep* this order.
Bacon.

Take this at least, this last advice, my son,
Keep a stiff rein, and move but gently on:
The coursers of themselves will run too fast,
Your art must be to moderate their haste.
Addison.

To regard; to attend.

While the stars and course of heaven I *keep*,
My weary'd eyes were seized with fatal sleep.
Dryden.

To not suffer to fail.

My mercy will I *keep* for him for ever.
Psalm lxxxix.

To hold in any state.

Ingenuous shame, and the apprehensions of displeasure, are the only true restraints: these alone ought to hold the reins, and *keep* the child in order.
Locke on Education.

Men are guilty of many faults in the exercise of this faculty of the mind, which *keep* them in ignorance. *Locke.*

Happy souls! who *keep* such a sacred dominion over their inferior and animal powers, that the sensitive tumults never rise to disturb the superior and better operations of the reasoning mind. *Watts.*

With all my soul!
Keep a firm rein upon these bursts of passion.
Byron. Marino Faliero.

To retain by some degree of force in any place or state. It is often followed in this sense by particles; as, *down, under, in, off.*

My sone beware and be not auctour newe
Of tidings, whether they ben false or trewe;
Wher so thou come, amonges high or lowe
Kepe wel thy tonge, and thinke upon the crowe.
Chaucer. The Manciples Tale.

It is hardly to be thought that any governor should so much malign his successor, as to suffer an evil to grow up which he might timely have *kept under*; or perhaps nourish it with coloured countenance of such sinister means. *Spenser.*

What! old acquaintance! could not all this flesh *Keep* in a little life? Poor Jack, farewel.
Shakspeare.

The Chinese sail where they will; which sheweth that their law of *keeping out* strangers is a law of pusillanimity and fear. *Bacon.*

Venus took the guard of noble Hector's corse,
And *kept* the dogs *off*: night and day applying sovereign force
Of rosy balms, that to the dogs were horrible in taste.
Chapman's Iliad.

And those that cannot live from him asunder,
Ungratefully shall strive to *keep* him *under*. *Milton.*

This wickedness is found by thee; no good deeds of mine have been able to *keep* it *down* in thee.
Sidney.

If any ask me what would satisfy,
To make life easy, thus I would reply:
As much as *keeps out* hunger, thirst, and cold.
Dryden.

Matters, recommended by our passions, take possession of our minds, and will not be *kept out.*
Locke.

Prohibited commodities should be *kept out*, and useless ones impoverish us by being brought in. *Id.*

An officer with one of these unbecoming qualities is looked upon as a proper person to *keep off* impertinence and solicitation from his superior.
Addison's Spectator.

And if two boots *keep out* the weather,
What need you have two hides of leather?
Prior.

We have it in our power to *keep in* our breaths, and to suspend the efficacy of this natural function.
Cheyne.

How much a dunce that has been sent to roam,
Excels a dunce, that has been *kept* at home.
Cowper. Progress of Error.

To continue any state or action.

Men gave ear, waited, and *kept* silence at my counsel. *Job* xxix. 21.

Auria made no stay, but still *kept* on his course.
Knolles.

It was then such a calm, that the ships were not able to *keep* way with the gallies. *Id.*

The moon that distance *keeps* till night. *Milton.*

An heap of ants on a hillock will more easily be *kept* to an uniformity in motion than these.
Glanville's Scepsis.

He dyed in fight;
Fought next my person; as in consort fought:
Kept pace for pace, and blow for blow. *Dryden.*

He, being come to the estate, *keeps* on a very busy family; the markets are weekly frequented, and the commodities of his farm carried out and sold.
Locke.

Invading foes without resistance,
With ease I make to *keep* their distance. *Swift.*

To preserve in any state.

My son, *keep* the flower of thine age sound.
Ecclus. xxvi.

To practise; to use habitually.

I rule the family very ill, and *keep* bad hours. *Pope.*

To copy carefully.

Her servant's eyes were fixed upon her face,
And as she moved or turned, her motions viewed,
Her measures *kept*, and step by step pursued.
Dryden.

To observe or solemnise any time.

This shall be for a memorial, and you shall *keep* it a feast to the Lord. *Exod.* xii. 14.

That day was not in silence holy *kept*. *Milton.*

To observe; not to violate.

Lord God, there is none like thee: who *keepest* covenant and mercy with thy servants.
1 *Kings* viii. 23.

Lord God of Israel, *keep* with thy servant that thou promisedst him. *Id.* 25

It cannot be,
The king should *keep* his word in loving us;
He will suspect us still, and find a time
To punish this offence in other faults. *Shakspeare.*

Sworn for three years term to live with me,
My fellow-scholars; and to *keep* those statutes
That are recorded in this schedule here. *Id.*

Obey and *keep* his great command. *Milton.*

His promise Palamon accepts; but prayed
To *keep* it better than the first he made. *Dryden.*

My debtors do not *keep* their day,
Deny their hands and then refuse to pay. *Id*

My wishes are,
That Ptolemy may *keep* his royal word. *Id.*

To maintain; to support with necessaries of life.

Much more affliction than already felt
They cannot well impose, nor I sustain,
If they intend advantage to my labours,
The work of many hands, which earns my *keeping*.
Milton.

To have in the house.

Base tyke, call'st thou me host? I scorn the term nor shall my Nell *keep* lodgers
Shakspeare. Henry V.

Not to intermit.

Keep a sure watch over a shameless daughter, lest she make thee a laughing-stock to thine enemies, and a bye-word in the city. *Ecclus.* xli. 11

Not *keeping* strictest watch as she was warned.
Milton.

To maintain; to hold.

——————Some say that laughter here
Keeps residence; but laughter fits not there,
Where darkness ever dwells, and melancholy fear.
Fletcher's Purple Island.

They were honourably brought to London, where every one of them *kept* house by himself.
Hayward.

Twelve Spartan virgins, noble, young, and fair,
To the pompous palace did resort,
Where Menelaus *kept* his royal court. *Dryden.*

To remain in; not to leave a place.

I pr'ythee tell me, doth he *keep* his bed?
Shakspeare.

Not to reveal; not to betray.

A fool cannot *keep* counsel. *Ecclus.* viii. 17.

Great are thy virtues, though *kept* from man.
Milton.

If he were wise, he would *keep* all this to himself.
Tillotson.

To restrain; to withhold.

He that me *kepte* fro the false blame,
While I was in the lond amonges you,

He can me *kepe* fro harme and eke fro shame
In the salt see, although I se not how.
Chaucer. The Man of Lawes Tale.

If any rebel or vain spirit of mine
Did with the least affection of a welcome,
Give entertainment to the might of it,
Let heaven for ever *keep* it from my head.
Shakspeare.

Some obscure passages in the inspired volume *keep* from the knowledge of divine mysteries. *Boyle.*

If the god of this world did not blind their eyes, it would be impossible, so long as men love themselves, to *keep* them from being religious. *Tillotson.*

There is no virtue children should be excited to, nor fault they should be *kept* from, which they may not be convinced of by reasons.
Locke on Education.

If a child be constantly *kept* from drinking cold liquor whilst he is hot, the custom of forbearing will preserve him. *Locke.*

By this they may *keep* them from little faults.
Id.

To debar from any place.

Ill fenced for heaven to *keep* out such a foe.
Milton.

To keep back. To reserve; to withhold.

Whatsoever the Lord shall answer, I will declare; I will *keep* nothing *back* from you. *Jer.* xlii. 4.

Some are so close and reserved, as they will not shew their wares but by a dark light, and seem always to *keep back* somewhat. *Bacon's Essays.*

To keep back. To withhold; to restrain.

Keep back thy servant from presumptuous sins.
Psalm xix.

To keep company. To frequent any one; to accompany.

Heaven doth know, so shall the world perceive,
That I have turned away my former self,
So will I those that *kept* me *company*. *Shakspeare.*
Why should he call her whore? Who *keeps* her *company?*
What place? what time? *Id. Othello.*
What mean'st thou, bride! this *company* to *keep*?
To sit up, till thou fain would sleep? *Donne.*
Neither will I wretched thee
In death forsake, but *keep* thee *company*.
Dryden.

To keep company with. To have familiar intercourse.

A virtuous woman is obliged not only to avoid immodesty, but the appearance of it; and she could not approve of a young woman *keeping company with* men, without the permission of father or mother.
Broome on the Odyssey.

To keep in. To conceal; not to tell.

I perceive in you so excellent a touch of modesty, that you will not extort from me what I am willing to *keep in*. *Shakspeare.*

Syphax, your zeal becomes importunate;
I have hitherto permitted it to rave,
And talk at large; but learn to *keep* it *in*,
Lest it should take more freedom than I'll give it.
Addison.

To keep in. To restrain; to curb.

If thy daughter be shameless, *keep* her *in* straitly, lest she abuse herself through overmuch liberty.
Ecclesiasticus.

It will teach them to *keep in*, and so master their inclinations. *Locke on Education.*

To keep off. To bear to distance; not to admit.

Then came old January, wrapped well
In many weeds to *keep* the cold away.
Spenser's Faerie Queene.

To keep off. To hinder.

A superficial reading, accompanied with the common opinion of his invincible obscurity, has *kept off* some from seeking in him the coherence of his discourse. *Locke.*

To keep up To maintain without abatement.

Land *kept up* its price, and sold for more years purchase than corresponded to the interest of money
Locke.

This restraint of their tongues will *keep up* in them the respect and reverence due to their parents. *Id.*

Albano *keeps up* its credit still for wine. *Addison.*

This dangerous dissension among us we *keep up* and cherish with much pains. *Id. Freeholder.*

The ancients were careful to coin money in due weight and fineness, and *keep* it *up* to the standard.
Arbuthnot.

To keep up. To continue; to hinder from ceasing.

You have enough to *keep* you alive, and to *keep up* and improve your hopes of heaven. *Taylor.*

In joy, that which *keeps up* the action is the desire to continue it. *Locke.*

Young heirs, from their own reflecting upon the estates they are born to, are of no use but to *keep up* their families, and transmit their lands and houses in a line to posterity. *Addison.*

During his studies and travels he *kept up* a punctual correspondence with Eudoxus. *Id.*

To keep under. To oppress; to subdue.

O happy mixture! whereby things contrary do so qualify and correct the one the danger of the other's excess, that neither boldness can make us presume, as long as we are *kept under* with the sense of our own wretchedness; nor, while we trust in the mercy of God through Christ Jesus, fear be able to tyrannize over us. *Hooker.*

Truth may be smothered a long time, and *kept under* by violence; but it will break out at last.
Stillingfleet.

To live like those that have their hope in another life, implies that we *keep under* our appetites, and do not let them loose into the enjoyments of sense.
Atterbury.

Keep, *v. n.* To remain by some labor or effort in a certain state.

With all our force we *kept* aloof to sea,
And gained the island where our vessels lay.
Pope's Odyssey.

To continue in any place or state; to stay.

Thou shalt *keep* fast by my young men, until they have ended. *Ruth* ii. 21.

What! *keep* a week away? seven days and nights?
Eightscore eight hours? and lovers' absent hours,
More tedious than the dial eightscore times?
O weary reckoning! *Shakspeare. Othello.*

I think, it is our way,
If we will *keep* in favour with the king,
To be her men, and wear her livery.
Shakspeare.

She would give her a lesson for walking so late, that should make her *keep* within doors for one fortnight. *Sidney.*

The necessity of *keeping* well with the maritime powers, will persuade them to follow our measures.
Temple.

On my better hand Ascanius hung,
And with unequal paces tript along:
Creusa *kept* behind. *Dryden's Æneid.*

The goddess born in secret pined;
Nor visited the camp, nor in the council joined;
But *keeping* close, his gnawing heart he fed
With hopes of vengeance. *Id. Homer.*

And while it *keeps* there, it *keeps* within our author's limitation. *Locke.*

A man that cannot fence will *keep* out *of* bullies, and gamesters' company. *Id. On Education.*

There are cases in which a man must guard, if he intends to *keep* fair with the world, and turn the penny. *Collier.*

The endeavours Achilles used to meet with Hector, the contrary endeavours of the Trojan to *keep* out of reach, are the intrigue. *Pope's View of Epic Poetry.*

Deep loneliness hath wrought this mood in thee,
For like a cloistered votaress, thou hast *kept*,
Thy damsels till me, this lone turret's bound.
Maturin's Bertram.

To remain unhurt; to last; to be durable.

Grapes will *keep* in a vessel half full of wine, so that the grapes touch not the wine. *Bacon.*

Disdain me not, although I be not fair:
Doth beauty *keep* which never sun can burn,
Nor storms do turn! *Sidney.*

If the malt be not thoroughly dried, the ale it makes will not *keep*. *Mortimer's Husbandry.*

To dwell: to live constantly.

A breath thou art,
Servile to all the skiey influences,
That do this habitation, where thou *keepest*,
Hourly afflict.
Shakspeare. Measure for Measure.

Knock at the study, where, they say, he *keeps*,
To ruminate strange plots of dire revenge.
Shakspeare.

To adhere strictly; with *to*.

Did they *keep to* one constant dress they would sometimes be in fashion, which they never are.
Addison's Spectator.

It is so whilst we *keep to* our rule; but when we forsake that we go astray. *Baker on Learning.*

To keep on. To go forward.

So chearfully he took the doom;
Nor shrunk, nor stept from death,
But with unaltered pace *kept on*. *Dryden.*

To keep up. To continue unsubdued.

He grew sick of a consumption; yet he still *kept up*, that he might free his country.
Life of Cleomenes.

The general idea of this word is care, continuance, or duration, sometimes with an intimation of cogency or coercion.

Keep, *n. s.* From the verb. Custody; guard.

Pan, thou god of shepherds all,
Which of our lambkins takest *keep*. *Spenser.*
The prison strong,
Within whose *keep* the captive knights were laid:
Was one partition of the palace-wall. *Dryden.*

Guardianship; restraint.

Youth is least looked into when they stand in most need of good *keep* and regard. *Ascham.*

Keeper, *n. s.* From keep. One who holds any thing for the use of another.

The good old man, having neither reason to dissuade nor hopes to persuade, received the things with the mind of a *keeper*, not of an owner. *Sidney.*

One who has prisoners in custody.

The *keeper* of the prison, call to him. *Shakspeare.*
Io now
With horns exalted stands, and seems to lowe:
A noble charge; her *keeper* by her side
To watch her walks his hundred eyes applied
Dryden.

A pleasant beverage he prepared before
Of wine and water mixed, with added store
Of opium; to his *keeper* this he brought,
Who swallowed unaware the sleepy draught. *Id*
Am I then
My brother's *keeper?* *Byron. Cain.*

One who has the care of parks, or beasts of chace.

There is an old tale goes, that Herne the hunter,
Sometime a *keeper* here in Windsor forest,
Doth all the Winter-time, at still of midnight,
Walk round about an oak with ragged horns.
Shakspeare.

The first fat buck of all the season's sent,
And *keeper* takes no fee in compliment. *Dryden.*

One that has the superintendance or care of any thing.

Hilkiah went unto Hildah, *keeper* of the wardrobe.
2 *Kings.*

The Keeper of the Privy Seal is a lord by office, through whose hands all grants, pardons, &c. pass before they come to the great seal; and even some things pass his hands which do not pass the great seal at all. He is also one of the privy council, and was anciently called clerk of the privy seal. His duty is to put the seal to no grant, &c. without a proper warrant; nor with warrant where it is against law, or inconvenient, but shall first acquaint the king therewith.

Keep'ership, *n. s.* From keeper. Office of a keeper.

The gaol of the shire is kept at Launceston: this *keepership* is annexed to the constableship of the castle. *Carew.*

Keeping, in painting, denotes the representation of objects as a whole, in the same proportions in which they appear to the eye at different distances from it. The famous Raphael twice transgressed these rules; in one of his cartoons, representing the miraculous draught of fishes, the men in each of the boats appearing of a full size, while the boats are represented so small, and the men so big, that any of the fishermen appears sufficient to sink either of the boats by his weight. The other instance occurs in his picture of our Saviour's transfiguration on the Mount; where he is represented with Moses and Elias, &c., almost as large as the rest of his disciples at the foot of the mount, with the father and the mother of a boy whom they brought to be cured; and the mother, though on her knees, is more than half as tall as the mount is high. So that the mount appears only of the size of a little hay-rick, with a few people on its top, and a greater number at its bottom on the ground. See Painting.

KEFF, an important town of Tunis, anciently called Sicca, or Sicca Veneria, on the eastern bank of the river Mejerdah. It stands, as its name imports, on the declivity of a hill, in the centre of which is a plentiful spring. In the civil wars of the eighteenth century, the greater part of the citadel was blown up, but it was afterwards rebuilt, with augmented strength. In digging for materials two statues were found, of Venus and Marcus Antoninus. It is seventy miles W.S.W. of Tunis.

KEG, *n. s.* Fr. *caque*. A small barrel, commonly used for a fish-barrel.

Their stock was damaged by the weather's stress.
Two casks of biscuits, and a *keg* of butter,
Were all that could be thrown into the cutter.
Byron. Don Juan.

KEHL, or KEIL, an important fortress of Germany, now belonging to Baden. It was originally a fort and village on the east side of the Rhine, which, in 1678, were taken by storm and rased by the French. The village was then removed, and the fort built at the influx of the Kinzig into the Rhine, on the west side of that river, one mile and a half from Strasburgh. The French took possession of it in 1684, and fortified it very strongly after the designs of M. Vauban. In 1697 it was declared imperial, being ceded to the empire at the peace of Ryswick; when the emperor consigned it to the house of Baden, reserving to himself, however, the right of a garrison. In 1733 it was again taken by the French, but restored at the peace. But, upon the commencement of the late wars, the fortifications were made stronger than ever; notwithstanding which it was taken by the French republicans under general Moreau in 1796; but retaken in December by the Austrians after a long siege. In 1797 the French recovered it, but in May 1799 it was again taken by the Austrians. The French afterwards recovered it, but evacuated it on the 21st of May 1801; when the fort was dismantled, as well as those of Old Brisach, Cassel, Ehrenbreitsten, and Dusseldorf. The French, on resuming the offensive, retook this fort, and continued to possess it till 1814, when it was restored to the grand duke of Baden; at present the bridge here thrown across the Rhine belongs partly to France, and partly to Baden.

KEJ, an important trading town of Persia, the capital of the province of Mekran. It is on the high road from Candahar, Kelat, and other towns on the north, to the seaports of Guatter and Chobar, and encircles a fort built on a high precipice, with a river running beneath. It has maintained a garrison of 5000 men. The vicinity is arid and barren. Long. 62° 30′ E., lat. 26° 10′ N.

KEILL (James), M.D., an eminent physician, was born in Scotland about 1673; and having travelled abroad, read lectures on anatomy with great applause in the Universities of Oxford and Cambridge, from the latter of which he received the degree of M.D. In 1700 he settled at Northampton, where he had considerable practice as a physician; and died there, of a cancer in his mouth, in 1719. He published, 1. An English translation of Lemery's Chemistry. 2. An Account of Animal Secretion, the Quantity of Blood in the Human Body, and Muscular Motion. 3. A Treatise on Anatomy; and 4, Several pieces in the Philosophical Transactions.

KEILL (John), M.D., elder brother to Dr. James, a celebrated astronomer and mathematician, born in Edinburgh in 1671. He studied in the university of that city, and in 1694 went to Oxford; where, being admitted of Baliol College, he read lectures on the Newtonian system, in his private chamber in that college. He is said to have been the first who taught Sir Isaac Newton's principles by the experiment on which they are founded. This he did by an apparatus of instruments of his own providing, by which he acquired great reputation in the university. The first specimen he gave the public of his skill in mathematical and philosophical knowledge, was his Examination of Dr. Burnet's Theory of the Earth, with Remarks on Mr. Whiston's Theory: and these theories being defended by their respective inventors, drew from Mr. Keill An Examination of the Reflections on the Theory of the Earth, together with A Defence of the Remarks on Mr. Whiston's New Theory. In 1701 he published his celebrated treatise intitled, Introductio ad Veram Physicam, which contains fourteen lectures; but in the following editions he added two more. This work has been translated into English, under the title of an An Introduction to Natural Philosophy. Afterwards, being made F.R.S., he published, in the Philosophical Transactions, a paper on the laws of attraction; and, being offended at a passage in the Acta Eruditorum of Leipsic, warmly vindicated, against Mr. Leibnitz, Sir Isaac Newton's right to the honor of the first invention of his method of fluxions. In 1709 he went to New England as treasurer of the Palatines. About 1711 objections being urged against Newton's philosophy, in support of Des Cartes's notions of a plenum, Mr. Keill published a paper in the Philosophical Transactions on the rarity of matter, and the tenuity of its composition. While he was engaged in this dispute, queen Anne appointed him her decypherer; and he continued in that place till 1716. He had also the degree of M.D. conferred on him by the University of Oxford in 1713. He died in 1721. He published also Introductio ad veram Astronomiam, which he translated into English; and an edition of Commandinus's Euclid, with additions of his own.

KEITH (James Francis Edward), field-marshal in the Prussian service, was the younger son of William Keith, earl marshal of Scotland; and was born at Inverugie in 1696. He was designed by his friends for the law; but his inclination led him to arms. When the rebellion broke out in Scotland, in 1715, through the instigation of his mother, he joined James's party; was wounded at the battle of Sheriff-muir, and made his escape to France. Here he applied himself to military studies; and going to Madrid, by the interest of the duke of Liria, obtained a commission in the Irish brigades, then commanded by the duke of Ormond. He afterwards attended the duke of Liria, when he went ambassador to Muscovy; and, being by him recommended to the empress Catharine I., was promoted to the rank of lieutenant-general, and invested with the order of the black eagle. He distinguished himself by his valor and conduct in the Russian service, and had no inconsiderable share in the revolution that raised Elizabeth, the daughter of Peter the Great, to the throne; he also served in several embassies; but finding the honours of that country but a splendid kind of slavery, he left that court and entered the Prussian service. The king of Prussia made him field-marshal of the Prussian armies, and governor of Berlin; and distinguished him so far by his confidence, as to travel in disguise with him over a

great part of Germany, Poland, and Hungary. In business he made him his chief counsellor; in his diversions, his chief companion. The king was much pleased with an amusement which the marshal invented in imitation of the game at chess. He ordered several thousand small statues of men in armor to be cast by a founder; these he would set opposite to each other, and ranged them in battalia, as if he had been drawing up an army; would bring out a party from the wings or centre, and show the advantage or disadvantage resulting from the different movements. This brave and experienced general, after many important services in the various wars of that illustrious monarch, was killed at the fatal battle of Hochkirchen, on the 14th of October, 1758.

KEITH (Thomas), a celebrated mathematician and author of many distinguished works, was a native of Brandsburton, near Beverley, in Yorkshire, and born on the 22d of September, 1759. He received the rudiments of his education in the free school at that place. At the age of fourteen years, his parents dying, leaving him with but slender pecuniary means, he was compelled to engage himself as tutor in a private family, in which situation he had frequent opportunities of pursuing his mathematical studies. In the year 1781 he quitted the country, and settled in London. In 1789 he published his first volume, An Introduction to the Science of Geography. In 1796 was published his New Schoolmaster's Assistant, which, after passing through two editions, was suppressed to make room in 1799 for The Complete Practical Arithmetician. To this work a key was afterwards published for the use of tutors. Besides the works already mentioned, Mr. Keith published, in 1801, An Introduction to the Theory and Practice of Plane and Spherical Trigonometry; in 1805, a Treatise on the Use of the Globes; and, in 1814, The Elements of Geometry. He also superintended several editions of Paterson's Book of Roads, and of Hawney's Complete Measurer, and was the contributor of valuable papers to the various mathematical periodicals. Mr. Keith declined accepting any public mathematical situation, but in his capacity as a private tutor contributed largely to the public good by the application of his knowledge and acquirements to works of practical utility. He was, however, accountant to the British Museum, and for many years secretary to the master of his late majesty's household. In 1810, with the approbation of her majesty queen Charlotte and the prince regent, he was appointed professor of geography and the sciences to the late lamented princess Charlotte of Wales, from whom, and from her royal highness the princess Sophia Matilda (who with many other distinguished personages received the benefit of his scientific acquirements), he received many flattering marks of attention and respect. In the month of November, 1822, he was afflicted with an internal disorder, which ultimately caused his death. He ended his life on the 29th of June 1824, with the most perfect composure and resignation, and retained, almost to the last hour of his existence, the exercise of those strong mental faculties, and of those kind and gentle manners which so much endeared him to his family, his friends, and his acquaintances. Up to the period of his death he was engaged in writing a new work on the Science of Geography, which his friends have recently completed and published.

KELAT, the capital of Baloochistan, and residence of its sovereign Mahmoud Khan. See BALOOCHISTAN. It stands on a high hill surrounded by a mud wall; the houses are built of half-burnt brick; the upper stories nearly joining across the streets; which are narrow and ill-paved. It is notwithstanding populous, and contains 4000 houses, several good bazaars, and some fine gardens. The inhabitants are a mixture of Afghauns, Balouches, and Hindoos. The last are the principal merchants. Long. 67° 57' E., lat. 29° 6' N.

KELL, *n. s.* The omentum; that which enwraps the guts.

The very weight of bowels and *kell*, in fat people, is the occasion of a rupture. *Wiseman's Surgery.*

KELLERMAN (Francis Christopher), duke de Valmy, peer and marshal of France, &c., was born at Strasburgh in 1735, and entered into the army at the age of seventeen. Having given various proofs of his talents and courage, in the seven years' war, he was rapidly promoted, till in 1788 he was made quarter-master-general. Adopting the principles of the revolution, he was in 1792 appointed commander of the army of Moselle, and then effected a junction with Dumourier, on the plain of Champagne. On the 17th of September he distinguished himself by his defence of the position of Valmy. He next served under Custine, who denounced him to the Convention; and, though he justified himself against the accusation, similar attacks followed him, and he was arrested and confined in the military prison of the abbey. On his trial, after the expiration of the reign of terror, he was fully acquitted, and in 1795 took the command of the army of the Alps and Italy; in which he was superseded by Buonaparte. In 1798 he was nominated a member of the military board, and in 1801 was president of the conservative senate, and the following year a marshal of the empire. Under Napoleon he served in Germany and Prussia; and, having in 1814 voted for the restoration of royalty, was employed under the Bourbons till his death in 1820.

KELLISON (Matthew), a celebrated Roman Catholic divine, was born in Northamptonshire in 1560, and took his doctor's degree at Rheims, where he was rector of the university. Hence he removed Douay, and became president of the English college. He died in 1641. His works are—1. Survey of the New Religion; 2. Reply to Sutcliffe; 3. Oratio coram Henrico IV. rege Christianissimo; 4. The Gagg of the Reformed Gospel; 5. Examen Reformationis: 6. The Right and Jurisdiction of the Prince and Prelate; 7. A Treatise on the Hierarchy of the Church; 8. A Brief and Necessary Instruction for the Catholics of England; 9. Comment, in tertiam partem Summæ Sancti Thomæ.

KELLS, a Market town of Ireland, in the county of Meath, Leinster, thirty-one miles from Dublin. This town is pleasantly situated on the

Blackwater, and has four fairs. It was anciently called Kenanus, afterwards Kenlis, and was one of the most famous cities in the kingdom. On the arrival of the English, it was walled and fortified with towers. In 1178 a castle was erected where the market-place now is; and opposite to it was a cross of one entire stone, ornamented with bas-relief figures, and many curious inscriptions in the ancient Irish character. Near it was the church of St. Senan; and on the south of the churchyard is a round tower which measures ninety-nine feet from the ground, the roof ending in a point. A celebrated monastery, founded here in 550 for regular canons, was dedicated to the Virgin. It owed its origin to St. Columba, to whom the site of the abbey was granted by Dermod king of Ireland.

Kells, an ancient town of Ireland, in Kilkenny, seventy-five miles from Dublin, seated on King's River; and noted for a priory of Augustines, built and richly endowed by Geoffroy Fitz Roberts, who came over from Wales with Strongbow. The prior sat as one of the lords spiritual in the house of peers before the Reformation. The ruins only of this abbey now remain: a synod was held in it in 1152, when John Paparo, legate from Rome, was one of the bishops that were convened there to settle the affairs of the church. The present church is built in the Gothic manner. Fair held 13th of July.

Kells is also the name of a town of Antrim, one hundred and five miles from Dublin, principally celebrated for the ruins of Templemoge Abbey, which are supposed to have had a mural communication with the ancient remains of Connor. The beautiful moat of Kells is situated on a height recently planted above Kells-water, a rapid but generally shallow mountain stream which is a chalybeate water, containing excellent trout.

KELLY (Michael), the son of a wine merchant of Dublin, who for many years acted, as master of the ceremonies at the Vice-regal castle. He was born in 1762, and at an early age gave proofs of a genius for music, which induced his father to place him under Rauzzini, at this time in Dublin, who prevailed on his friends to send him to Naples, where he arrived in his sixteenth year Here he was much patronised by Sir William Hamilton, the British minister, and studied under Fineroli, at the Conservatorio La Madona della Loretto. He also received lessons from Aprili, the first singing master of his day, who procured him an engagement at Leghorn. He subsequently performed at most of the Italian theatres, and in Germany; and contracted a close intimacy during his stay at Vienna with the celebrated Mozart. The emperor Joseph became his patron: but having obtained permission for a year's absence, in order to visit his friends in Ireland, he settled in London. In April 1787 he made his first appearance at Drury Lane Theatre as Lionel, in the opera of Lionel and Clarissa, and retained his situation as first-singer at that theatre, till his final retirement from the stage. He furnished, in 1797, the music to A Friend in Need; The Castle Spectre; &c.; which in the succeeding year he followed up by the most popular of his compositions, the airs marches, &c., in Colman's musical romance of Bluebeard. From this period till 1819 he wrote upwards of sixty successful pieces. He wrote also an amusing work entitled Reminiscences, 2 vols. 8vo. His death took place at Ramsgate on the 15th of October, 1826.

KELP, *n. s.* Perhaps from kali. A salt produced from calcined sea-weed,

In making alum, the workmen use the ashes of a sea-weed called *kelp*, and urine. *Boyle on Colours.*

Kelp, in the glass trade, the name of a sort of potassa made use of in many of the glass works, particularly for the green glass. It is the calcined ashes of a plant called by the same name; and in some places of sea thongs, a sort of thick-leaved fucus, or sea wrack. See Fucus. The process of making it is this: the rocks, which are dry at low water, are the beds of great quantities of sea-weed; which is cut, carried to the beach, and dried; and a hollow is dug in the ground three or four feet wide; round its margin is laid a row of stones, on which the sea-weed is placed, and set on fire within; and, quantities of this fuel being continually heaped upon the circle, there is in the centre a perpetual flame, from which a liquid-like melted metal drops into the hollow beneath: when it is full, as it commonly is ere the close of day, all heterogeneous matter being removed, the kelp is wrought with iron rakes, and brought to a uniform consistence in a state of fusion. When cool, it consolidates into a heavy dark-colored alkaline substance, which undergoes in the glass houses a second vitrification, and assumes a perfect transparency. See Glass.

KELSO, a town in the county of Roxburgh, pleasantly situated on the Tweed. It is built much after the manner of a Flemish town, with a square and town-house. It has a very considerable market, wherein great quantities of corn are sold weekly. The abbey of the Tyronensians was a vast pile, and, to judge by the remains, of venerable magnificence. The walls are ornamented with false round arches, intersecting each other in the form of a true Gothic arch. The steeple of the church is a vast tower. This house was founded by David I. when earl of Cumberland. He first placed it at Selkirk, then removed it to Roxburgh, and finally, when he came to the crown, fixed it here in 1128. Its revenues were in money about £2000 Scots a year. The abbot was allowed to wear a mitre and pontifical robes, to be exempt from episcopal jurisdiction, and to be present at all general councils. The environs of Kelso are very fine; the lands consist of gentle risings, enclosed with hedges, and extremely fertile. From the Chalkheugh is a fine view of the forks of the rivers, Roxburgh hill, and in the distance Fleurus. Much wheat is raised in the neighbourhood, part of which is sent up the Frith of Forth, and part into England. The fleeces are very fine. The wool is sent into Yorkshire, to Linlithgow, or into Aberdeenshire, for the stocking manufacture; and some is woven here into a cloth called plains, and sold into England to be dressed. Here is also a considerable manufacture of white leather, chiefly sent to Edinburgh. At Kelso there was

KEMPELEN'S CHESS PLAYER.

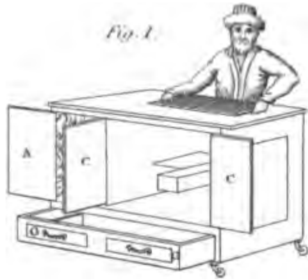
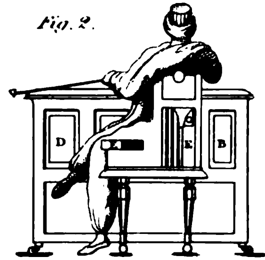


Fig. 1.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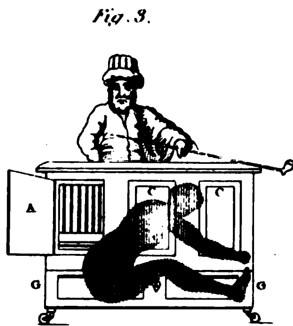
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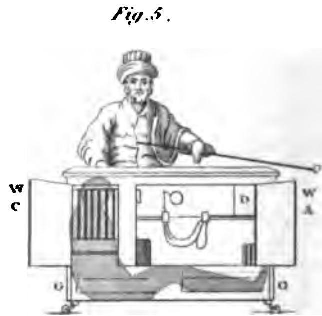
Fig. 4.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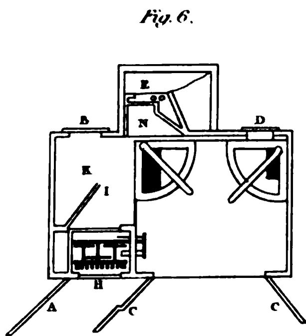
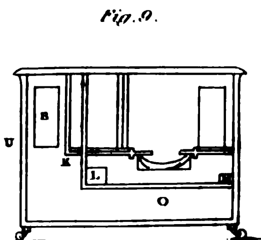


Fig. 6.

Fig. 7.

Fig. 8.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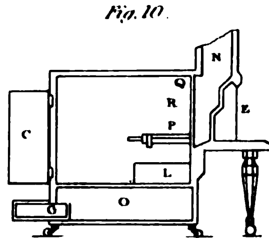
Fig. 10.

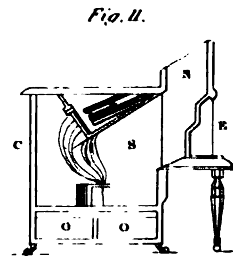
Fig. 11.

London, Published by Thomas Tegg, 73 Cheapside. J. Sharp sculp.

a fine stone bridge of six arches over the Tweed, near its confluence with the Teviot; which was carried away by a flood in 1798, but has since been rebuilt. There are two fairs and a weekly market, besides twelve high market days in the year. Kelso is twenty miles west of Berwick, and 256 N.N.W. of London.

KELSON, *n. s.* More properly keelson. The wood next the keel.

We have added close pillars in the royal ships, which, being fastened from the *kelson* to the beams of the second deck, keep them from settling, or giving way. *Raleigh.*

KELTER, *n. s.* He is not in kelter, that is, he is not ready; from Dan. *kilter* to gird.

KEMAON, a district of Hindostan, subject to Nepaul and the British, situated principally between 29° and 30° N. lat., and 79° and 81° of E. long. The northern or mountainous part of this country belongs to the rajah: the southern, or flat part, is now attached to the British territory of Bareilly. It is mostly a hilly country; composed of a fine rich soil, covered with verdure, and forest trees. The valleys are also productive and watered by numerous rivers. The chief town is Almora.

To KEMB, *v. a.* Saxon cœmban; German *kammen*: now written, perhaps less properly, to comb. To separate or disentangle by a denticulated instrument.

Yet are the men more loose than they,
More *kembed* and bathed, and rubbed and trimmed,
More sleek. *Ben Jonson.*

Thy head and hair are sleek;
And then thou *kemb'st* the tuzzes on thy cheek.
Dryden.

KEMBLE (John Philip), one of the most celebrated of English tragedians, was the eldest son of Mr. Roger Kemble, the manager of a company of comedians in the north of England, and born at Prescot in Lancashire, February 1st 1757. He received his early education at the Roman Catholic Seminary of Sedgley-park, Staffordshire, whence he proceeded to Douay, with a view to the clerical profession. Here he evinced an early attachment to elocution; but preferring the stage to other pursuits he entered upon that line at Liverpool. After performing in the country with great reputation; he appearon the boards of Drury Lane, September 30th 1783, in the character of Hamlet. From that time he maintained the character of the first English tragedian of his age. On the secession of Mr. King, he became manager of Drury Lane. In 1802 he visited the French and Spanish theatres, with a view to the improvement of his own: and on his return became manager of Covent Garden, where he continued till 1809, when that building was destroyed by fire. On its restoration Mr. Kemble was involved in a series of disputes with the public, called the O. P. riots, and at length worsted in his attempts to raise the prices. Mr. Kemble took farewell of the stage on the 23rd of July 1817, on which occasion he was complimented with a public dinner. He shortly after retired to the continent where he died at Lausanne in Switzerland, February 26th, 1823, of a paralytic attack, after a few hours' illness.

KEMMOO, a town of Western Africa, the capital of the state of Kaarta, situated in an open plain. Park was here well received by the king, who was not to be distinguished from his subjects by his dress. A bank of earth, about two feet high, with a leopard's skin spread over it, being the only badge of royalty. Long. 7° 46' W., lat. 14° 20' N.

KEMP (Joseph), Mus. D., a musical composer of considerable celebrity, was born at Exeter in 1778, and educated there by Jackson. In 1802 he was organist at Bristol cathedral; and in 1809 proceeded to the degree of Mus. D. at Cambridge; when his exercise entitled The Crucifixion was performed and much admired. He now became a lecturer at several institutions of the metropolis, and invented a new mode of teaching the science. In 1818 he visited the continent, and on his return went to reside in his native city. In April 1824 he came back to London, and died there on the 22nd of the following month. His works are; 1. A new System of Musical Education, being a Self-Instructor; 2. Twenty Psalmodical Melodies: 3. The Jubilee, a Patriotic Entertainment; 4. The Siege of Isca, an opera; 5. The Vocal Magazine; 6. Songs, Glees, Duets, &c.

KEMPELEN (Wolfgang de), an ingenious Hungarian gentleman and mechanic, the inventor of the celebrated automaton chess-player, was born at Presburg, and became first known to the public by the announcement of that invention in 1769. He was at that time aulic counsellor of the royal chamber of Hungary to the empress Maria Theresa. See our article AUTOMATON.

In that article we have given the statement of a gentleman who took great personal pains to investigate the mystery of the chess-player of Kempelen; and who nearly satisfied himself and us that, in point of fact, it is an imposition on the public. We have since had an opportunity of examining more accurately the pamphlet alluded to in the close of our article: and remembering that Dr. Hutton has denominated this, if altogether a mechanical contrivance, 'the greatest master-piece of mechanics that ever appeared in the world,' think the reader may be gratified by a reference to figures, and the following further explanation of the possible concealment of a living person:—

Fig. 1, plate KEMPELEN'S CHESS-PLAYER. A perspective view of the automaton, seen in front, with all the doors thrown open.

Fig. 2. An elevation of the back of the automaton.

Fig. 3. An elevation of the front of the chest, the dotted lines representing the player in the first position.

Fig. 4. A side elevation, showing the player in the same position.

Fig. 5. A front elevation, showing the second position.

Fig. 6. An horizontal section through the line WW, fig. 5.

Fig. 7. A front elevation, showing the third position.

Fig. 8. A side elevation of the same position.
Fig. 9. A vertical section through the line X X, fig. 8.
Fig. 10. A vertical section through the line Y Y, fig. 7, showing the false back closed.
Fig. 11. A similar section, showing the false back raised

The following letters of reference are employed in all the figures.

A Front door of the small cupboard.
B Back door of ditto.
CC Front doors of large cupboard.
D Back door of ditto.
E Door of ditto.
F Door in the thigh.
GG The drawer.
H Machinery in front of the small cupboard.
I Screen behind the machinery.
K Opening caused by the removal of part of the floor of the small cupboard.
L A box which serves to conceal an opening in the floor of the large cupboard, made to facilitate the first position; and which also serves as a seat for the third position.
M A similar box to receive the toes of the player in the first position.
N The inner chest, filling up part of the trunk.
O The space behind the drawer.
PQ The false back turning on a joint at Q.
R Part of the partition formed of cloth stretched tight, which is carried up by the false back, to form the opening between the chambers.
S The opening between the chambers.
T The opening connecting the trunk and chest, which is partly concealed by the false back.
U Panel which is slipped aside to admit the player.

'The exhibitor, in order to show the mechanism, as he informs the spectators, unlocks the door A, fig. 1, of the chest, which exposes to view a small cupboard, lined with black or dark colored cloth, and containing different pieces of machinery, which seem to occupy the whole space. He next opens the door, B, fig. 2, at the back of the same cupboard, and holding a lighted candle at the opening, still further exposes the machinery within. The candle being withdrawn, the door B is then locked. The drawer, G G, fig. 1, in the front of the chest, is then opened, and a set of chess men, a small box of counters, and a cushion for the support of the automaton's arm are taken out of it. The exhibitor now opens the two front doors, C C, fig. 1, of the large cupboard, and the back door D, fig. 2, of the same, and applies a candle, as in the former case. This cupboard is lined with cloth like the other, but it contains only a few pieces of machinery. The chest is now wheeled round, the garments of the figure lifted up, and the door E, fig. 2, in the trunk, and another, F, in the thigh, are opened. But it must be observed, that the doors, B and D, are closed. The chest is now restored to its former position on the floor; the doors in front, and the drawer, are closed and locked; and the exhibitor, after he has occupied some time at the back of the chest, in apparently adjusting the machinery, removes the pipe from the hand of the figure, winds up the works, and the automaton begins to move.

Our author after pointing out the extreme difficulty of executing the movements of the chess player by machinery alone, and the regular and undeviating mode of disclosing the interior of the chest; shows that the various facts which have been observed respecting the winding up of the machine, 'afford positive proof that the axis turned by the key is quite free and unconnected either with a spring or a weight, or any system of machinery.' He then suggests a method by which any person well skilled in the game, and not exceeding the ordinary stature, may secretly animate the automaton, and imitate the movements of the chess-player. This method will be best understood from the following extract:—

'The drawer, G G, fig. 10, when closed, does not reach to the back of the chest; it leaves a space, O, behind it, about one foot two inches broad, eight inches high, and three feet eleven long. This space is never exposed to view. The small cupboard is divided into two parts by the door or screen, I, fig. 6, which is moveable on a hinge, and is so contrived that, when B is closed, this screen may be closed also. The machinery, H, occupies the whole of the front division as far as I; the hinder division is nearly empty, and communicates with the space behind the drawer, the floor of this division being removed. The back of the great cupboard is double, and the part, P Q, to which the quadrants, &c., are attached, moves on a joint Q, at the upper part, and forms, when raised, an opening, S, between the two cupboards, by carrying with it part of the partition, R, which is composed of cloth stretched tight. Fig. 10 shows the false back closed. Fig. 11 shows the same raised, forming the opening S, between the chambers.

'When the trunk of the figure is exposed, by lifting up the dress, it will be seen that a great part of it is occupied by an inner trunk, N, which passes off towards the back in the form of an arch, fig. 2, and conceals a portion of the interior from the view of the spectators. This inner trunk opens to the chest by an aperture, T. fig. 9, about one foot three inches high, by one foot broad. When the false back is raised, the two chambers, the trunk, and the space behind the drawer, are all connected together.

'The player may be introduced into the chest through the sliding panel U, fig. 6, at the end. He will then elevate the false back of the large cupboard, and assume the position represented by the dotted lines in figs. 3 and 4. Every thing being thus prepared, 'the charm's wound up,' and the exhibitor may begin his operations by opening the door, A. From the crowded and very ingenious disposition of the machinery in this cupboard, the eye is unable to penetrate far beyond the opening, and the spectator is led to conclude that the whole space is occupied with a similar apparatus. This illusion is strengthened and confirmed by observing the glimmering light which plays among the intricacies of the machinery, and occasionally meets

the eye, when the lighted candle is held at the door, B. A fact, too, is ascertained, which is equally satisfactory, though for opposite reasons, to the spectator and the exhibitor, viz. that no opake body of any magnitude is interposed between the light and the spectator's eye. The door, B, must now be locked, and the screen, I, closed, which, being done at the moment the light is withdrawn, will wholly escape observation.

'It has been already mentioned, that the door, B, from its construction, closes by its own weight; but as the player's head will presently be very near it, the secret would be endangered, if, in turning round the chest, this door were, by any accident, to fly open; it becomes necessary, therefore, 'to make assurance doubly sure,' and turn the key. If the circumstance should be observed, it will probably be considered as accidental, the keys being immediately wanted for the other locks. The opening, B, being once secured, and the screen, I, closed, the success of the experiment may be deemed complete. The secret is no longer exposed to hazard; and the exhibitor is at liberty to shape his conduct in any way he may think most likely to secure the confidence of the spectators, and lead them insensibly from the main object of pursuit. The door, A, may safely be left open; this will tend to confirm the opinion, which the spectators probably formed on viewing the candle through this cupboard, that no person was concealed within it: it will assure them that nothing can pass in the interior without their knowledge, so long as this door continues open. The drawer stands next in the order of succession: it is opened, apparently for the purpose of taking out the chess men, cushion, &c., but really to allow time for the player to change his position (see fig. 5), and to replace the false back and partition, preparatory to the opening of the great cupboard.

'The machinery is so thinly scattered over this cupboard, that the eye surveys the whole space at one glance, and it might seem unnecessary to open a door at the back, and to hold a lighted candle there, as in the former instance; but the artifice is dictated by sound policy, which teaches that the exhibitor cannot be too assiduous in affording facilities to explore every corner and recess, which, he well knows, contains nothing that he is desirous of concealing. The chest may now be wheeled round for the purpose of showing the trunk of the figure; leaving, however, the front doors of the great chamber open. The bunch of keys, too, should be suffered to remain in the door, D; for the apparent carelessness of such a proceeding will serve to allay any suspicion which the circumstance of locking the door, B, might have excited, more especially as the two doors resemble one another in point of construction. When the drapery has been lifted up, and the doors in the trunk and thigh opened, the chest may be returned to its former situation, and the doors be closed. In the mean time the player should withdraw his legs from behind the drawer, as he will not so easily effect this movement after the drawer has been pushed in.

'Here let us pause a while, and compare the real state of the chest at this time, with the impression which, at a similar period of an exhibition of the chess-player, has generally been left on the minds of the spectators; the bulk of whom have concluded that each part of the chest had been successively exposed; and that the whole was at that time open to inspection; whereas, on the contrary, it is evident that some parts had been entirely withheld from view, others but obscurely shown, and that nearly half of the chest was then excluded from their sight. Hence we learn how easily, in matters of this sort, the judgment may be led astray by an artful combination of circumstances, each assisting the other towards the attainment of one object.

'When the doors in front have been closed, the exhibitor may occupy as much time as he finds necessary, in apparently adjusting the machinery at the back, whilst the player is taking the position described in figs. 7 and 8. In this position he will find no difficulty in executing every movement required of the automaton: his head being above the table, he will see the chess-board through the waistcoat as easily as through a veil; and his left hand extending beyond the elbow of the figure, he will be enabled to guide its hand to any part of the board, and to take up and let go a chess man with no other 'delicate mechanism' than a string communicating with the finger. His right hand, being within the chest, may serve to keep in motion the contrivance for producing the noise, which is heard during the moves, and to perform the other tricks of moving the head, tapping on the chest, &c. In order to facilitate the introduction of the player's left arm into the arm of the figure, the latter is obliged to be drawn backwards; and, to account for and conceal this strained attitude, a pipe is ingeniously placed in the automaton's hand. This pipe must not be removed till the other arrangements are completed. When all is ready, and the pipe removed, the exhibitor may turn round the winder, to give the impression to the spectators of winding up a spring, or weight, and to serve as a signal to the player to set the head of the automaton in motion. The above process is simple, feasible, and effective; showing indisputably that the phenomena may be produced without the aid of machinery, and thereby rendering it probable that the chess-player derives its merit solely from the very ingenious mode by which the concealment of a living agent is effected.'

De Kempelen published La Mecanisme de la Parole, Suivi de la Description d'une Machine Parlante, et enrichi de vingt-et-sept Planches, Vienne, 1791, 8vo. printed in French: also a drama, called Perseus and Andromeda; the Unknown Benefactor, a comedy, &c. In addition to the machines mentioned in the article AUTOMATON, he likewise made a printing press for the use of Madame Pardies, a blind musician. He died in Vienna in 1804.

KEMPIS (Thomas à), a pious and learned regular canon, born at the village of Kemp, in the diocese of Cologne, in 1320; from which he took his name. He studied at Deventer, in the community of poor scholars established by Ge-

rard Groot; where he made great progress in the sciences. In 1399 he entered the monastery of the regular canons of Mount St. Agnes, near Zwoll, of which his brother was prior. Thomas à Kempis there distinguished himself by his eminent piety, his respect for his superiors, his charity to his brother canons, &c. He died in 1471, aged seventy. The best editions of his works, which consist of sermons, spiritual treatises, and lives of holy men, are those of Paris in 1649, and of Antwerp in 1607. The famous book de Imitatione Christi, which has been translated into almost all languages, having been found printed under the name of Gerson, has been, on this account, as on the credit of some MSS., since ascribed to the abbot Gerson. This occasioned a violent dispute between the canons of St. Augustine and the Benedictines.

KEMPTEN, the ancient Campodunum, a town of the Bavarian states, on the Iller. It consists of the old town, and the Stifts-stadt, and contains altogether 5300 inhabitants. Here is an aqueduct: manufactures of cotton and linen, and some trade on the Iller. The two parts of the town were formerly distinct, the old town having no territory but a good trade; while the Stifts-stadt, which stands on an eminence, was the seat of the abbey. In 1802 both the abbey and town were made over to Bavaria. Sixty-six miles W. S. W. of Munich, and fifty south by east of Ulm.

KEN, *v. a.* & *n. s.* Sax. cennan; Goth. *kenna;* Belg. *kennen.* To know; to see at a distance; to descry; to know. Ken, a view or sight.

Colin! thou *kenst* the southerne shepheard's boy
Him love that wounded with a dealy darte,
Whilome on him wos all my care and ioye
Forcing with giftes to win his wanton heart.
Spenser's Shepheard's Calendar.

'Tis he, I *ken* the manner of his gait.
Shakspeare.

Lo! within a *ken* our army lies. *Id. Henry IV.*

When from the mountain top Pisanio shewed thee,
Thou wast within a *ken.* *Id. Cymbeline.*

The next day about evening we saw, within a *kenning*, thick clouds, which did put us in some hope of land. *Bacon.*

At once as far as angels *ken*, he views
The dismal situation waste and wild. *Milton.*

It was a hill
Of paradise the highest; from whose top
The hemisphere of earth, in clearest *ken*,
Stretched out to the amplest reach of prospect, lay.
Id.

He soon
Saw within *ken* a glorious angel stand. *Id.*

Coasting they kept the land within their *ken*,
And knew the North but when the pole-star shone.
Dryden.

If thou *ken'st* from far,
Among the Pleiads, a new-kindled star;
'Tis she that shines in that propitious light. *Id.*

When we consider the reasons we have to think, that what lies within our *ken* is but a small part of the universe, we shall discover an huge abyss of ignorance. *Locke.*

We *ken* them from afar, the setting sun
Plays on their shining arms. *Addison.*

Now plain I *ken* whence love his rise begun:
Sure he was born some bloody butcher's son,
Bred up in a shambles. *Gay's Pastorals.*

Ken (Thomas), an eminent English bishop, in the seventeenth century, who was educated at Winchester school, whence he went to Oxford; and in 1669 was made a prebend of Winchester. He was appointed by king Charles II. to attend lord Dartmouth at the demolishing of Tangier; and at his return was made chaplain to the king, as he was some time after to the princess of Orange. In Jan. 1685 he was made bishop of Bath and Wells. The month following he attended king Charles II. at his death, for three whole days and nights. In James the Second's reign he zealously opposed the progress of popery; and in June, 1688, he with five other bishops, and the archbishop of Canterbury, was committed prisoner to the Tower of London, for subscribing a petition to his majesty against the declaration of indulgence. Upon the Revolution, however, he refused to take the oaths to king William and queen Mary, on which account he was deprived of his bishopric. Queen Anne bestowed on him a yearly pension of £200 to his death, in 1710. He published several pious works.

KENDAL, a market town of Westmoreland, seated in a valley, among hills, on the west side of the Ken, over which there are two stone bridges, and one of wood, which leads to the castle, now in ruins. It is a large handsome place; and has two fine long streets, crossing each other. The inhabitants have carried on the cotton and woollen manufactory ever since the reign of Edward III., and laws were enacted for regulating Kendal cloths as early as Richard II. and Henry IV. It is also famous for the manufactory of cottons, druggets, serges, hats, worsted and yarn stockings, &c. Queen Elizabeth incorporated it with aldermen and burgesses; and king James I. with a mayor, recorder, town-clerk, twelve aldermen, twenty-four burgesses, or common council-men, and two attorneys. There are seven companies, viz. mercers, shearmen, cordwainers, glovers, tanners, tailors, and pewterers. It has an elegant town-hall, and a court of conscience for debts under 40*s*. It has a large beautiful church, which stands on the other side of the brook called Blindbeck, out of the liberty of the town: a large and handsome Gothic fabric, 180 feet long and ninety-nine broad, with five aisles, each parted by a row of eight pillars, and a strong square steeple. Near it is Abbot's Hall, the residence of the abbot when this church belonged to an abbey dissolved by Henry VIII. In 1755 a new chapel was erected in the middle of the town, and twelve chapels of ease belong to it. Here are several public and private charitable institutions, viz. Sandy's Hospital and Charity School, founded in 1670; the Blue-coat school, for fifty boys and forty girls; a school of Industry, built in 1799; a dispensary, erected in 1782; and the workhouse, which is at the north west end of the town, and is very commodious. The newspaper published here is of long standing, and a subscription book-club has been long established. Here is also a free grammar-school well endowed. Eastward of the town on the opposite side of the river on a hill, whence is a fine prospect, stand the ruins of a castle, wherein

was born Catharine Parr, the sixth wife of Henry VIII. By the inland navigation, it has communication with the rivers Mersey, Dee, Ribble, Ouse, Trent, Severn, Humber, Thames, Avon, &c., extending above 500 miles in the counties of Lincoln, Nottingham, York, Lancaster. Chester, Stafford, Warwick, Leicester, Oxford, Worcester, &c. The sessions of the peace for this part of the county, called the barony of Kendal, are held in this town; and there is a very good market on Saturday, for all kinds of provisions and for woollen yarn. It has fairs May 6th, and November 8th: and between them a great market for black cattle every fortnight. Kendal sends one member to parliament. Returning officer, the mayor of the town.

KENE, or KENNE, a considerable place of Upper Egypt, which now forms the centre of its trade. The goods destined for India are brought up the Nile to this place in boats, where they are landed and carried over land to Cosseir, and embarked on the Red Sea. The goods from India are also landed at Cosseir, and brought to Kene. It is however chiefly supported by the great caravan from Western and Central Africa which passes annually through it, and brings numerous pilgrims for Mecca and Medina. Those cities, as well as their port, Jidda, being situated in a very barren country, the pilgrims are obliged to supply themselves at Kene. Long. 32° 27′ E., lat. 26° 9′ 36″ N.

KENHAWAY, a large river of the United States, in Virginia, which is formed by the Kenhaway Proper, and the Green Briar rivers. The former rises in North Carolina, in 36° N. lat. to the east of the Alleghany Mountains. Its course is first nearly north, passing into the Alleghany valley obliquely. It then follows the range of the valley, and at a distance of about forty miles enters Virginia, and, continuing sixty miles north-east to Inglisville, then turns north-west by north, enters Cumberland valley, over which it meanders about seventy miles, and receives, from the north-east, Green Briar River. Below their junction, the Great Kenhaway flows north-west forty or fifty miles, and passes Cumberland mountain by considerable falls. A rock, a little elevated in the middle, crosses the bed of the river, over which the water shoots, and falls about fifty feet perpendicularly, except at one side, where the descent is more gradual. Below these falls the stream, upwards of 300 yards wide, pursues nearly a north course for 100 miles, and falls into the Ohio at Point Pleasant, in lat. 38° 55′ N. The Great Kenhaway is 196 miles below Pittsburg, and navigable to the great falls most of the year.

KENHAWAY, LITTLE, a smaller river of the United States, in Virginia, which rises among the Alleghany Mountains, west of Chestnut ridge, or Cumberland Mountain. It is 150 yards wide at its mouth, and is navigable only ten miles. It falls into the Ohio at Parkersburg.

KENILWORTH, or KILLINGWORTH, is a market-town of England, in the county of Warwick, consisting chiefly of an irregular street, nearly a mile in length. The church is an ancient building, with a spire; and there are two dissenting meeting-houses. A manufacture of horn combs is carried on here, but the town is chiefly noted for its magnificent castle, which formed at one time the pride and ornament of this part of the kingdom. The remains present one of the most splendid and picturesque wrecks of castellated strength found in England. The castle was originally founded by Geoffrey de Glinton, chamberlain and treasurer to king Henry I. But most of the buildings which remain were built by John of Gaunt, who acquired it by marriage. Through his son Henry IV. it returned into the hands of the crown, until queen Elizabeth conferred it on Robert Dudley, earl of Leicester. This nobleman spent immense sums in adorning and enlarging it; and, when all was finished, he entertained the queen here for seventeen days. According to a survey, taken some time after, the area within the walls of the castle contained seven acres, and the circuit of the walls, manors, parks, and chase, was nineteen or twenty miles. During the civil wars the buildings were extensively demolished, and the materials sold. The earl of Clarendon is the present proprietor. Population 2279. Market on Wednesday. Five miles north of Warwick, and 101 north-west of London.

KENNEBECK, a river of Maine (next to Penobscot, the largest in the district), North America, has two principal branches, the eastern and western. The former rises from Moosehead Lake; and the latter, called Dead River, interlocks with the sources of the Chaudiere, with which it is connected by a portage of only five miles. The two branches unite about twenty miles below Moosehead Lake; and the river afterwards pursues a southerly course, and flows into the Atlantic, between Phipsburg and Georgetown, a league from Seguin Island. It is joined by the Androscoggin, eighteen miles from the sea. The tide flows up as far as Augusta, and the river is navigable for ships to Bath, twelve miles; for vessels of 150 tons to Hallowell, forty miles; for sloops to Augusta, two miles further; and for boats to Waterville, eighteen miles above Augusta.

The most considerable falls on the Kennebeck are at Teconic, between Waterville and Winslow; Skouhegan Falls, between Bloomfield and Canaan; Norridgewock Falls, between Anson and Madison; and Karatunk Falls, between Emden and Sola. The country watered by it is one of the best grazing districts in New England; and the towns of Bath, Gardiner, Hallowell, Augusta, Waterville, Bloomfield, and Norridgewock are on its banks.

KENNEDY (John), M. D., a learned Scots physician of the eighteenth century, who resided several years at Smyrna. He made a valuable collection of coins and pictures: and published a Dissertation on the Coins of Carausius, which produced a controversy between him and Dr. Stukely. He died in 1760.

KEN'NEL, *n. s.* & *v. n.* Fr. *chenil;* Dut. *kennel;* Lat. *canalis.* A cot for dogs; a number of dogs kept together; the hole of a fox or other beast; the water-course of a street; to lie; to dwell: a term used in contempt when applied to man.

From forth the *kennel* of thy womb hath crept
A hell-hound, that doth hunt us all to death.
Shakspeare.

A little herd of England's timorous deer,
Mazed with a yelping *kennel* of French curs. *Id.*

Bad humours gather to a bile; or, as divers *kennels* flow to one sink, so in short time their numbers increase. *Hayward.*

The seditious remain within their station, which, by reason of the nastiness of the beastly multitude, might be more fitly termed a *kennel* than a camp. *Id.*

Yet, when they list, would creep,
If ought disturbed their noise, into her womb,
And *kennel* there: yet there still barked and howled
Within, unseen. *Milton's Paradise Lost.*

A dog sure, if he could speak, had wit enough to describe his *kennel*. *Sidney.*

The dog *kennelled* in a hollow tree, and the cock roosted upon the boughs. *L'Estrange.*

He always came in so dirty, as if he had been dragged through the *kennel* at a boarding-school. *Arbuthnot.*

Brutes capable would tell you 'tis a lie
And judge you from the *kennel* and the stye.
Cowper. Progress of Error.

A KENNEL for hounds should be situated on an eminence; its front ought to be to the east, and the courts round it ought to be wide and airy, to admit the sun-beams at any time of the day. Two kennels are necessary to the well-being of hounds: when there is but one it is seldom sweet. When the feeder first comes to the kennel in a morning, he should let out the hounds into the outer court; and in bad weather should open the door of the hunting kennel (that in which the hounds designed to hunt next day are kept), lest want of rest should incline them to go into it. The lodging room should then be cleaned out, the doors and windows of it opened, the litter shaken up, and the kennel made sweet and clean before the hounds return to it again. The floor of each lodging room should be bricked, and sloped on both sides to run to the centre, with a gutter left to carry off the water, that when they are washed they may soon be dry. If water should remain, through any fault in the floor, it must be carefully mopped up; for damps are always very prejudicial. The kennel ought to have three doors; two in the front and one in the back; the last to have a lattice-window in it, with a wooden shutter, which is constantly to be kept closed when the hounds are in, except in summer, when it should be left open all the day. At the back of the kennel should be a house thatched and furzed up on the sides, large enough to contain at least a load of straw. Here should be a pit ready to receive the dung, and a gallows for the flesh. The gallows should have a thatched roof, and a circular board at the posts, to prevent vermin from climbing up. A piece of ground adjoining to the kennel should be enclosed for such dog horses as may be brought alive. In some kennels a stove is used; but, where the feeder is a good one, a mop properly used will render the stove unnecessary. If ticks at any time be troublesome in your kennel, let the walls of it be well washed; if that should not destroy them, the walls must then be white-washed. There should also be a stream of water in the neighbourhood, or even running through it if possible; with moveable stages on wheels for the hounds to lie on. The soil ought at al events to be dry. The most magnificent kennel in England is the duke of Richmond's at Goodwood, which cost £19,000, and is sufficiently extensive for two packs of hounds. The building comprises five kennels; two thirty-six by fifteen, three thirty by fifteen, and two feeding rooms twenty by fifteen feet, with stoves for warming the air when too cold. The huntsman and whipper-in have each a parlour, kitchen, and sleeping room.

KENNET (Dr. White), bishop of Peterborough, a learned English writer, was born at Dover, August 10th, 1660; and educated at St. Edmund's Hall, Oxford; where he soon distinguished himself by his translations of several books into English, and other publications. In 1695 he published his parochial Antiquities. In 1706 he published his Case of Impropriations, and two other tracts on the same subject. In 1709 he published the third volume of The Complete History of England; the two former being compiled by Mr. Hughes. In 1709 he published A Vindication of the Church and Clergy of England from some late Reproaches rudely and unjustly cast upon them; and A True Answer to Dr. Sacheverel's Sermon. Dr. Kennet was exposed to great odium as a low-churchman, on account of his conduct and writings. In 1713 he presented the Society for Propagating the Gospel with a great number of books, suitable to their design; published his Bibliothecæ Americanæ Primordia, and founded an antiquarian and historical library at Peterborough. In 1715 he published a sermon entitled, The Witchcraft of the present Rebellion, and afterwards several other pieces. In 1717 he was engaged in a dispute with Dr. William Nicholson, bishop of Carlisle, relative to some alterations in the bishop of Bangor's celebrated sermon; and disliked the proceedings of the convocation against that bishop. Upon the death of Dr. Cumberland, bishop of Peterborough, he was promoted to that see in 1718; which he held till his death in 1728. He was an excellent philologist, and well versed in the history and antiquities of England.

KENNET (Dr. Basil), a learned English writer, and brother to the bishop, was born at Postling in Kent, in 1674; and educated in Corpus Christi College, Oxford, where he became fellow. In 1706 he went over as chaplain to the English factory at Leghorn; where he met with great opposition from the papists, and was in danger from the Inquisition. He died in 1714. He published Lives of the Greek Poets; the Roman Antiquities; a volume of Sermons preached at Leghorn; A Translation into English of Puffendorf's Treatise of the Law of Nature and Nations, &c.

KENNET, in geography, a river which rises among the chalky hills in Wilts, and flows to Newbury in Berks, where it becomes navigable, and below which it is augmented by the Lamborn. It then keeps along the south edge of the county, till, turning up to Reading, it mingles with the Thames. Pope has celebrated this river, as

'The Kennet swift, for silver eels renowned.'

KENNICOTT (Dr. Benjamin), well known in the learned world for his elaborate edition of the Hebrew Bible, and other valuable publications, was born in 1718, at Totness in Devonshire, where his father was parish clerk. Some opportunities of early improvement must have occurred, superior to those which his father could afford to give him; for, in 1743, he wrote A Poem on the Recovery of the honorable Mrs. Elizabeth Courtenay from a dangerous illness; which was soon followed by such contributions as procured for him the advantages of an academical education. In 1744 he entered at Wadham College, and soon distinguished himself in that particular branch of study in which he afterwards became so eminent. His two dissertations, On the Tree of Life, and The Oblations of Cain and Abel, came to a second edition so early as 1747, and procured him the singular honor of a bachelor's degree conferred on him gratis by the university, a year before the statuteable time. The dissertations were gratefully dedicated to those benefactors whose liberality had opened his way to the university. He was soon after admitted a fellow of Exeter College, and distinguished himself by the publication of several sermons. In 1753 he laid the foundation of his great work on the Hebrew Bible, by publishing his first dissertation, On the State of the Printed Hebrew Text, in which he proposed to overthrow the then prevailing notion of its absolute integrity. The first blow, indeed, had been struck long before, by Capellus, in his Critica Sacra, published after his death by his son in 1650—a blow which Buxtorf, with all his abilities and dialectical skill, was unable to ward off. But Capellus having no opportunity of consulting MSS., though his arguments were supported by the authority of the Samaritan Pentateuch, of parallel passages, and of the ancient versions, could never absolutely prove his point. Indeed the general opinion was, that the Hebrew MSS. contained no, or at most very few and trifling, variations from the printed text: and with respect to the Samaritan Pentateuch, very different opinions were entertained. Those who held the Hebrew verity, condemned the Samaritan as corrupt in every place where it deviated from the Hebrew; and those who believed the Hebrew to be incorrect, did not think the Samaritan of sufficient authority to correct it. Besides the Samaritan itself appeared to a very great advantage; for no Samaritan MSS. were then known, and the Pentateuch was condemned for those errors which ought rather to have been ascribed to the incorrectness of the editions. In this dissertation, therefore, Dr. Kennicott proved, that there were many Hebrew MSS. extant, which, though they had hitherto been generally supposed to agree with each other, and with the Hebrew text, yet contained many and important various readings; and that from those various readings considerable authority was derived in support of the ancient versions. He announced the existence of six Samaritan MSS. in Oxford only, by which many errors in the printed Samaritan might be detected; and he attempted to prove, that even from the Samaritan, as it was already printed, many passages in the Hebrew might undoubtedly be corrected. This work was examined with great severity both in Britain and abroad. In some foreign universities, the belief of the Hebrew verity, on its being attacked by Capellus, had been insisted on as an article of faith. And at home this doctrine of the corrupt state of the Hebrew text was opposed by Comings and Bate, two Hutchinsonians, with as much violence as if the whole truth of revelation had been at stake. The next three or four years of Dr. Kennicott's life were chiefly spent in searching out and examining Hebrew MSS. About this time Dr. Kennicott became one of the king's preachers at Whitehall; and in 1759 vicar of Culham in Oxfordshire. In January, 1760, he published his second dissertation on the state of the Hebrew text; in which, after vindicating the authority and antiquity of the Samaritan Pentateuch, he disarmed the advocates for the Hebrew verity of their most specious arguments. He appealed also to the writings of the Jews themselves on the subject of the Hebrew text, and gave a compendious history of it, from the close of the Hebrew canon down to the invention of printing; together with a description of 103 Hebrew MSS. also which he had discovered in England, and an account of many others preserved in various parts of Europe. A collation of the Hebrew MSS. was now loudly called for, by the most learned and enlightened of the friends of biblical criticism; and in this same year Dr. Kennicott published his proposals, for collating all the Hebrew MSS. prior to the invention of printing, that could be found in Great Britain and Ireland, and for procuring at the same time as many collations of foreign MSS. of note, as the time and money he should receive would permit. His first subscribers were archbishop Secker, and the delegates of the Oxford press, who gave him an annual subscription of £40. In the first year the money received was about 500 guineas, in the next it arose to 900, at which sum it continued stationary till the tenth year, when it amounted to 1000. During the progress of the work, the industry of our author was rewarded by a canonry of Christ Church. He was also presented to the valuable living of Mynhenyote, in Cornwall, by the nomination of the chapter of Exeter. In 1776 the first volume was published, and in 1780 the whole was completed. If now we consider that above 600 MSS. were collated, that the whole work occupied twenty years of Dr. Kennicott's life, it must be owned that sacred criticism is indeed greatly indebted to him. Within two years of his death he resigned his living in Cornwall, on account of his not having a prospect of ever again being able to visit his parish. He died at Oxford, after a lingering illness, September 18th, 1783 and left a widow, who was sister to the late Edward Chamberlayne, esq., of the treasury. At the time of his death he was employed in printing Remarks on Select Passages in the Old Testament; which were afterwards published, the volume having been completed from his MSS

KENSINGTON, a populous village of Middlesex, on the west road from London, nearly two miles from Hyde Park Corner. The palace,

which was the seat of Lord Chancellor Finch, afterwards earl of Nottingham, was purchased by king William III., who greatly improved it, and caused a royal road to be made to it, through St. James's and Hyde Parks. Queen Ann improved what William had begun; and was so pleased with the place, that she frequently supped during the summer in the greenhouse, which is very beautiful; but queen Caroline completed the design by extending the gardens from the great road in Kensington to Acton; by bringing the Serpentine River into them; and by taking in some acres from Hyde Park, on which she caused a mount to be erected. This mount is planted round with ever-greens, and commands a fine view over the gardens, and the country south and west. They were originally designed by Kent, and were very much improved by Brown. The palace indeed has not much grandeur, but the royal apartments are noble, and some of the pictures good. At this palace king William, prince George of Denmark, queen Anne, and king George II. died. The old church was pulled down in 1696, and a much better one built in its room. Part of this village, from the palace gate to the Bell, is in the parish of St. Margaret's, Westminster.

KENT, a county of England, which Camden, Wallis, Harris, Hasted, and others, conjecture was originally united to the continent of Europe, by a narrow isthmus extending between Dover and Calais. The chalky cliffs of Dover, and of Calais and Boulogne, have indeed an almost exact resemblance; their faces are rugged and precipitous, appearing as if they had been rent asunder by violence; and their length on both coasts is similar, being about six miles. It is probable that Kent was possessed by the Belgæ, and afterwards lost their proper name in the word Cantii, from the name of the county. Camden observes that time has not yet stripped this county of its ancient name; but as Cæsar, Strabo, Diodorus, Siculus, Ptolemy, and others call it Cantium; so the Saxons, as Nennius tells us, named it Cant-guar-lantol; or, in other words, the country of the people inhabiting Cantium. Caint is a British word, and is still the name of this county in Welsh. It is descriptive of a country abounding with clear, fair, or open downs; and this is the general characteristic of Kent. In the Domesday Book it is written Chenth.

This was the first county invaded by the Romans, who, after they had with much difficulty subjugated the island, named this district a portion of Britannia Prima. It formed also the first kingdom of the Saxon Heptarchy; but its kings, in process of time, being reduced or conquered by Egbert, it became part of the West Saxon kingdom, and so continued till the Norman Conquest. The inhabitants are said to have been the first in England that were converts to Christianity: and by their courage and resolution they retained some privileges which the inhabitants of every other county lost by a capitulation with William the Conqueror; particularly a tenure called gavel-kind, by virtue of which every man possessed of lands in this county is in a manner a freeholder, not being bound by copyhold, customary tenure, or tenant right, as they are in most other parts of England. The male heirs, and in default of such the female, share all lands alike. The lands of a brother, if he have no legal issue, are shared by all the surviving brethren. An heir of fifteen years of age may sell or alienate. And, lastly, though the ancestor be convicted of felony or murder, the heirs may enjoy his inheritance. But this privilege extends not to treason, piracy, outlawry, or abjuring the realm. Such are privileges still allowed (though not quite peculiar) to the county of Kent.

This county forms the south-east angle or corner of the kingdom. Some have supposed its name to have been hence derived. It is bounded on the north by the river Thames, the county of Essex, and the German Ocean; on the south by Sussex; on the east by the British Channel; and on the west by Surrey. Its figure is quadrilateral. It is about sixty-three miles in length from Deptford to the point of the North Foreland. Its breadth from east to west is forty miles; and its circumference about 174 miles. It is divided into two grand districts, West and East Kent; sixty-three hundreds, five lathes, fifteen liberties, two cities, thirty-four market-towns, and 414 parishes. It is in the home circuit, the province of Canterbury, and the dioceses of Canterbury and Rochester.

Kent, in consequence of its proximity to the German Ocean and British Channel, is very subject to cold sea winds. The prevailing breezes are from north-east and south-west. The sub-soil of the whole Isle of Thanet is a dry, hard, rock chalk. The tops of the poor chalky ridges are about sixty feet above the level of the sea, and are covered with a dry loose chalky mould from six to eight inches deep; it has a mixture of small flints, and is, without manure, a very poor soil. The vales between the ridges, and the flat lands on the hills, have a depth of dry loamy soil, from one to three feet, with less chalk and of much better quality. The west end of the island, even on the hills, has a good mould, from one to two feet deep, a little inclining to stiffness; but the deepest and best soil is that which lies on the southernmost ridge, running westward from Ramsgate to Monkton; it is there a deep, rich, sandy loam. The soil of the marshes is a stiff clay, mixed with sea-sand, and small marine shells. In east Kent, the open part of the district between Canterbury, Dover, and Deal is of various soils, the principal of which are chalk, loam, strong cledge, hazel-mould, and stiff clay. Besides these, there are some small tracts of flints, gravel, and sand. Almost the whole of the Isle of Sheppey is a deep, strong, stiff clay. The varieties of soil in west Kent are chalk, loam, clay, gravel, sand, hassock, pinnock, coomb, and hazel-mould. The Weald of Kent has the reputation of being an entire mass of clay; but on examination it is found to contain the following varieties of soil:—clay, hazel-mould, rag-stone, sand, and gravel. Almost the whole surface of the spacious level of fine marsh-land called Romney Marsh, is the sediment of the sea. It consists chiefly of a

soft loam and clay, with a greater or less mixture of sea-sand; there are, however, near the shore, some small tracts of blowing sand, and some sea-beach, which are of very little value. The principal rivers are the Thames, the Medway, the Greater and Less Stone, the Darent or Dart, the Cray, and the Ravensbone. The only navigable canals within the county are the Rochester Canal from Chatham to Gravesend, and the Croydon Canal from Croydon in Surrey to London. Kent abounds with agricultural produce of various kinds; with plantations of hops, and orchards of cherries and other fruit-trees. It also produces great quantities of corn, wood, and madder. The Weald of Kent is remarkable for large bullocks; and in this district there are woods of oak, beech, and chestnut. There are several mineral springs in various parts, particularly in the neighbourhood of Tunbridge Wells. The parish of Penshurst, as well as the neighbouring ones, abounds in veins of iron ore, and most of the springs in them are more or less chalybeate.

Kent returns fifteen members to Parliament: viz. four for the county, two for the city of Canterbury, two for the city of Rochester, two for Maidstone, two for Dover, two for Sandwich, one for Hythe, and Queenborough and New Romney formerly sent members. The family of Knatchbull has represented this county at various periods since the reign of Charles I. The duke of Dorset is said to be proprietor or patron of the county, the admiralty of the city of Rochester, and the ordnance and admiralty of Queenborough.

The eminent natives of Kent are very numerous: the following are the principal:—Lords Jeffery and Nicholas Amherst.—Sir Nicholas Bacon.—Sir Robert Buller.—R. Boyle.—Admiral Byng.—Mrs. Carter.—Wm. Caxton.—Dr. Thomas Comber.—Sir Ed. Dering.—Leonard and Thomas Digges.—Brien Duppa.—Queen Elizabeth.—Sir George Ent.—J. Evelyn.—J. Evelyn, his son.—Sir R. Filmer.—William of Gillingham.—Robert Glover.—J. Goddard.—Peter Gunning.—Robert Jenkins—Stephen Hales. Dr. Harris.—J. Harvey.—Dr. Wm. Harvey.—Dr. J. Hawkesworth.—King Henry VIII.—Bishop B. Hoadly.—Bishop G. Horne.—Drs. W. and Basil Kennet.—Kilburn, the antiquary.—Dr. N. Lardner.—J. Lilly.—Mrs. Macaulay.—Queen Mary.—Mrs. E. Montague.—Dr. John Monro.—The late Right Hon. William Pitt.—Richard, Earl of Cork.—Sir G. Rooke.—Reginald Scott.—Sir Charles Sedley.—Christopher Smart.—Wm. Somner.—Algernon Sydney.—Sir Philip Sydney.—Lewis Theobald.—F. Thynne.—Sir Thomas Twysden.—Sir R. Twysden.—Sir Robert Twysden.—Sir F. Walsingham.—Dr. Wilson.—Major-general James Wolfe.—Sir Henry Wotton.—Rev. Dean Wotton.—Sir T. Wyat.—Philip Yorke, Earl of Hardwicke. Canterbury and Rochester are both bishops' sees. Maidstone is the county town, and gives the title of Viscount to the Finch family.

Grazing and agriculture almost entirely engross the concerns of this county; hence there are not many private manufactures of consequence. The cloth trade, first introduced at Cranbrook, has long forsaken this county, but a few descendants of the French Protestant refugees carry on the manufacture of brocades, and there are some silk mills at Sevenoaks. Some of the finest writing paper in the world is made in the vicinity of Maidstone. At Crayford are calico printing and bleaching works: at Dartford mills for manufacturing gunpowder In time of war government gives employment to vast numbers of workmen in this county. The greater part of the entire implements of our warfare are prepared here. At Woolwich the artillery establishment is thought the most extensive and best regulated collection of workshops and storehouses in the world; and the whole establishment under the Board of Ordnance, including the Academy for the instruction of the cadets, the Artillery Barracks, and the Arsenal, is highly creditable to the country. Kent also contains the four naval arsenals of Deptford, Woolwich, Chatham, and Sheerness; and the magnificent Greenwich Hospital. See GREENWICH.

KENT, a populous and fertile county of Delaware, bounded on the east by the Delaware; south by Sussex county, west by the state of Maryland, and north by Newcastle county. It is forty miles long from north to south, and twenty-six broad from east to west. Dover is the capital.

KENT, a county of Maryland, on the eastern shore, bounded on the east by Newcastle, and part of Kent county in Delaware; south by the Chester, which divides it from queen Anne's county; west by Chesapeake Bay; and north by the Sassafras, which separates it from Cecil county. It is thirty-two miles and a half long, and thirteen broad. Chester is the capital.

KENT, a county of Rhode Island, bounded on the east by Narraganset Bay, south by Washington county, west by the State of Connecticut, and north by Providence county. It is twenty miles long, and ten broad. Warwick is the capital.

KENTUCKY, one of the United States of North America, is bounded north by the river Ohio, which separates it from Ohio, Indiana, and Illinois; east by Virginia; south by Virginia and Tennessee; and west by the river Mississippi. It extends from long. 81° 49′ to 89° 20′ W., lat. 36° 30′ to 39° 10′ N.; 300 miles long, and from forty to 180 broad; containing 42,000 square miles. The number of inhabitants in 1830 amounted to 688,844.

The counties and chief towns, at present, are thus exhibited:—

Counties.	Chief Towns.
Adair	Columbia
Barren	Glasgow
Bath	Owensvilla
Boone	Burlington
Bracken	Augusta
Breckenridge	Hardingsburg
Bourbon	Paris
Butler	Morgantown
Bullet	Shepherdsville
Clarke	Winchester

Counties.	Chief Towns.
Casey	Liberty
Campbell	Newport
Christian	Hopkinsville
Cumberland	Burkesville
Clay	Manchester
Caldwell	Princeton
Estill	Irvine
Fayette	Lexington
Franklin	Frankfort
Fleming	Flemingsburg
Floyd	Prestonville
Gallatin	Port William
Greenup	Greenupsburgh
Green	Greensburgh
Grayson	Litchfield
Garrard	Lancaster
Henry	Newcastle
Harrison	Cynthiana
Henderson	Henderson
Harden	Elizabeth Town
Hopkins	Madisonville
Jessamin	Nicholasville
Jefferson	Louisville
Knox	Barbousville
Livingston	Smithland
Lewis	Clarksburg
Lawrence	Louisa
Lincoln	Stanford
Logan	Russellville
Mason	Washington
Mercer	Danville
Madison	Richmond
Muhlunbergh	Greenville
Montgomery	Mount Sterling
Nicholas	Carlisle
Nelson	Bairdstown
Ohio	Hartford
Pulaski	Summerset
Pendleton	Falmouth
Rockcastle	Mount Vernon
Scott	Georgetown
Shelby	Shelbyville
Union	Morganfield
Wayne	Monticello
Washington	Springfield
Warren	Bowling-green
Woodford	Versailles.

Frankfort is the seat of government. Lexington and Louisville are the largest towns. The other most considerable towns are Maysville, Washington, Bairdstown, Paris, Danville, Russellville, Georgetown, and Newport.

There have been no less than fifty-five banks and branches of banks incorporated in this state. They are not all, however, in operation.

The principal rivers are the Ohio, which flows along the state 637 miles, following its windings; the Mississippi, Tennessee, Cumberland, Kentucky, Green, Licking, Big Sandy, Salt, and Rolling.

Cumberland mountains form the south-east boundary of this state. The eastern counties, bordering on Virginia, are mountaincus and broken. A tract from five to twenty miles wide, along the banks of the Ohio, is hilly and broken land, interspersed with many fertile valleys. Between this strip, Green River, and the eastern counties, lies what has been called the garden of the state. This is the most populous part, and is about 150 miles long, and from fifty to 100 wide, comprising the counties of Mason, Fleming, Montgomery, Clarke, Bourbon, Fayette, Scott, Harrison, Franklin, Woodford, Mercer, Jessamine, Madison, Garrard, Logan, Casey, Lincoln, Washington, and Green. It is watered by Kentucky, Licking, Little Sandy, and Salt rivers, and their numerous branches. The soil is excellent, and the surface is agreeably diversified, gently rising and descending. These lands produce black walnut, black cherry, honey locust, buckeye, pawpaw, sugar-maple, mulberry, elm, ash, cotton-wood, white-thorn, with an abundance of grape vines.

There is a tract of country in the south-western part of the state, east and north of Cumberland River, and watered by Green and Barren rivers, about 100 miles in extent, called the Barrens, which a few years since was a beautiful prairie, destitute of timber. It is now covered with a young growth of various kinds of trees. These, however, do not prevent the growth of grass, and an almost endless variety of plants, which are in bloom during the whole of the spring and summer; when the whole region is a wilderness of the most beautiful flowers. The soil is of an excellent quality, being a mixture of clay, loam, and sand. Through this country there runs a chain of conical hills, called knobs. It is also distinguished for some most stupendous caves. This country, sometimes called the Green River country, is now rapidly settling. The principal towns in it are Russellville, Bowling Green, and Hopkinsville.

Ancient fortifications and mounds of earth are found in almost all parts of Kentucky. The caves in the south-western part of the state are great curiosities. One, styled Mammuth cave, 130 miles from Lexington, on the road leading to Nashville, is said to be eight or ten miles in length, with a great number of avenues and windings. Earth strongly impregnated with nitre is found in most of these caves, and there are many establishments for manufacturing it. From 100 lbs. of earth 50 lbs of nitre have frequently been obtained.

A number of the rivers in this state have excavated the earth, so as to form abrupt precipices, deep glens, and frightful gulfs. The precipices formed by Kentucky River are in many places awfully sublime, presenting perpendicular banks of 300 feet of solid limestone, surmounted with a steep and difficult ascent, four times as high. The banks of Cumberland River are less precipitous, but equally depressed below the surface of the surrounding country.

Wheat, tobacco, and hemp, are the staple productions; but Indian corn is the principal grain raised for home consumption. Rye, oats, barley, buckwheat, flax, potatoes, &c., are cultivated. Apples, pears, peaches, cherries, and plums, are the most common fruits. Domestic animals are large and beautiful, and particularly the horse.

Marble of excellent quality abounds, and the whole state may be said to repose on a bed of limestone. Salt and iron are among the minerals of this state. The most extensive works for the

KOULI KHAN.

Sr G. KNELLER.

KEPPEL.

KOTZEBUE.

J. KNOX.

LORD LAKE.

KIRCHER.

KEMBLE.

KLO[illegible]CK.

manufacture of salt, established west of the Alleghany Mountains, are on the waters of Kentucky. These supply not only this state, but a great part of Ohio and Tennessee.

There is a college at Lexington, and academies are established at Augusta, Cynthiana, Frankfort, Georgetown, Greensburg, Harrodsburg, Louisville, Newport, Paris, Russellsville, Versailles, Washington, &c. The legislature has made an appropriation of lands for the support of public schools, in every county, but these appropriations, in many instances, have been injudiciously managed, and have, in some cases, turned to little account. Baptists, Methodists, and Presbyterians, are the most numerous denominations of Christians in Kentucky.

The legislature is composed of a senate, consisting of thirty-eight members, chosen by districts, for four years; and a house of representatives, not exceeding 100, chosen annually. The governor and lieutenant-governor are chosen by the people for four years, but are not eligible for the succeeding seven years. The legislature meets on the first Monday in November.

Kentucky, from its position, has become a manufacturing state. The amount of manufactured articles, in 1814, exceeded 13,000,000 of dollars. Of this sum, the looms produced 4,657,081; salt works, 725,870; rope walks, 393,400; maple sugar, 903,932.

KENTUCKY, a river, which rises in the south-east part of the state of that name, and runs north-west into the Ohio, seventy-seven miles above the rapids at Louisville. It is navigable in the winter for small boats, about 180 miles. The current is rapid, and the banks high and rocky.

KEPLER (John), one of the greatest astronomers of his age, was born at Wiel, in the county of Wirtemberg, in 1571. His father had been an officer in the imperial service, but was so much reduced as to be obliged to keep a public house. Young Kepler, however, studied astronomy and mathematics under Mæstlinus, and made such rapid progress, that in 1593 he was appointed professor of mathematics at Gratz. In 1595 he wrote an excellent work, which was printed at Tubingen in 1596, entitled Prodromus dissertationum de proportione orbium cœlestium, deque causis cœlorum numeri, magnitudinis, motuumque periodicorum, genuinis et propriis. Tycho Brahe having settled in Bohemia, under the patronage of the emperor Rodolphus, he prevailed upon Kepler to leave the university of Gratz, and remove into Bohemia with his family and library, in 1600. Upon Brahe's death, the emperor appointed him his mathematician for life, and he daily acquired additional reputation by his works. The emperor ordered him to finish the tables of Tycho Brahe, which were called the Rodolphine Tables. He died at Ratisbon, where he was soliciting payment of the arrears of his pension, in 1630. The principal works of this great astronomer are, 1. Prodromus dissertationum, above mentioned, which he also entitled Mysterium Cosmographicum, and esteemed more than any other of his works. He sometimes said, he would not give up the honor of having written what was contained in that book for the electorate of Saxony. 2. Harmonia mundi, with a defence of that treatise. 3. De cometis libri tres. 4. Epitome astronomiæ Copernicanæ. 5. Astronomia nova. 6. Chilias logarithmorum, &c. 7. Nova stereometria doliorum vinariorum, &c. 8. Dioptrice. 9. De vero natali anno Christi. 10. Ad Vitellionem Paralipomena, quibus Astronomiæ pars optica traditur, &c. 11. Somnium, Lunarisve Astronomia; in which he began to draw up that system of comparative astronomy which was afterwards pursued by Kircher, Huygens, and Gregory. His death happened while the work was printing; upon which James Bartschius his son-in-law undertook the care of it, but was also interrupted by death: and Lewis Kepler his son, who was then a physician at Konigsberg in Prussia, was with difficulty prevailed upon to attempt to finish it, lest it should prove fatal to him: he, however, completed the task.

KEPLER'S PROBLEM is the determining the true from the mean anomaly of a planet, or the determining its place, in its elliptic orbit, answering to any given time. The general state of the problem is this: To find the position of a right line, which, passing through one of the foci of an ellipsis, shall cut off an area which shall be in any given proportion to the area of the ellipsis; which results from this property, that such a line sweeps areas that are proportional to the times. Many solutions have been given of this problem, some direct and geometrical, others not: viz. by Kepler, who first proposed it; Bulliald, Ward, Newton, Keill, Machin, &c. See Newton's Principia, lib. 1, prop. 31; Keill's Astronomy Lect. 23; Philosophical Transactions, abr. vol. viii. p. 73, &c.

KEPPEL (Augustus), lord viscount Keppel, a celebrated British admiral, the second son of William earl of Albemarle. He accompanied Anson in his famous voyage round the world, and afterwards rose to the highest naval honors. In 1778 he commanded the channel fleet, and had Sir Hugh Palliser for his second. In the engagement between the British and French fleets, little was done, and the two admirals in consequence attacked each other. See ENGLAND. Admiral Keppel was acquitted, and in 1782 was created a peer, and was twice first lord of the Admiralty. He died in 1786.

KEPPEL BAY, a bay on the east coast of New Holland, found by captain Flinders to communicate with Port Curtis. It was discovered and named by captain Cook, in 1770. A ship going in will be deceived by the color of the water; for, the shores of the bay being soft and muddy, the water running out by the deep channels with the latter part of the ebb is thick; whilst the shallows over which the tide does not flow are covered with clear water. The deep water is therefore in the muddy channels.

KERAH, or HAWEEZA, or, as called by the Turks, Karasu, a river of Persia, formed by the junction of several streams, of the province of Ardelan, in Koordistan. It runs through the plain of Kermanshaw, where it receives the Kazawur and the Gamasu, by which, being greatly increased, it flows with a violent course

through Chusistan; passes on the west of the ruins of Shus to the city of Haweeza, and enters the Shut-el-Arab about twenty miles below Korna.

KER'CHIEF, *n. s.* Coverchief.—Chaucer. KER'CHIEFED, *adj.* French *couvre* to cover, KER'CHIEFT, *adj.* and *chef* the head: and hence a handkerchief to wipe the face or hands; a head-dress of a woman; any loose cloth used in dress: dressed; hooded.

Hire gilded heres with a golden threde
I bounden were, untressed as she laie:
And naked from the brest unto the hede,
Men might her se; and sothly for to saie,
The remenaunt covered well to my paie,
Right with a lityl *kerchefe* of Valence;
There n'as no thicker clothe of no defence.
Chaucer. The Assemble of Foules.

I see how thine eye would emulate the diamond; thou hast the right arched bent of the bow, that becomes the ship-tire, the tire-valiant.—A plain *kerchief*, Sir John; my brows become nothing else.
Shakspeare. Merry Wives of Windsor.

O! what a time have you chose out, brave Caius,
To wear a *kerchief*. *Id. Julius Cæsar.*

Every man had a large *kerchief* folded about the neck. *Hayward.*

The evening comes,
Kerchiefed in a comely cloud,
While racking winds are piping loud. *Milton.*

The proudest *kerchief* of the court shall rest
Well satisfied of what they love the best. *Dryden.*

While the fair populace of crowding beauties,
Plebeian as Patrician cheered us on
With dazzling smiles, and wishes audible
And waving *kerchiefs*, and applauding hands
Even to the goal!— *Byron. Two Foscari.*

KERF, *n. s.* Sax. ceoppan; Goth. *kerfa*; Swed. *karfwa*. To cut.

The sawn-away slit between two pieces of stuff is called a *kerf*. *Moxon's Mechanical Exercises.*

KERBELA, anciently Vologesia, a populous town of Irak Arabi, near the western bank of the Euphrates, with which it is connected by a magnificent canal. Its chief celebrity is derived from Hossein, the son of Ali by Fatima, the daughter of the prophet who was slain near this place; and from whom it is sometimes called Mesched Hossein. Since his time it has become the resort of numerous pilgrims of the sect of Ali, particularly from Persia. The environs contain extensive plantations of palm trees; and the walls are upwards of two miles in circumference. The town has five gates, a well supplied bazaar, and seven caravanseras, Nadir Shah embellished the tomb of Hossein with a gilded cupola, which forms a conspicuous object, fifty miles S. S. W. of Bagdad.

KERCKRING (Theodore), a famous physician of the seventeenth century, born at Amsterdam. He found out the secret of softening amber without depriving it of its transparency; and made use of it in covering the bodies of curious insects to preserve them. He was a member of the Royal Society of London, and died in 1693 in Hamburg, where he had spent the greatest part of his life, with the title of resident of the grand duke of Tuscany. His principal works are, 1. Spicilegium Anatomicum. 2. Anthropogeniæ Ichonographia. There is also attributed to him an anatomical work, printed in 1671 in folio.

KERCOLANG, or KARKALANG, an island of Asia, in the Indian Ocean, between eighty and 100 miles in circumference, and, in general, of a good height. The face of the country seems to be steep hills and extensive valleys, and every part to be covered with trees and verdure, with some pleasant cultivated grounds. The houses stand on posts, and are well built, and thatched. The fishing hooks and lines are mostly European; and the inhabitants Mahommedans. Their clothing, in general, is made of a coarse kind of calico, though some wear silk, and most of them have a kind of turban round the head. A few are seen with a Chinese pointed hat. They are a mild and quiet people; and put great confidence in strangers. The Dutch had formerly a fort here; but about the year 1773 the inhabitants of Magindano exercised a jurisdiction over the island, and exacted a tribute, which was usually paid in slaves. It lies between 4° and 5° of N. lat., and about 126° 30′ E. long.

KERGUELEN'S LAND, in the South Pacific Ocean, was visited by captain Cook, in 1779. From its sterility, it might properly have been called the Island of Desolation. Mr. Anderson, who accompanied captain Cook in this voyage, says, that no place hitherto discovered in either hemisphere affords so scanty a field for the naturalist as this spot. Some verdure indeed appeared when at a small distance from the shore, which might raise the expectation of meeting with a little herbage; but all this lively appearance was occasioned by one small plant resembling saxifrage, which grew upon the hills in large spreading tufts, on a kind of rotten turf, which, if dried, might serve for fuel, and was the only thing seen here that could possibly be applied to that purpose. Long. 69° 37′ E., lat. 49° 3′ S.

KERI (Francis Borgia), a Hungarian Jesuit, who published a History of the Emperors of the East, and a History of the Ottoman Emperors. He was also an astronomer, and made improvements on the telescope. He died in 1769.

KERI-CHETIB, in philology, the name given to various readings in the Hebrew Bible: keri signifies that which is read; and chetib that which is written. For, where any such various readings occur, the wrong reading is written in the text, and that is called the chetib; and the true reading is written in the margin, with ק under it, and called the keri. It is generally said by the Jewish writers, that these corrections were introduced by Ezra; but it is most probable, that they had their original from the mistakes of the transcribers after the time of Ezra, and the observations and corrections of the Masorites. Those Keri-chetibs which are in the sacred books written by Ezra himself, or which were taken into the canon after his time, could not have been noticed by Ezra himself; and this affords a presumption that the others are of late date. These words amount to about 1000; and Dr. Kennicott, in his Dissertatio Generalis, remarks, that all of them with the exception of fourteen are to be found in the text of MSS.

KERKOOK, the largest town in Lower Koordistan, Asiatic Turkey, is situated on an eminence. nearly perpendicular, and retains the appearance of a Roman fortress. The population is estimated at 18,000; but Mr. Kinneir does not think it can exceed 13,000; consisting of Armenians, Nestorians, Turks, and Curds. There are twelve mosques here; but the streets are narrow and filthy, and the houses mean. The country around is hilly. Long. 43° 42′ E., lat. 35° 29′ N.

KERMES, in natural history, a roundish body of the size of a pea, of a brownish color, and containing a multitude of little distinct granules which when crushed yield a scarlet dye. Till lately it was believed to be a vegetable excrescence, but it is now known to be the body of a species of Coccus, which see.

This insect hangs to the tree from which it is gathered by means of a cottony down, which, according to M. Chaptal, resembles the caoutchouc in many of its chemical characteristics. In Languedoc, about the middle of May, when this insect has attained to its proper size, the harvest commences, and the peasants begin to gather it. This harvest continues till about the middle of June, or later, but one heavy storm of rain puts an end to the gathering for that year. The persons employed in this business are women, who set out early in the morning, with a lantern and a glazed earthen pot, so as to pick off as many of the kermes as possible before day, which is the most favorable time for this business. A single person may gather from one to two pounds a day.

According as the winter has been more or less mild, the harvest of kermes is the more or less plentiful; and the people always presage themselves a fine season, when the spring has been free from frosts and fogs. It is observed, that the lowest and oldest shrubs are always the fullest of this insect; and the kermes produced on those trees, which are in the neighbourhood of the sea, is always larger and finer than from the inland places.

It is no uncommon thing to have two harvests of kermes in the year. Those of the latter season are smaller and less valuable than those of the first, and are found not on the branches, but on the leaves of the shrub; which is just analogous to the custom of the gall-insects of all other kinds; all which, about this age, leave the branches to feed on the leaves, where their yet tender trunks can find an easier entrance. See Coccus. When the kermes is dried there comes out of it an infinite number of small insects, and flies, so small that they are scarcely visible; insomuch, that the whole inward substance seems converted into them. This shell is nothing but the body of the mother, distended by the growth of the eggs. To prevent this inconvenience, they usually steep the kermes in vinegar before it be dry; and thus prevent the exclusion of the ova, and kill such animals as are already hatched. It is afterwards dried on linen cloths. This operation gives it a color like that of red wine. They draw the juice, or pulp, from the kermes, by pounding it in a mortar, and then straining it through a sieve: of this they make a syrup, by adding a sufficient quantity of sugar. Sometimes they dry the pulp separate from the husk; which pulp, thus dried, they call pastel of kermes. If the living insect be bruised, it gives out a red color.

Kermes is used in medicine also; and by it excellent effects may be produced. In kermes are united the exciting and evacuant virtues of the emetic preparations of antimony, with the tonic, aperitive, and resolving properties of the liver of sulphur. It is capable of answering two principal indications in the treatment of many acute and chronic diseases. Properly managed, it may become an emetic, a purgative, diuretic, sudorific, or an expectorant; and it is always attenuating and resolving. When seven or eight grains are taken at once, it chiefly acts upon the primæ viæ, generally as an emetic and a purgative. A dose of three or four grains is seldom emetic, and more is frequently purgative. When administered in smaller doses it passes almost into the lacteal, blood, and lymphatic vessels. In these it increases all secretions and excretions, but particularly those of urine, sweat, and expectoration, according to the dose, the nature of the disease, and to the disposition of the patient. Kermes may be administered in linctuses, in oily or in cordial potions, in any vehicle; or incorporated in a bolus, with other suitable remedies. Antiacid and absorbent substances ought to be joined with it, if the patient has an acescent disposition of the primæ viæ; for as these acids saturate the alkali, by which the kermes is rendered in antimoniated liver of sulphur, and by which alone it differs from what is commonly called golden sulphur of antimony, they accordingly render the kermes entirely similar to the golden sulphur of antimony, the properties of which are very different from those of kermes.

Kermes Mineral, so called from its color, which resembles that of vegetable kermes, is one of the most important antimonial preparations, both with regard to its chemical phenomena and to its medicinal uses. The use of kermes mineral was not established in medicine before the beginning of this century. Some chemists, indeed, amongst others Glauber and Lemeri, had before that time mentioned in their works several preparations of antimony which approach more or less to kermes; but these preparations, being little known, were confounded with many others which are entirely neglected, although much praised by their authors. The fame of kermes was occasioned by friar Simon, apothecary to the Chartreux friars. He received this preparation from a surgeon called La Ligerie, who had procured it from a German apothecary, who had been a scholar of the famous Glauber. Friar Simon, from the commendations given to this new remedy by La Ligerie, administered it to a Chartreux friar, who was dangerously ill of a violent peripneumony, by which the friar was suddenly, and to all appearance miraculously cured. From that time the friar apothecary published the virtue of his remedy. Several other remarkable cures were performed by means of kermes. The public believed in its medicinal qualities, and called it powder of Chartreux; because it

was prepared only in the apothecary's shop belonging to these monks. The reputation of kermes increased more and more, till at length the duke of Orleans, then regent of France, procured the publication of the process by La Ligerie. Chizel gives the following process for obtaining a fine kermes, light, velvety, and of a deep purple-brown: One part of pulverised sulphuret of antimony, twenty-two and a half parts of crystallised subcarbonate of soda, and 200 parts of water, are to be boiled together in an iron pot. Filter the hot liquor into warm earthen pans, and allow them to cool very slowly. At the end of twenty-four hours the kermes is deposited. Throw it on a filter, wash it with water which had been boiled and then cooled out of contact with air. Dry the kermes at a temperature of 85°, and preserve in corked phials. Whatever may be the process employed, by boiling the liquor, after cooling and filtration, on new sulphuret of antimony, or upon that which was left in the former operation, this new liquid will deposit, on cooling, a new quantity of kermes. Besides the hydrosulphuretted oxide of antimony, there is formed a sulphuretted hydrosulphuret of potash or soda. Consequently, the alkali seizes a portion of the sulphur from the antimonial sulphuret, water is decomposed, and whilst, a portion of its hydrogen unites to the alkaline sulphuret, its oxygen, and the other portion of its hydrogen, combine with the sulphuretted antimony. It seems, that the resulting kermes remains dissolved in the sulphuretted hydrosulphuret of potash or soda; but, as it is less soluble in the cold than the hot, it is partially precipitated by refrigeration. If we pour into the supernatant liquid, after the kermes is deposited and removed, any acid, as the dilute nitric, sulphuric, or muriatic, we decompose the sulphuretted hydrosulphuret of potash or soda. The alkaline base being laid hold of, the sulphuretted hydrogen and sulphur to which they were united are set at liberty; the sulphur and kermes fall together, combine with it, and form an orange-colored compound, called the golden sulphuret of antimony. It is a hydroguretted sulphuret of antimony. Hence, when it is digested with warm muriatic acid, a large residuum of sulphur is obtained, amounting sometimes to 12 per cent. Kermes is composed, by Thenard, of 20·3 sulphuretted hydrogen, 4·15 sulphur, 72·76 oxide of antimony, 2 79 water and loss; and the golden sulphuret consists of 17·87 sulphuretted hydrogen, 68·3 oxide of antimony, and twelve sulphur.

By evaporating the supernatant kermes liquid, and cooling, crystals form, which have been lately employed by the calico printer to give a topical orange. These crystals are dissolved in water, and the solution, being thickened with paste or gum, is applied to cloth in the usual way. When the cloth is dried, it is passed through a dilute acid, when the orange precipitate is deposited and fixed on the vegetable fibres.

KERN, *n. s.* Irish *cearn*, contracted, says Mr. Thomson, from *ceatharn*; Scot. *caterane*. Irish foot-soldier; an Irish boor.

These wizards welter in wealths waves,
Pampred in pleasures deepe;
They han fat *kernes* and leany knaves,
Their fasting flockes to keepe.
Spenser. Shepheard's Calender.

Out of the fry of these rake-hell horseboys, growing up in knavery and villainy, are their *kearn* supplied. *Spenser.*

Justice had with valour armed,
Compelled these skipping *kernes* to trust their heels.
Shakspeare.

If in good plight these northern *kerns* arrive,
Then does fortune promise fair. *Philips's Briton.*

KERN, *n. s.* A hand-mill consisting of two pieces of stone, by which corn is ground. It is written likewise quern, and still used in some parts of Scotland.

KERN, *v. n.* Teut. *kernen*. To harden, as ripened corn; to take the form of grains.

When the price of corn falleth, men break no more ground than will supply their own turn, wherethrough it falleth out that an ill *kerned* or saved harvest soon emptieth their old store. *Carew.*

The principal knack is in making the juice, when sufficiently boiled, to *kern* or granulate. *Grew.*

KER'NEL, *n. s.* & *v. n.*, KER'NELLY, *adj.*, KER'NELWORT. Saxon cẏrnel, a gland; Fr. *cerneau*; Belgic *karne*. The edible substance contained in a shell; any thing included in a husk; the seed of fruits; the central part of any thing which is covered with concretions; glandular tumors. Kernel, to ripen to kernels. Kernelly, full of kernels. Kernelwort, an herb.

The sunne ysurmounteth the mone,
That troublen is, and chaungeth sone,—
And the nutte *kerneill* dothe the shell,—
(I skorne nat that I you it tell.—)
Chaucer. Romaunt of the Rose.

I think he will carry this island home in his pocket, and give it his son for an apple.—And, sowing the *kernels* of it in the sea, bring forth more islands.
Shakspeare. Tempest.

As brown in hue
As hazel nuts, and sweeter than the *kernels.*
Shakspeare.

There can be no *kernel* in this light nut; the soul of this man is his clothes. *Id.*

The apple inclosed in wax was as fresh as at the first putting in, and the *kernels* continued white.
Bacon's Natural History.

The *kernel* of a grape, the fig's small grain,
Can clothe a mountain, and o'ershade a plain.
Denham.

The *kernel* of the nut serves them for bread and meat, and the shells for cups. *More.*

In Staffordshire, garden-rouncivals sown in the fields *kernel* well, and yield a good increase.
Mortimer's Husbandry.

Oats are ripe when the straw turns yellow and the *kernel* hard. *Id.*

A solid body in the bladder, makes the *kernel* of a stone. *Arbuthnot*

KERRERA, an island of Scotland, in Argyleshire, in the Sound of Mull, near the main land of Mid Lorn, and included in the parish of Kilbride. In this island king Alexander II., being upon an expedition against the Danes, died of a fever on the 8th of July 1249. His ships were anchored in the Greater Horse-Shoe Bay, whilst he, for the benefit of his health, was on shore, and his pavilion was erected on Dalree (i. e. the king's plain), by that natural harbour, whence his body was carried to the abbey of Melrose

KERRY, a county or shire in the province of Munster, and kingdom of Ireland. It is bounded on the west by the Atlantic Ocean; on the east by parts of Cork and Limerick; on the north by the Shannon; and on the south by part of Cork and by the ocean. Its greatest length is about sixty-seven miles, and its maximum breadth about sixty-two: containing, according to Dr. Beaufort, 1,040,487 statute acres, or 1639 square miles. If Dr. Beaufort's returns of population and of houses be correct, both appear to have been *doubled* in thirty-five years.

Kerry is divided into eight baronies, Clanmaurice, Corkaguinny, Dunkerron, Glanerought, Iraghticonnor, Iveragh, Magunihy, and Truaghnacmy, which are subdivided into eighty-three parishes, all of them being in the ancient dioceses of Ardfert, and Aghadoe, which have been annexed to the see of Limerick since the year 1663. Kerry comprehends a great part of the ancient Desmonia, and gives title of earl to the noble family of Petty. Many schools for the education of the peasantry are established here, and upwards of 15,000 children are daily receiving the benefits of a very sound and substantial system of instruction. This is effected almost entirely by pay-schools, or, at all events, by domestie support, the bounty of strangers being rejected except in a very few cases.

The northern part of this county, lying towards the Shannon, is comparatively low, having a fall or inclination towards the river Gale or Cashen: it is now in a very unprofitable condition, although well adapted for conversion into a good tillage country. The central district is an upland country, rising gradually into the boundary between Limerick and Cork, the upper stratum of which is an indurated clay-shiver, covering thin beds of culm, which, in the eastern extremity of the range, are found alternating with a good coal blende, similar to that of Kilkenny. This field is flanked by extensive beds of secondary limestone. The vales of the central district consist of an extensive and improvable bog, having a drainage southward towards Dingle Bay, and eastward by the Blackwater, towards Cork. The southern district is formed of an extensive and lofty mountain chain, commencing on the eastern side of Dingle Bay, and continuing, with little interruption, along the south side of the lakes of Killarney, and of the river Blackwater, as far as the county of Waterford. The vales between these hills are generally extensive bog fields, capable of reclamation, and peculiarly well situated for exportation of this produce, though they now lie totally waste. The prevailing and component rock of this mountain range is clay slate, the strata of which are so highly inclined, that they are easily decomposable by the weather; and this decomposition forms an adhesive loam well suited to the reception of grain crops. This clay slate has also been quarried for roofing in some places: but the convenience of export has hitherto confined the workings to Cahir, Begnish, and Valentia.

The culm and stone coal of Kerry are yet but imperfectly explored, and the waste lands and bog, exceeding 200,000 acres, remain in the same unoccupied, unimproved, and deplorable condition in which they were found by the bog commissioners in the year 1814. The barony of Glanerough is particularly oppressed by poverty, scarcely one plough existing within that whole district, for which spade labor is necessarily substituted. Besides the coal and culm already mentioned, copper is found in considerable quantities in the Kerry mountains, occurring chiefly in the limestone district. It occurs on both sides of the river Kenmare, but on the south side is found in slate. On Ross Island, on the beautiful lake of Killarney, one of the richest mines of ruby copper ore in Ireland is now at full work: but this is also in the limestone region; and another vein, not now worked, occurs in the same matrix, near to the picturesque ruin of Mucress Abbey, on the same lake.

The roads, or rather the want of them, have hitherto militated against the improvement of the Kerry peasants; but the patronage and assistance of government, as well as the exertions of the fishery board, have succeeded in opening the wildest districts of a very retired country, by lines of road skilfully laid down and ably executed. A mail coach line is now completed from Limerick city by Listowel and Tralee to Dingle. Another line is finished from Limerick to Valentia, by Rathkeale, Abbyfeale, Castleisland, and Cahir: and a most necessary, as well as most romantic road (particularly distinguished for its workmanlike execution, and its systematic and durable conformation), connects the towns of Killarney and Kenmare, skirting the beautiful lakes of Killarney, which were hitherto concealed from all but navigators of their surface, and affording a sublime view of their picturesque scenery. How great are the benefits that in all likelihood will follow, from these improvements, may easily be imagined from the incalculable advantage already derived to the peasantry, whose only staple is live cattle or butter, the latter of which was formerly carried in panniers, on horse-back, for distances exceeding fifty miles.

The rivers of this country do not afford any advantage as to inland navigation. The Kenmare is navigable for some miles, but this may be called an arm of the sea. The other rivers are the Blackwater, the Feale, Gale, Cashin, Maing, Lea, Flesk, Laune, Carrin, Fartin, Inny, and Roughty. The Flesk falls into the Lower Lake of Killarney, the waters of which are discharged into the sea by the Laune. The principal towns are Tralee the assizes town, Dingle, Killarney, Nedeen or Kenmare, Castleisland, Lixnaw, Listowel, and Milltown.

The line of sea coast is very extensive and much indented: the chief islets and bays are those of Tralee, Brandon, Dingle, Valentia, Ballinaskelligs, and Kenmare. The last, twenty miles in length, is capacious and safe, and Valentia (a name given by the Spaniards) is one of the safest in Ireland. Here it is now proposed, by the American and Colonial Steam Navigation Company, to establish a packet station, and vessels to ply regularly between this place and Nova Scotia. The coast, which is rather bold, is rendered dangerous by the great number of islands and rocks, above seventy, on two of the most conspicuous of which, the Skelligs, light-houses

are now erected. In the limestone caves on the sea shore, near to Dingle, Kerry Head, and many other places, very beautiful crystals, clear and hard, are often found. These, called Kerry stones and Irish diamonds, are deservedly esteemed by lapidaries. A few amethysts have also been detected, and some valuable pearls have been raised from the lakes and rivers of the county.

Cider was formerly made here in large quantities from the Cackigay apple, and obtained both a good price and estimation: but this traffic is now much neglected; and another species of apple, equally valued, called the Kerry pippin, is now most difficult to be procured.

KERTSCH, Kertz, or Kjerch, a fortress and sea-port of European Russia, in the government of Taurida. It stands in a peninsula of this name, and has a good harbour, but is thinly peopled, containing, exclusive of the garrison, not more than 400 inhabitants, mostly Greeks. The fortress is of the greatest importance, as one of those commanding the passage which forms the communication between the Black Sea and the sea of Azoph. In the neighbourhood stood the ancient Panticapæum, remarkable for the death of Mithridates. Kertsch was taken by the Russians in 1771. Its Russian name is Vospor. Sixty miles N. N. E. of Caffa, and 100 E. S. E. of Perekop.

KER'SEY, *n. s.* Fr. *carisée;* Belg. *karsaye,* A coarse stuff.

Taffata phrases, silken terms precise,
I do forswear them; and I here protest,
Henceforth my wooing mind shall be exprest
In russet yeas, and honest *kersey* noes.
Shakspeare.

His lackey, with a linen stock on one leg, and a *kersey* boot-hose on the other. *Id.*

The same wool one man felts into a hat, another weaves it into cloth, and another into *kersey* or serge. *Hale.*

Thy *kersey* doublet spreading wide,
Drew Cicely's eye aside. *Gay.*

KEST. The preter tense of cast. It is still used in Scotland.

Only that noise heaven's rolling circles *kest.*
Fairfax.

KESTREL. *n. s.* A little kind of bastard hawk.

His *kestrel* kind,
A pleasing vein of glory, vain did find.
Faerie Queene.

Kites and *kestrels* have a resemblance with hawks.
Bacon.

KESTZHELY, a town of Hungary, in the palatinate of Sala, on the Platten see, with a castle. It is noted for an agricultural seminary, in which are taught mathematics, natural history, botany, economics, and mechanics. The inhabitants are supported partly by woollen manufactures, partly by the culture of vineyards. Here, in an extensive garden, provided with ponds and ditches, are reared a number of land tortoises. Twenty-three miles south of Vasarhily. Inhabitants 9000.

KESSEL (John Van), an eminent painter, born at Antwerp in 1626. He not only excelled in fruits and flowers, but was eminent for painting portraits. He resembled Velvet Breughel, and nearly equalled him in birds, plants, and flowers. The prodigious prices for which he sold his works occasioned the rich alone to be the purchasers; and the king of Spain admired his performances so much, that he purchased as many of them as he could procure, and at last prevailed on him to visit his court, where he was appointed painter to the queen, and was retained in her service as long as she lived. He painted portraits admirably, with a light free touch, and a tone of color that very much resembled Vandyck; nor are his works in that style considered in Spain as inferior to that great master. He died in 1708, aged eighty-two.

KESWICK, a town of Cumberland, with a market on Saturday; seated in a vale surrounded by hills, near the rapid river Greeta. It was formerly famous for its copper mines, which rendered it a considerable place; but it now consists only of one long street. Its chief trade is from the influx of travellers on visits to the lakes. The church stands nearly half a mile from the town, and is a beautiful object in the vale. A new market house was erected here a few years ago, which, viewed from any point, adds to the beauty of the scene. Here are a free-school and a Sunday school, and two museums, containing specimens of most of the minerals and other curiosities of Cumberland. It is twenty-five miles north-west by north of Kendal, and 291 N. N. W. of London.

Keswick, Vale of, a delightful spot in the south part of Cumberland, much visited by the admirers of nature. Here is the lake of Keswick, or, more properly, the Derwent-water. To the north of this romantic piece of water soars the lofty Skiddaw, one of the most distinguished mountains in England, the haunt of birds of prey. To the south is the dreary region of Borrowdale. The water of the Derwent is subject to violent agitations, and often without any apparent cause. It has one peculiar characteristic: namely, that it retains its form, viewed from any point, and never assumes the appearance of a rive. See Derwent and Cumberland.

KESZDI Vasarhely, a handsome town of Transylvania, in the district of Haromsrek, separated from that of Kanta by a rivulet, and surrounded by mountains. One of them is decidedly volcanic, and yields tufa. Population 6500: seventy-two miles E. N. E. of Hermanstadt.

KET (William), a tanner of Norfolk, who in the reign of Edward VI. instigated a revolt against the government. The populace were at first excited by the complaints against enclosures; but finding their numbers increase, and amounting to 20,000 strong, they grew insolent, and proceeded to more exorbitant pretensions. They demanded the suppression of the gentry, the placing of new counsellors about the king, and the re-establishment of the popish religion. Ket assumed the government over them, and exercised his brief authority with the utmost arrogance. Having taken possessionof Moushold Hill, near Norwich, he erected his tribunal under the branches of an old spreading oak, thence denominated the Oak of Reformation, and summoning

the gentry to appear before him, he gave such decrees as might be expected from his character and situation. At length the earl of Warwick was sent against the rebels and put them to flight. Ket being taken was hanged at Norwich Castle, and nine of his followers on as many boughs of the Oak of Reformation, and the insurrection was entirely suppressed in 1549.

KETCH, *n. s.* Ital. *caicchio.* A barrel; a heavy ship, as a bomb-ketch. Jack Ketch seems to derive his name from the Saxon ceocs, to choke or strangle.

> I wonder
> That such a *ketch* can with his very bulk
> Take up the rays o' the' beneficial sun,
> And keep it from the earth. *Shakspeare.*

KETCHES, in naval affairs, vessels with two masts, and usually from 100 to 250 tons burden, pincipally used as bomb-vessels. Bomb-ketches are built remarkably strong, as being fitted with a greater number of riders than any other vessel of war; and are furnished with all the apparatus necessary for a vigorous bombardment.

KETCHUP, in cookery, a most agreeable relish for fish, beef-steaks, &c., is manufactured from mushrooms, from cockles, and from walnuts. The first is generally most esteemed, but we shall present our readers with the methods of preparing each:—

Mushroom ketchup.—Take the largest broad mushrooms, break them in an earthen pan, strew salt over, and stir them now and then for three days. Then let them stand till there is a thick skum over them; strain and boil the liquor with Jamaica and black pepper, mace, ginger, a clove or two, and some mustard seed. When cold, bottle it and tie a bladder over the cork: in three months boil it again with fresh spice, and it will then keep for twelve months. Or; take a stew pan full of large flap mushrooms, that are not worm eaten, and the skins and fringe of those you have pickled; throw a handful of salt among them, and set them by a slow fire; they will produce a great deal of liquor, which you must strain, and put to it four ounces of shalots, two cloves of garlick, a good deal of pepper, cloves, ginger, mace, and a few bay leaves.—Boil and skim very well. When cold, cork close. In two months boil it up again with a little fresh spice, and a stick of horse-radish, and it will keep the year; which mushroom ketchup, if not boiled a second time, rarely does.

Cockle ketchup.—Open the cockles; scald them in their own liquor; add a little water when the liquor settles, if you have not enough; strain through a cloth; then season with every savory spice; and, if for brown sauce, add port, anchovies, and garlic:—if for white, omit these, and put a glass of sherry, lemon-juice, and peel mace, nutmeg, and white pepper. If for brown, burn a piece of sugar for coloring.

Walnut ketchup.—Boil or simmer a gallon of the expressed juice of walnuts, when they are tender, and skim it well; then put in two pounds of anchovies, bones and liquor; ditto of shalots; one ounce of cloves, ditto of mace, ditto of pepper, and one clove of garlick. Let all simmer till the shalots sink; then put the liquor into a pan till cold; bottle and divide the spice to each; cork closely and tie a bladder over. It will keep twenty years, and is not good the first. Be very careful to express the juice at home; for it is very rarely unadulterated if bought.

KETSKEMET, a large town of Hungary, the chief place of a district, and the residence of many families of rank. It has manufactures of soap and leather; but the chief property of the district consists in cattle and sheep. Both the Catholics and Calvinists have churches and schools here. Forty-six miles N. N. W. of Szegedin, and fifty S. S. E. of Pest.

KETT (Henry), B. D., born at Norwich in 1761, was educated at the grammar-school, and entered as a commoner of Trinity College, Oxford, where he took his degree of M. A. in 1783. In 1790 he was Bampton lecturer, and in 1795 took the degree of B. D. In 1798 he published History the Interpreter of Prophecy, which attracted notice. In 1802 appeared his Elements of General Knowledge, which, though severely criticised by some members of the university of Oxford, passed through nine editions. His other performances are of a trifling cast; a novel entitled Emily is the only one that bears an original character. After holding his fellowship many years, he married, and obtained the living of Charlton in Gloucestershire. He was found drowned at the seat of his friend Sir J. Gibbon, Stanwell, where he had been bathing, June 30th, 1825.

KETTERING, a town of Northamptonshire, pleasantly seated on an ascent, and surrounded by a great number of gentlemen's seats. The church has an embattled tower, with a very elegant spire sixty-three yards high. There are four fairs, and a market on Friday. Seventy-five miles N. W. from London.

KETTLE, *n. s.* } Sax. cetl; Belgic *ketel;*
KET'TLEDRUM. } Swed. and Teut. *kettel.* A vessel in which liquor is boiled: kettledrum, a drum of which the head is spread over a body of brass.

> The fire thus formed, she sets the *kettle* on;
> Like burnished gold the little seether shone. *Dryden.*
>
> As he drains his draughts of Rhenish down,
> The *kettledrum* and trumpet thus bray out
> The triumph of his pledge. *Shakspeare.*

KETTLE is also a term given by the Dutch to a battery of mortars, because sunk under ground.

KETTLE-DRUMS are formed of two large basins of copper or brass, rounded at the bottom, and covered over with vellum or goat-skin, which is kept fast by a circle of iron, with several holes in it, fastened to the body of the drum, and a like number of screws to screw up and down. The two basins are kept fast together by two straps of leather, which go through two rings, and are fastened the one before and the other behind the pommel of the kettle-drum's saddle.

KETTLEWELL (John), a learned divine, born in 1653, was descended from an ancient family in the North Riding of Yorkshire, and elected fellow of Lincoln College, Oxford. In 1675 he entered into orders; but, refusing to take the oaths to king William and queen Mary, was deprived of his living. He published several works which were collected and reprinted

together in 1718, in 2 vols folio. He died of a consumption in 1695.

KEVELS, in ship-building, a frame composed of two pieces of timber, whose lower ends rest in a sort of step or foot, nailed to the ship's side, whence the upper ends branch outward into arms or horns, serving to belay the great ropes by which the bottoms of the main-sail and fore-sail are extended.

KEW, a village of Surry, on the banks of the Thames, over which is a handsome stone bridge of seven arches to Brentford, seven miles west by south of London. It was formerly a hamlet to Kingston; but in 1769 an act of parliament was passed, forming Kew and Petersham into one vicarage. Kew House, a royal palace, is celebrated for its fine gardens, and his majesty's exotic garden. This last has been brought to great perfection by the introduction of numbers of new plants from Africa, New South Wales, and various parts of the world, and is known throughout all Europe. Kew gardens are open to the public every Monday, from Midsummer to the end of autumn.

KEY, *n. s.* Sax. cæᵹ. An instrument by which the bolt of a lock is pushed forward or backward.

> And ne had the gode keping be [been kept]
> Whilom of the universitee,
> That kepeth the *kei* of Cristendome,
> We had been tourmented all and some. *Chaucer.*

> If a man were porter of hell-gate, he should have old turning the *key*. *Shakspeare.*

> The glorious standard last to heaven they spread,
> With Peter's *keys* ennobled, and his crown. *Fairfax.*

> Yet some there be, that by due steps aspire
> To lay their just hands on that golden *key*,
> That opes the palace of eternity. *Milton.*

> He came, and knocking thrice without delay,
> The longing lady heard, and turned the *key*. *Dryden.*

> Conscience is its own counsellor, the sole master of its own secrets; and it is the privilege of our nature that every man should keep the *key* of his own breast. *South.*

> The warder at the door his *key* applies,
> Shoots back the bolt, and all his courage dies. *Cowper.*

An instrument by which something is screwed or turned.

> Hide the *key* of the jack. *Swift.*

An explanation of any thing difficult.

> An emblem without a *key* to it is no more than a tale of a tub. *L'Estrange.*

> These notions in the writings of the ancients darkly delivered, receive a clearer light when compared with this theory, which represents every thing plainly, and is a *key* to their thoughts. *Burnet.*

> Those who are accustomed to reason have got the true *key* of books. *Locke.*

The parts of a musical instrument which are struck with the fingers.

> Pamela loves to handle the spinnet, and touch the *keys*. *Pamela.*

Key, in music, a certain tone to which every composition, whether long or short, ought to be fitted: and this key is said to be either flat or sharp, not in respect of its own nature, but with relation to the flat or sharp third, which is joined with it.

> Te Deum amoris, sang the thrusted cocke:
> Tubal himself the first musician,
> With *key* of armony coude not unlocke
> So swete a tewne, as that the thrustel can
> 'The lorde of Love we praisen;' quod he than
> 'And so done al the foules gret and lite;
> Honour we may, in fals lovers despite.
> *Chaucer. The Court of Love.*

> Hippolita, I wooed thee with my sword,
> And won thy love doing thee injuries;
> But I will wed thee in another *key*,
> With pomp, with triumph, and with revelling. *Shakspeare.*

> But speak you with a sad brow; or do you play the flouting Jack? Come in what *key* shall a man take you to go in the song? *Id.*

> Not know my voice! Oh, time's extremity!
> Hast thou so cracked and splitted my poor tongue
> In seven short years, that here my only son
> Knows not my feeble *key* of untuned cares? *Id.*

Fr. *quai;* Dut. *kaye.* A bank raised perpendicular for the ease of lading and unlading ships.

> A *key* of fire ran along the shore,
> And lightened all the river with a blaze. *Dryden.*

Key cold was a proverbial expression, now out of use.

> Poor *key cold* figure of a holy king!
> Pale ashes of the house of Lancaster. *Shakspeare.*

Key. See Lock. L. Molinus has a treatise of keys, de Clavibus Veterum, printed at Upsal, wherein he says, that the use of keys is yet unknown in some parts of Sweden. The invention of keys is ascribed to Theodore of Samos, according to Pliny and Polydore Virgil; but this must be a mistake, the use of keys having been known before the siege of Troy; mention even seems to be made of them in Gen. xix. 10. Molinus is of opinion, that keys at first only served for the untying certain knots, wherewith they anciently secured their doors; but the Laconic keys, he maintains, were nearly akin in use to our own; they consisted of three single teeth, and made the figure of an E; of which form there are still some to be seen in the cabinets of the curious. There was another key called βαλαναγρα, made in the manner of a male screw; which had its corresponding female in a bolt affixed to the door. Key is hence become a general name for several things serving to shut up or close others. See Lock.

This word is also used for ecclesiastical jurisdiction; particularly for the power of excommunicating and absolving. The Romanists say the pope has the power of the keys, and can open and shut Paradise as he pleases: grounding their opinion on that expression of our Lord to Peter, 'I will give thee the keys of the kingdom of heaven.' In St. Gregory we read, that it was the custom of the popes to send a golden key to princes, wherein they enclosed a little of the filings of St. Peter's chains, kept with great devotion at Rome; and that these keys were worn in the bosom, as being supposed to contain some wonderful virtues.

Key is used for an index of a cipher. See Cipher.

Key in music, is the fundamental note or tone, to which the whole piece in cantata, sonata, concerto, &c., is accommodated, and with which it usually begins, but always ends.

Key, or **Quay**. See Quay.

Keys' Islands, three islands in the Eastern Seas, lying N. N. E. of Timour Laut and near the coast of New Guinea. They are called Key Watelas, Little and Great Key; the last being said to be fifty miles in length, and from seven to twelve broad, but little is known of any of them.

Keys of an Organ, Harpsichord, &c., those little pieces in the fore part of those instruments, by means whereof the jacks play, so as to strike the strings. In large organs there are several sets of keys, some to play the secondary organ, some for the main body, some for the trumpet, and some for the echoing trumpet, &c.; in some there are but a part that play, and the rest are only for ornament. See Organ, &c.

KEY'AGE, *n. s.* } Money paid for lying at
Key'hole, *n. s.* } the key or quay. Key-
Key'stone, *n. s.* } hole, the perforation in the lock through which the key is put. Key-stone, the middle stone of an arch.

Make doors fast upon a woman's wit, and it will out at the casement; shut that and it will out at the *keyhole*. *Shakspeare.*

I keep her in one room; I lock it
The *key*, look here, is in this pocket;
The *keyhole* is that left? Most certain.
Prior.

If you will add a *keystone* and chaptrels to the arch, let the breadth of the upper part of the *keystone* be the height of the arch. *Moxon.*

I looked at the *keyhole*, and saw a well-made man.
Tatler.

Shylock and the Moor
And Pierre, cannot be swept or worn away—
The *Keystones* of the arch!
Byron. Childe Harold.

The **Key-stone of an Arch or Vault** is the last stone placed at top; which, being wider and fuller at the top than bottom, wedges and binds all the rest. The key is different in the different orders; in the Tuscan and Doric it is a plain stone, only projecting; in the Ionic it is cut and waved somewhat after the manner of consoles; in the Corinthian and Composite it is a console enriched with sculpture, foliages, &c.

KEYSLER (John George), F. R. S., a learned German antiquary, born at Thourneau in 1689. After studying at the university of Halle, he was appointed preceptor to Charles Maximilian and Christian Charles, the counts of Giech; with whom he travelled through Germany, France, and the Netherlands, and gained great reputation among the learned, by illustrating several monuments of antiquity, particularly some fragments of Celtic idols discovered in the cathedral of Paris. In 1716 he was employed to superintend the education of two grandsons of baron Bernstorff, first minister of king George I., as elector of Brunswick Lunenberg. However, obtaining leave, in 1718, to visit England, he was elected F. R. S. for a learned essay De Dea Nehelennia numine veterum Walachorum topico. He also wrote on Stonehenge, and on the Consecrated Misletoe of the Druids. These detached essays, with others, he published on his return to Hanover, under the title of Antiquitates selectæ Septentrionales et Celticæ, &c. He afterwards made the grand tour with the young barons, to which we owe the publication of his Travels; which were translated into English, and published in 1756, in 4 vols. 4to. Mr. Keysler on his return spent the remainder of his life under the patronage of his noble pupils, who committed their fine library and museum to his care, with a handsome income. He died in 1743.

KHALIF, Kaliph, or Caliph. Arab. khalifah, i. e. a successor or heir: successor of Mahomet in the spiritual as well as temporal empire erected by that legislator. After the death of Mahomet, Abubeker having been elected by the Mussulmans to supply this place, he would take no other title but that of khalifah resoul allah, i. e. vicar of the prophet, or messenger of God. Omar, who succeeded Abubeker, preferred the title of emir moumenin, i. e. prince of the believers: but his successors resumed that of khalif, which thus came to signify the supreme ecclesiastical dignity among the Saracens; or sovereign among the Mahommedans, vested with absolute authority in all matters relating both to religion and policy. It is still one of the grand seignior's titles, as successor of Mahomet. One of the chief functions of the khalif, in quality of imam, or chief priest of Mussulmanism, was to begin the public prayers every Friday in the chief mosque, and to deliver the khothbak, or sermon. In after times they had assistants for this latter office; but the khalifs always performed in person. The khalif was also obliged to lead the pilgrims to Mecca in person, and to march at the head of the armies of his empire. He granted investiture to princes; and sent swords, standards, gowns, and the like, as presents to princes of the Mahommedan religion; who, though they had thrown off the yoke of the caliphate, nevertheless held of it as vassals. The khalifs usually went to the mosque mounted on mules; and the Seljukide sultans, though masters of Bagdad, held their stirrups, and led their mule by the bridle some distance on foot, till such time as the khalifs gave them the sign to mount on horseback. At one of the windows of the khalif's palace there always hung a piece of black velvet, twenty cubits long, which reached to the ground, and was called the khalif's sleeve; which the grandees of his court never failed to kiss with great respect every day. After the destruction of the caliphate, by Hulaku, the Mahommedan princes appointed a particular officer, in their respective dominions, who sustains the sacred authority of khalif. In Turkey he goes under the denomination of mufti, and in Persia under that of sadne. After the death of Mahomet (see Arabia and Mahomet), the succession of khalifs continued in Arabia and Bagdad till the 655th year of the Hegira, when Bagdad was taken by the Tartars. See Bagdad, Egypt, and Saracens. After this, however, there were persons who claimed the khaliphate, as pretending to be of the family of the Abassides, and to whom the sultans of Egypt rendered great honors at Cairo, as the true successors of Mahomet; but this honor was

merely titular, and the rights allowed them only in matters relating to religion; and though they bore the sovereign title of khalifs, they were nevertheless subjects and dependents of the sultans. In the year of the Hegira 361 a kind of caliphate was erected by the Fatemites in Africa, and lasted till it was suppressed by Saladin. Historians also speak of a third caliphate in Gemen or Arabia Felix, erected by some princes of the family of the Jobites. The emperors of Morocco assume the title of grand cherifs; and pretend to be the true khalifs, or successors of Mahomet, though under another title.

KHAN, or CHAM, the title given to the princes of Tartary. The word in Persian signifies mighty lord; in the Sclavonic, emperor. Sperlingius, in his Dissertation on the Danish term of majesty, koning, king, thinks the Tartarian cham may be derived from it; adding, that in the north they say kan, konnen, konge, konning, &c. The term is also applied among the Persians to the great lords of the court, and the governors of provinces.

KHANDESH, a Mahratta province of Hindostan, situated between 21° and 23° of N. lat. On the north it is bounded by Malwah, on the west by Gujerat, on the south by Aurungabad, and on the east by Berar. It was long in possession of the Afghauns, when the capital was Asseer or Hasseer, but was conquered by the emperor Akbar in the sixteenth century. It is remarkably strong in fortresses. Within one day's march nearly twenty are to be seen; and it is intersected by the Narbudda and Tapty rivers. The greater portion of it belongs to the descendants of Holkar; the remainder to the peshwa and Sindia; but many of the strong places are in possession of refractory chiefs. The inhabitants are chiefly Hindoos. Cotton cloths called baftahs were formerly manufactured here. The chief towns are Boorhampore, Hindia, and Hasser.

KHERASKOF (Michael), an eminent Russian poet of the eighteenth century, who published a poem On the Use of Science; and an epic poem called the Russiada, the subject of which is the conquest of Casan by John Basiliowitz II. He was appointed vice-president of the College of Mines, curator of the university of Moscow, and a counsellor of state.

KHILKOF, PRINCE, a Russian nobleman, who was ambassador to Charles XII.; and when the war broke out between Sweden and Russia, was, contrary to the law of nations, thrown into prison by that prince. During his confinement he wrote an Abridgment of the Russian History. He died after a captivity of eighteen years. His work was published by Mr. Muller in 1770, in 8vo.

KHOEE, a large and handsome town of Persia, in the province of Aderbijan, on the lake Ureemea. It is a principal channel of the trade with Turkey: the walls are in good condition; the streets regular and well-built, and adorned with avenues of trees. Population about 25,000. In the neighbourhood a battle was fought in 1514 between the sultan Selim I. and Shah Ismael, in which 30,000 Persians engaged 300,000 Turks.

KHOJUND, a populous city of Bukharia, subject to Koukan, or the khan of the Tartar tribe of Mengh. It is said to be larger than Samarcand. The Sirr, or Sihon (anciently the Jaxartes), flows under its walls, but is no where fordable; nor are boats or any bridge employed in passing it; the inhabitants being merely conveyed over in floats of reeds.

KHORASSAN, a considerable province of Persia, having Irak and Mazanderan to the west, Seistan to the south, Bukharia and Balk to the north and east. Though nominally included in Persia, it partakes largely both of the natural and political character of the bordering regions of Tartary; and the south part belongs in fact to the Afghauns. It is in general a level country, though intersected by lofty and irregular ranges of mountains; some part of it also consists of sandy deserts. But the soil is fertile when cultivated, and yields corn, wine, rice, oil, and silk, in abundance. According to the elevation, the climate is sometimes extremely cold; and it is subject to a pestilential wind, called the bad semum, which is observed to blow for forty days in the year.

KHYRABAD, or KAIRABAD, a district of the province of Oude, Hindostan, situated principally between 27° and 28° of N. lat: it is bounded on the west by the Ganges, and on the east by the Gogra; and is fertile and well watered, producing sugar, and all the grains of India. It is intersected by the Goomty River; and its chief towns are Khyrabad, Shahabad, and Mahommedy.

KIAKHTA, a town of Asiatic Russia, in the government of Irkoutsk, and district of Verschnei Oudinsk. It has of late become the emporium of the commerce between Russia and China; the latter allowing trade only at one point of each of its frontiers. Kiakhta was, in 1728, fixed upon by treaty as the medium of the communication. To the great fair, held in December, merchants flock from every part of the Russian empire, and bring cloths, beavers, furs, Russia and morocco leather, receiving in exchange tea, nankeens, silk stuffs, rhubarb, &c. Kiakhta is situated in a plain, traversed by a river of this name, and surrounded by high granitic and wooded mountains, on the most elevated of which is a fort. On another mountain are seen the boundaries of the two empires. The Russian boundary being a hillock, with a cross at the top, while the Chinese have a kind of cone or pyramid. The Chinese town close by is called Naimatschin. 330 miles south of Irkoutsk.

KIANG NAN, a province of China, and one of the most fertile, commercial, and opulent, in the empire. It is bounded on the west by Honan and Hou-quang; south by Tchekiang and Kiang-si; east by the gulf of Nanking; and north by Chan-tong. The emperors long kept their court in this province, till reasons of state obliged them to move nearer Tartary, and reside in Pekin. This province contains fourteen cities of the first class, and ninety-three of the second and third. They are all of them places of considerable trade. Large barks can go to them from all parts; the whole country being intersected by lakes, rivers, and canals, communi

cating with the Yang-tse-kiang, which runs through the middle of the province. Silk stuffs, lacquer-ware, ink, paper, and every thing that comes from Nanking, as well as from the other cities of the province, are much more esteemed, and fetch a higher price than those brought from the neighbouring provinces. In the Chang-hai, and the villages dependent on it, there are said to be above 200,000 weavers of cotton cloths. In several places on the sea-coast are many salt-pits, the produce of which is distributed all over the empire. This province is divided into two parts, each of which has a distinct governor. The governor of the east part resides at Soutcheou, that of the west at Ngan-king. Each of them has under his jurisdiction seven cities of the first class. The official account of the population given to Sir George Staunton stated it to amount to 32,000,000.

KIANG-SI, a province of China, bounded on the north by that of Kiang-nan, west by Houquang, south by Quang-tong, and east by Fokien and Tchekiang. The country is extremely fertile, but so populous, that it can scarcely supply the wants of its inhabitants. They are people of great acuteness, and often rise to the highest dignities of the state. The mountains are covered with verdure, and contain mines of gold, silver, lead, iron, and tin. The rice produced here is very delicate, and several barks are loaded with it every year for the court. The porcelain is the most valuable in the empire. This province contains thirteen cities of the first class, and seventy-eight of the second and third.

KIAYAS, in Turkish polity, commanding officers of the janissaries, Arabs, &c., who, after the first year, lay down their employments, become veterans, and have a voice in the divan.

KIBBAN, or Madan, a considerable town of Koordistan, at the foot of a high mountain, and surrounded by narrow and deep defiles. The neighbourhood abounds with mines of copper and iron. It lies about a mile and a half from the Euphrates, and eighty miles west of Diarbekir.

KIBE, *n. s.* } From Germ. *kerb*, a cut—
KIBED', *adj.* } Skinner; from Welsh *kibwe*—Minsheu. An ulcerated chilblain; a chap in the heel caused by the cold. Kibed, troubled with chilblains.

If 'twere a *kibe*, 'twould put me to my slipper.
Shakspeare.

The toe of the peasant comes so near the heel of our courtier, that it galls his *kibe*. *Id.*

One boasted of the cure, calling them a few *kibes*.
Wiseman.

KIBITKA, the name of a Russian travelling carriage, which contains two persons. In shape it resembles a cart of about five feet in length, the hinder half being covered with a semicircular tilt like a waggon, made of laths, interwoven with bark. The Russians, when travelling, place a feather bed at the bottom of the kibitka, and having thus rendered bearable the jolts and concussions occasioned by the uneven timber roads, comfortably doze away the journey.

KICK, *v. a.*, *v. n.*, & *n. s.* } Teut. *kauchen;*
KICK'ER, *n. s.* } Lat. *calcare*. To strike with the foot; to beat the foot in anger or contempt: a blow with the foot. Kicker, one who strikes with his foot.

Jeshurun waxed fat and *kicked*. *Deut.* xxxii. 15.

Wherefore *kick* ye at my sacrifice, which I have commanded? 1 *Sam.* ii. 29.

For, trewely, ther n'is non of us all,
If any wight woll claw us on the gall,
That we n'il *kike* for that he saith us soth,
Assay, and he shall find it that so doth.
Chaucer. The Wife of Bathes Tale.

The doctrines of the holy Scriptures are terrible enemies to wicked men, and this is that which makes them *kick* against religion, and spurn at the doctrines of that holy book. *Tillotson.*

What, are you dumb? Quick, with your answer, quick,
Before my foot salutes you with a *kick*.
Dryden's Juvenal.

He must endure and digest all affronts, adore the foot that *kicks* him, and kiss the hand that strikes him. *South.*

It angered Turenne once upon a day,
To see a footman *kicked* that took his pay.
Pope.

Another, whose son had employments at court, valued not, now and then, a *kicking* or a caning.
Swift.

KICK'SHAW, *n. s.* This word is supposed to be only a corruption of *quelque chose*, something: yet Milton seems to have understood it otherwise; for he writes it kickshoe, as if he thought it used in contempt of dancing.—Johnson. But there is a Belgic *kyckshouw*, a trifle, from which it may directly come. Something uncommon, fantastical, or ridiculous; a dish so changed by the cookery that it can scarcely be known.

Some pigeons, a joint of mutton, and any pretty little tiny *kickshaws*. *Shakspeare. Henry IV.*

Shall we need the monsieurs of Paris to take our youth into their slight custodies, and send them over back again transformed into mimicks, apes, and *kickshoes*? *Milton.*

In wit, as well as war, they give us vigour;
Cressy was lost by *kickshaws* and soup-meagre.
Fenton.

KICK'SY-WICKSEY, *n. s.* From kick and wince. A made word, in ridicule and disdain of a wife.

He wears his honour in a box, unseen,
That hugs his *kicksy-wicksey* here at home,
Spending his manly marrow in her arms.
Shakspeare.

KID, *n. s.* & *v. a.* Dan. *kid;* Welsh *cidwlen*. The young of a goat; a bundle of heath: to bring forth kids.

Therto, she coude skip, and make a game,
As any *kid* or calf folowing his dame.
Chaucer. The Milleres Tale.

Next came fresh Aprill, full of lustyhed,
And wanton as a *kid*, whose home new buds;
Upon a Bull he rode, the same which led
Europa floting through the' Argolick fluds.
Spenser's Faerie Queene.

There was a herd of goats with their young ones, upon which sight Sir Richard Graham tells, he would snap one of the *kids*, and carry him close to their lodging. *Wotton.*

Sporting the lion ramped, and in his paw
Dandled the *kid*. *Milton.*

So *kids* and whelps their sires and dams express;
And so the great I measured by the less. *Dryden.*

While bright the dewy grass with moon-beams shone,
And I stood hurdling in my *kids* alone,
How often have I said (but thou had'st found
Ere then thy dark cold lodgment under ground)
Now Damon sings, or springes set for hares,
Or wicker-work for various use prepares.

Cowper. Death of Damon.

KID'DER, *n. s.* Teut. *kauten*, to chaffer. An engrosser of corn to enhance its price.

KIDDERS, in law, are those that carry corn, dead victuals, or other merchandise, up and down to sell: every person being a common badger, kidder, lader, or carrier, &c., says the stat. 5 Eliz. cap. 12. They are called kidders, 13 Eliz. cap. 25.

KIDDER (Dr. Richard), a learned English bishop, born in Sussex, and educated at Cambridge. In 1689 he was installed dean of Peterborough; and, in 1691, was nominated bishop of Bath and Wells, in the room of Dr. Thomas Ken. He published, 1. The Young Man's Duty; 2. A Demonstration of the Messiah, 3 vols. 8vo.; 3. A Commentary on the Five Books of Moses, 2 vols. 8vo.; and several other valuable tracts. He was killed in his bed, together with his lady, by the fall of a stack of chimneys, in his palace at Wells, during the great storm in 1703. The bishop, in the dissertation prefixed to his commentary on the five books of Moses, having reflected upon Monsieur Le Clerc, some letters passed between them in Latin, which were published by Le Clerc, in his Bibliotheque Choisie.

KIDDERMINSTER, or KEDDERMINSTER, a market town and parish of Worcestershire, seated under a hill on the Stour, near the Severn, 128 miles from London. It contains about 2000 houses, and 11,000 inhabitants, who carry on an extensive trade in the various branches of weaving. In 1735 a carpet manufactory was established with success, so as to employ above 250 looms; and there are upwards of 700 looms employed in the silk and worsted. Many hands are employed as spinners, &c., in the carpet looms only in the town and neighbourhood; others in preparing yarn, which is used in different parts of England in carpeting. The silk manufactory was established in 1755. The town is remarkably healthy; and has also an extensive manufacture of quilting in the loom, in imitation of Marseilles quilting. Woollen plush is also made here for the Portuguese market. The water of the river Stour is said to contribute much to the celebrity of the manufactures of this place, by its remarkable property of striking and securing their colors. The lord of the manor holds a court leet for the prevention of encroachments and public nuisances, and here is a court of requests for debts under 40*s.* The church, which stands in a commanding situation, is a venerable Gothic structure, very large, and has lately been ornamented and repaired at considerable expense. In it are several curious ancient monuments. The tower adjoining the church is a strong, lofty pile, containing eight bells. The town-hall is a large commodious brick building, being in part occupied by the prison; on the ground-floor are butchers' stalls; and, above, is the council-chamber, for transacting public business. There are also in Kidderminster a Presbyterian meeting-house, two good free schools, a charity-school, and two alms-houses &c. It is governed by a bailiff, twelve burgesses, twenty-five common councilmen, &c. And sends one member to parliament. By the inland navigation it has communication, by the junction of the Severn canals, with the rivers Mersey, Dee, Ribble, Ouse, Trent, Derwent, Severn, Humber, Thames, Avon, &c.; which navigation, including its windings, extends above 500 miles, in the counties of Lincoln, Nottingham, York, Lancaster, Westmoreland, Chester, Stafford, Warwick, Leicester, Oxford, Worcester, &c. The parish extends to Bewdly Bridge, has a weekly market, and three fairs.

KIDDLE, or KIDEL, a dam or wear in a river with a narrow cut in it, for laying pots or other engines to catch fish. The word is ancient; for in Magna Charta, cap. 24, we read, Omnes kidelli deponantur per Thamesiam et Medweyam, et per totam Angliam, nisi per costeram maris. And by king John's charter power was granted to the city of London, de kidellis amovendis per Thamesiam et Medweyam. A survey was ordered to be made of the wears, mills, stanks, and kiddles, in the great rivers of England, 1 Hen. IV. Fishermen of late corruptly call these dams kettles; and they are much used in Wales, and on the coasts of Kent.

KID'NAP, *v. a.* From Dut. *kind*, a child, and *nab*. To steal children; to steal human beings.

KID'NAPPER, *n. s.* From kidnap. One who steals human beings; a manstealer.

The man compounded with the merchant upon condition that he might have his child again; for he had smelt it out, that the merchant himself was the *kidnapper*. *L'Estrange.*

These people lye in wait for our children, and may be considered as a kind of *kidnappers* within the law. *Spectator.*

KIDNAPPING the forcible abduction or stealing away of man, woman, or child, from their own country, and sending them into another. This crime was capital by the divine law: see Exodus xxi. 16. So likewise, in the civil law, the offence of stealing men and children, which was called plagium, and the offenders plagiarii, was punished with death. This is unquestionably a very heinous crime, as it robs the king of his subjects, banishes a man from his country, and may in its consequences be productive of the most cruel and disagreeable hardships; and therefore the common law of England has punished it with fine, imprisonment, and pillory. And also the statute 11 and 12 W. III., c. 7, though principally intended against pirates, has a clause that extends to prevent the leaving such persons abroad as are thus kidnapped or spirited away; by enacting, that if any captain of a merchant vessel shall (during his being abroad) force any person on shore, or wilfully leave him behind, or refuse to bring home all such men as he carried out, if able and desirous to return, he shall suffer three months' imprisonment.

KID'NEY, *n. s.* Goth. *kiud*, the belly, probably, and Sax. *nær*, the reins. A gland in the ABDOMEN. See that article.

A youth laboured under a complication of diseases, from his mesentery and *kidneys*.

Wiseman's Surgery.

Sort; kind: in ludicrous language.

Think of that, a man of my *kidney*; think of that, that am as subject to heat as butter; a man of continual dissolution and thaw. *Shakspeare.*

There are millions in the world of this man's *kidney*, that take up the same resolution without noise. *L'Estrange.*

KIDNEY, in anatomy, an abdominal viscus, shaped like a kidney-bean, that secretes the urine. There are two kidneys. One is situated in each lumbar region, near the first lumbar vertebra, behind the peritonæum. This organ is composed of three substances; a cortical, which is external, and very vascular; a tubulous, which consists of small tubes; and a papillous substance, which is the innermost. The kidneys are generally surrounded with more or less adipose membrane, and they have also a proper membrane, membrana propria, which is closely accreted to the cortical substance. The renal arteries, called also emulgents, proceed from the aorta. The veins evacuate their blood into the ascending cava. The absorbents accompany the blood-vessels, and terminate in the thoracic duct. The nerves of the kidneys are branches of the eighth pair and great intercostal. The excretory duct of this viscus is called the uretur. See ANATOMY.

KID'NEYBEAN, *n. s.* *Phaseolus*: so named from its shape. A leguminous plant.

Kidneybeans are a sort of cod ware, that are very pleasant wholesome food. *Mortimer's Husbandry.*

KIDNEY-BEAN. See PHASEOLUS.

KID'NEYVETCH, *n. s.* *Anthillis.* A plant.

KID'NEYWORT, *n. s.* *Cotyledon.* A plant.

KIDNEY-WORT. See SAXIFRAGA.

KIEL, a considerable town of Denmark, the capital of the duchy of Holstein, with a castle, and a university founded in 1665. It stands upon a small peninsula in a bay of the Baltic, and has a very commodious harbour. It is one of the largest and most commercial places in Holstein; and the neighbourhood is better cultivated than any other parts of the duchy. By its canal, which unites the Northern Sea with the Baltic, the whole duchy has been improved and enriched. See DENMARK. The imports are cotton, sugar, coffee, tobacco, and salt; the exports, corn, butter, cheese, and bacon; but ship-building and mercantile agency are the principal occupations. Hats, tobacco, starch, and sugar refining, are the only manufactures. A great annual fair takes place in January; at other times Kiel displays little activity. The environs are beautiful. Population about 7000. Kiel is twenty-six miles south-east of Sleswic, and fifty-one north of Hamburg.

KIEMA, a promontory of Switzerland, on the west shore of the lake of Zug; of which the ground belongs to the canton of Lucern, and the wood to that of Zug.

KIEN-LONG, late emperor of China, was born in 1710, and, in 1735, succeeded his father, Yuntschin. Until 1759 he reigned in peace; then he engaged in war with the Songarians, and, taking possession of Calmuc Tartary, extended his dominions to the frontiers of Siberia. This gave him also the command of Thibet. He was now in his turn invaded by the sovereign of Ava, but the attempt finally failed. Kien-Long favored privately the Christian religion it is said: the missionaries were however obliged to proceed with caution. Several of them were in the emperor's immediate service. On the suppression of the Jesuits, China being less visited by Europeans than heretofore, Kien-Long sent to Canton, and invited to his capital artists and learned men, particularly astronomers, of all the European nations. He possessed on his own part a taste for poetry and natural history; of which we have specimens in his panegyrics on the tea-plant, and on the city of Moukden, both of which have been translated into French by father Amiot. He supplied also a version of a poem by the emperor, on the conquest of Calmuc Tartary. Kien-Long engaged some French artists to copy the Chinese paintings of his victories; but Louis XV. had them engraved for him at his own expense. This emperor established a library of no fewer than 600,000 volumes; and admitted three books, written by the Jesuits, on the Christian religion. A description of the Chinese empire, which appeared in Busching's Magazine, was compiled by his order. He died at Pekin in 1786, after a reign of half a century.

KIERNANDER (John Zechariah), an early missionary of modern times, was born November 21st, 1711, at Akslad, in Sweden, and educated in the school of Lindkoping, and the university of Upsal. At the age of twenty-four he went to Halle, where he was patronised by professor Franke, who recommended him to the London Society for promoting Christian Knowledge. He was accepted as a missionary to the East; and, in 1740, arrived at Cuddalore, as colleague to Mr. Guester; but in 1744, on the removal of that gentleman to Madras, he had the sole charge of the mission. In 1749 Mr. Kiernander preached, in one day, a sermon in the same church, to the English, Tamulian, and Portuguese congregations there. In 1758, on the surrender of Cuddalore to the French, he went to Tranquebar; whence he removed to Calcutta, where he opened a school, and preached sometimes in English, at others in German, and occasionally in Portuguese. His celebrity was so great, that the emperor Shah Aulum solicited from him copies of the Psalter and New Testament in Arabic. In 1767 Mr. Kiernander laid the foundation of a church at Calcutta, which was opened in 1770, under the name of Beth Tephillah. The cost, which was about £8000, fell almost wholly upon himself: he also erected, close to it, a school capable of holding 250 children. Becoming however, by this means, involved in debt, the church which he built was seized, and would have been desecrated, had not the late Mr. Grant purchased it, and placed it in trust for pious uses. Mr. Kiernander, after this, officiated as chaplain to the Dutch at Chinsurah; but when that settlement was taken, in 1795, he became a prisoner of war to the English, and returned to Calcutta, where he died, April 10th, 1799.

KIEV, a government of the south-west of European Russia, comprising a part of the Ukraine, and bounded by the provinces of Podolia, Volhynia, Minsk, Tschernigov, and Poltava, from which last it is separated by the Dnieper. As constituted by the emperor Paul, in 1797, it

consisted of a territory lying on both sides of the Dnieper; but a subsequent arrangement by the emperor Alexander has given all the part on the east side of that river to the government of Tschernigov and Poltava; while that of Kiev received a large addition out of Poland on the west. It lies between 28° 40′ and 33° 25′ of E. long., and 48° 30′ and 51° 50′ of N. lat.; and has a territorial extent of 21,000 square miles. It is divided into twelve circles, and contains seventy-seven, great and small, towns. The surface is level, and the soil produces abundance of corn for exportation, and hemp, flax, fruit, and vegetables. It abounds also in pasturage, and exports a number of cattle and horses; honey, and Polish cochineal. The population is scattered, and the manufactures are few and small. The commerce of the country is chiefly in the hands of Jews. Population about 1,000,000.

KIEV, KIOV, or KIOW, the capital of the preceding province, stands on an acclivity on the right bank of the Dnieper, and consists properly of three towns, viz. the Old Town, Podol or the Lower Town, and the fortress of Petscherski. The three parts are connected by entrenchments; but the last alone is regularly defended. Here are barracks, magazines, officers' houses, several churches, and a government-house, with public gardens. Below the monastery, founded in the eleventh century, are a number of subterraneous vaults, divided into apartments and chapels, in which are kept a number of corpses in an undecayed state, the relics of saints and martyrs. In the old town is the residence of a Greek archbishop; and a cathedral. Agriculture, and the distilleries of Kiev, are the chief employments of the town and neighbourhood. Here is also a gymnasium, and an old established high-school, which formerly bore the name of an academy. It was erected into a university in 1803.

This dull town was founded, it is said, in 430, and it was long the capital of the kingdom of Russia. It fell, in 1240, into the hands of the Tartars, and afterwards into those of the Lithuanians and Poles; but was restored to Russia in the latter part of the seventeenth century; and the church of St. Sophia, being the earliest Christian church in Russia, has always been an object of great interest. Eighty-three miles east of Zytomiers, and 270 north by west of Cherson.

KIGGELARIA, in botany, bastard euonymus: a genus of the decandria order, and diœcia class of plants; natural order thirty-seventh, columniferæ. Male CAL. quinquepartite: COR. pentapetalous; there are five trilobous glandules; the antheræ are perforated at top. Female CAL. and COR. in the male; there are five styles: CAPS. unilocular, quinquevalved, and polyspermous. There is but one species, viz. K. Africana. It has an upright woody stem, and purplish branches, growing fifteen or eighteen feet high; oblong, sawed, alternate leaves; and diœcious, greenish-white flowers, in clusters from the sides of the branches; succeeded by globular rough fruit, the size of cherries, containing the seeds, which seldom ripen here. Being a native of warm climates, it must be constantly kept in a stove in this country. It is propagated by seeds, layers, or cuttings, but most readily by seeds.

KILDA (St.), one of the Western Islands of Scotland. It lies in the Atlantic, and is about three miles long from east to west, and two broad from north to south. The soil is better calculated for pasture than tillage. The natives prefer rearing sheep, and killing wild fowl, to the more toilsome business of husbandry. All the ground hitherto cultivated in this island lies round the village. The soil is thin, full of gravel, and naturally poor; but it is, however, rendered extremely fertile by the industry of the husbandmen, who manure every inch of their ground, so as to convert it into a kind of garden. Barley and oats are the only sorts of grain known at St. Kilda. Potatoes have been but lately introduced, and only small quantities raised. On the east side of the island, a quarter of a mile from the bay, lies the village, where the whole inhabitants of the island live together. Their houses are built in two rows, regular, and facing one another, with a tolerable causeway in the middle. These habitations are flat in the roof, or nearly so. The island being peculiarly subject to violent squalls and hurricanes, were their houses raised higher the first winter storm would bring them down about their ears. The walls are made of a rough gritty kind of stones huddled together, without lime or mortar, from eight to nine feet high. Their method of catching wild fowl is remarkable. The men are divided into fowling parties, each consisting of four persons distinguished for their agility. Each party must have at least one rope, about thirty fathoms long, made of a strong raw cow's hide, salted and cut circularly into three thongs of equal length, which, being closely twisted together, form a three-fold cord, able to sustain a great weight, and durable enough to last for two generations. To prevent the injuries it would receive from the sharp edges of the rocks, against which they often strike, the cord is covered with sheep skins, dressed in the same manner. This rope is the most valuable implement of which, in St. Kilda, a man can be possessed. In a testament it makes the first article in favor of the eldest son; should it fall to a daughter's share it is reckoned equal in value to two good cows. By the help of such ropes people, linked together in couples, each having either end of the cord fastened about his waist, go frequently through the most dreadful precipices: when one of the two descends, his colleague sets himself on a strong shelf, and takes care to have such sure footing that, if his fellow adventurer makes a false step, he may be able to save him.

KILDARE, a county of Ireland, bounded on the north by Meath, on the east by Dublin and Wicklow, on the south by Carlow, and on the west by King's and Queen's Counties. It is about forty-one miles long, and twenty-seven broad, and contains 392,397 English acres; of which four-fifths are arable, meadow, and pasture, and the remainder bog. It is in the province of Leinster, and archbishopric of Dublin: and there are fourteen baronies and half baronies, in all, in this county, subdivided into 113 parishes.

The surface of Kildare is undulating, and often presents a pleasing landscape: but its

climate is thought to be more humid than that of any other part of Ireland. On the west the bay of Allen and similar tracts occupy the greater part of the county.

Its rivers are the Liffey, Boyne, and Barrow; and it enjoys the advantages of the Grand and Royal Canals. The former, entering it from the north-east, proceeds in a west and north-west direction, till it passes into King's County. At Lowton a branch leaves the main trunk, and advances to the town of Athy, on the south-west boundary, and from this the navigation is continued southward on the river Barrow, which, soon after leaving Athy, becomes the boundary with Queen's County. The Royal Canal passes through its northern quarter from east to west, and then enters the county of Meath. The Boyne and Barrow rise in the bog of Allen and its neighbourhood.

Potatoes are every where cultivated: with regard to scientific agriculture, the course of cropping, with few exceptions, is the same as it has been for a century, viz. fallow, wheat, oats. Oxen are employed in ploughing, and horses for carriages; but in many instances four or six of these animals are mixed together in the plough. Mules are also kept on many farms. The rent of the arable and pasture land in 1807 was estimated at a little more than 20*s.* the Irish acre.

The great landowner of the county is the Duke of Leinster: it sends two members to the imperial parliament, but has no borough nor large towns. Common labor is said by Mr. Wakefield to yield 1*s.* 6*d.* a-day for men, and 10*d.* for women and children; and in hay and corn harvest 2*s.* 8*d.* Potatoes were at this time 5*d.* a stone, beef and mutton 6*d.* per pound, oatmeal 18*s.* per cwt. milk per quart 2*d.*, and butter-milk ½*d.* in summer, and ¾*d.* in winter. Under these circumstances the population has doubled since 1790; and the Catholics are to the Protestants in the proportion of thirty to one. Athy on the Barrow in the south-west of the county, and Naas on the north-east, are alternately the assize towns; the others are Kildare, Monasterevan, Castle Dermot, on the south and west; Leixlip, Maynooth, and a few others, on the north and east. At Cellbridge on the Liffey is a small woollen manufactory. At Maynooth about 200 Catholic students are trained for the priesthood, and accommodated with lodgings and commons. Each pays a small sum as entrance money, which, with other expenses, may amount to £20 a year; the general charges of the establishment being supported by an annual parliamentary grant.

KILDARE, the county town, is situate on a rising ground, twenty-five miles south-west of Dublin, and is celebrated for its Curragh, the Newmarket of Ireland. This common, or lawn, containing nearly 5000 acres of the softest turf, on a fine dry loam, is generally covered with flocks of sheep. It was once a forest of oaks. The races are held in April, June, September, and October. Here was a celebrated nunnery, founded about the year 584 by St. Bridget. This place is also noted for the remains of other religious houses; and a round tower in good preservation, 130 feet high, built of white granite to about twelve feet above the ground, the rest being of blue stone; the door is fourteen feet from the ground.

KIL'DERKIN, *n. s.* Dut. *kindekin*, a baby, says Dr. Johnson; but more probably from Lat. *quatuor*, four: as Teut. *cholern*, chaldron, A small barrel; the fourth part of a hogshead.

Make in the *kilderkin* a great bung-hole of purpose. *Bacon.*

A tun of man in thy large bulk is writ;
But sure thou'rt but a *kilderkin* of wit.
Dryden.

KILIAN (Lucas), an eminent German engraver, born at Augsburg, who flourished at the beginning of the seventeenth century. His style of engraving bears no small resemblance in many particulars to that of Henry Goltzius, and of John Mullar his disciple. He went to Italy to complete his studies. Few artists have manifested a greater command of the graver than Kilian, whether we consider the facility with which the strokes are turned upon each other, or the firmness with which they are executed; though, by paying too close attention to this part of the art, he neglected the correctness of the outlines, and fatigued the lights with unnecessary work; by which means he broke the masses, and often destroyed the effect of his prints. The naked parts of the human figure are seldom well expressed: the extremities especially are in general heavy, and sometimes incorrect. Upon the works of this master, however, it appears that Balechou formed his taste. His works are exceedingly numerous. There were several other engravers of the same name and family, but of inferior merit.

KILKENNY, a county of Ireland, in the province of Leinster, bounded on the south by that of Waterford, north by Queen's county, west by that of Tipperary, east by those of Wexford and Catherlogh, and north-west by Upper Ossory. Its greatest length from north to south is thirty-eight miles; and breadth from east to west eighteen. It contains ten baronies, and is one of the most healthy, pleasant, and populous counties in Ireland. It contains 287,650 Irish acres, 172 parishes, and one borough.

KILKENNY, the capital of the above county, lies seventy-five miles south-west of Dublin. It was named from the cell or church of Canice, a learned monk of this county; and is one of the most elegant cities in the kingdom. It is the seat of the bishop of Ossory, which was translated from Agabo in Ossory, about the end of Henry II.'s reign, by bishop O'Dullany. The city is pleasantly situated on the Neor, a navigable river that runs into the harbour of Waterford. It is said that its air is without fog, its water without mud, its fire without smoke, referring to the well-known Kilkenny coal, and its streets paved with marble, of which there are large quarries near the town. Its color is black, it takes a fine polish, and is beautifully intermixed with white granite. The air too is very salubrious. The city is governed by a mayor, recorder, aldermen, and sheriffs. This city was once a place of great importance, as appears by the venerable ruins yet remaining of churches, monasteries, and abbeys; which, even in their dilapidated state, exhibit such specimens

of taste in architecture, as may vie with any modern improvements, and the remains of its gates, towers, and walls, show it to have been a place of great strength. Here too parliaments were anciently held. It has two churches, and several catholic chapels; barracks for a troop of horse and four companies of foot; a market twice a week, and seven fairs. The cathedral, which stands in a sequestered situation, is a venerable Gothic pile. The bishop's palace is a handsome building, and communicates by a covered passage with the church. The castle was built in 1195, on the site of one destroyed by the Irish in 1173. The site was originally a conoid, the elliptical side abrupt and precipitous, with the river running rapidly at its base; here the natural rampart was faced with a wall of solid masonry forty feet high; the other parts were defended by bastions, curtains, towers, and out-works; and on the summit the castle was erected, which is now in the possession of the Ormond family. The college, originally founded by the Ormond family, has been rebuilt in an elegant style. There are two very fine bridges of cut marble over the Nore. The Ormond family also built and endowed a free-school in this city. Here are the ruins of three old monasteries, called St. John's, St. Francis's, and the Black Abbey. The chief manufactures are, coarse woollen clothes, fine blankets, and of starch. The Kilkenny coal-pits are within nine miles of the town. This city was incorporated by James I. in 1609. The borough of St. Canice, or Irishtown, enjoyed very ancient prescriptive rights. A close roll, of 5 Edward III. A. D. 1376, forbids the magistrates of Kilkenny to obstruct the sale of victuals in the market of Irishtown; and, lest the ample grants made to Kilkenny might be interpreted to include Irishtown, the corporation of the latter secured their ancient rights by letters patent, 15 Edward IV. A. D. 1474. These renew their former privileges, and appoint a portrieve to be chosen every 21st September, and sworn into office on the 11th October. The portrieve's prison was at Troy-gate. Whenever the mayor of Kilkenny came within Water-gate, he lowered the point of the city sword, to show he claimed no pre-eminence within the borough.

KILL, *v. a.* } Anciently to quell. Saxon
KIL'LER, *n. s.* } cpellan; Dut. *kelen*. To deprive of life; to put to death, as an agent; to destroy animals for food; to deprive of life as an instrument; to deprive of vegetative life. Killer, one who destroys life.

Ye have brought us forth into this wilderness, to *kill* this whole assembly with hunger.
Exodus xvi. 3.

Shall I take my bread and my flesh, that I have *killed* for my shearers. 1 *Sam.* xxv. 11.

But at the lest—though I therwith me *kill*—
I shall not spare to waile and wepe my fill.
Chaucer. Lament of Mary Magdaleine.

Wilt thou for the old lion hunt, or fill
His hungry whelps? and for the *killer kill*,
When couched in dreadful dens? *Sandys.*

Darest thou resolve to *kill* a friend of mine?
—Please you, I'd rather *kill* two enemies.
Shakspeare. Richard III.

Try with oil, or barm of drink, so they be such things as *kill* not the bough. *Bacon.*

The medicines, if they were used inwards, would *kill* those that use them; and therefore they work potently, though outwards. *Bacon.*

What sorrow, what amazement, what shame was in Amphialus, when he saw his dear foster-father find him the *killer* of his only son! *Sidney.*

So rude a time,
When love was held so capital a crime,
That a crowned head could no compassion find,
But died, because the *killer* had been kind.
Waller.

If *killing* birds be such a crime,
(Which I can hardly see,)
What think you, Sir, of *killing* time,
With verse addressed to me?
Cowper. Beau's Reply.

When the rich soil teemed with youth's generous flowers,
I felt thee, sunshine.—Now thy rayless light,
Falls like the cold moon on a blasted heath,
Mocking its desolation:—Speak thy vow—
I will not chide thee if the words should *kill* me.
Maturin. Bertram.

Would that the hour were come! we will not scotch,
But *kill*. *Byron. Marino Faliero.*

KILLALA, a sea-port of Ireland, in the county of Mayo, formerly a bishop's see, twenty-one miles north of Castlebar. This town, during the rebellion, suffered much by the depredations of both rebels and loyalists: but the bishop of Killala, who was himself a very loyal subject, says that the latter were by far the most unmerciful; plundering, burning, and destroying wherever they went.

KILLALOE, a town and once a bishop's see in the county of Clare and province of Munster, in Ireland, one hundred and ten miles from Dublin, otherwise called Lounia. It was anciently written Kill-da-Lua, i.e. the church of Lua, from Lua, or Molua, who, about the beginning of the sixth century, founded an abbey near this place. St. Molua appears to have derived his name from Loania, the place of his residence, as was customary amongst the ancient Irish. On the death of St. Molua, St. Flannan his disciple, and son of the chief of the district, was consecrated bishop of this place at Rome about A. D. 639, and the church endowed with considerable estates, by his father Theodoric. Towards the close of the twelfth century, the ancient see of Roscrea was united to that of Killaloe. At Killaloe is a bridge over the Shannon of nineteen arches; and here is a considerable salmon fishery. There are many ancient buildings in and about this town. The cathedral is a Gothic edfice in form of a cross, with the steeple in the centre, supported by four arches; it was built by Donald, king of Limerick, in 1160. There is a building near it, once the oratory of St. Molua; and there is another of the same kind in an island on the Shannon, having marks of still higher antiquity. The see-house of the bishop is at Clarisford, near to Killaloe. Adjoining to the cathedral are yet the remains of the mausoleum of Brien Boru.

KILLARNEY, a post-town of Ireland, in the county of Kerry and province of Munster, seated near Lough Lean, or the Lake of Killarney. It is 224 miles from Dublin, and has two fairs. Within a mile and a half of this place are the

ruins of the cathedral of Aghadoe, an ancient bishopric united to Ardfert.

KILLARNEY, a beautiful lake of Ireland, in the county of Kerry, otherwise called Lough Lean, from its being surrounded by high mountains. It is divided into three parts, called the Lower, Middle, and Upper Lake. The northern, or lower lake, is six miles in length, and from three to four in breadth. On the side of one of the mountains is O'Sullivan's Cascade, which falls into the lake with a tremendous roar. The view of this sheet of water is uncommonly fine, appearing as if it were descending from an arch of wood, which overhangs it above seventy feet in height from the point of view. The islands are not so numerous in this as in the upper lake; but there is one of uncommon beauty, called Innisfallen, nearly opposite O'Sullivan's Cascade. The shore is formed into a variety of bays and promontories. Among the distant mountains Turk appears an object of magnificence; and Mangerton's more lofty, though less interesting summit, soars above the whole. Here is a celebrated rock, called the Eagle's Nest, which produces wonderful echoes; the report of a single cannon is answered by a succession of peals resembling the loudest thunder, which seem to travel the surrounding scenery, and die away among the distant mountains. The upper lake is four miles long, and from two to three broad. It is almost surrounded by mountains, from which descend a number of beautiful cascades. The islands in this lake are numerous, and afford an amazing variety of picturesque views. The centre lake, which communicates with the upper, is small in comparison with the other two, and cannot boast of equal variety; but the shores are, in many places, indented with beautiful bays, surrounded by dark groves of trees. The east boundary is formed by the base of Mangerton, down the steep side of which descends a cascade, visible for 150 yards. This fall of water is supplied by a circular lake near the summit of the mountain, called the Devil's Punch-Bowl; which, on account of its immense depth, and the continual over-flow of water, is considered as one of the greatest curiosities in Killarney. One of the best prospects which this admired lake affords, is from a rising ground near the ruined cathedral of Aghadoe.

KILLAS, a genus of stones belonging to the argillaceous class, found chiefly in Cornwall in England. Its texture is either lamellar or coarsely granular; the specific gravity from 2630 to 2666. It contains sixty parts of siliceous earth, twenty-five of argillaceous, nine of magnesia, and six of iron. The greenish kind contains more iron, and gives a green tincture to the nitrous acid.

KILLICRANKIE, a noted pass of Perthshire, formed by the lofty mountains impending over the Garrie, which rushes through a deep, darksome channel beneath. In the last century this was a pass of much danger and difficulty; a path hanging over a tremendous precipice, threatened the traveller with destruction upon the least false step. At present a fine road, formed by the soldiery, gives an easy access to the Highlands; and the two sides are joined by a fine arch. Near the north end of this pass, in its open and unimproved state, was fought, in 1689, the battle of Killiecrankie, between the adherents of James II. under viscount Dundee, and of William III. under general Mackay. Dundee's army was very much inferior to that of Mackay's. When he came in sight of the latter, he found them formed in battalions ready for action. They consisted of 4500 foot, and two troops of horse. The Highlanders, under Dundee, amounted to little more than half that number. These he ranged instantly in order of battle. Maclean, with his tribe, formed the right wing. The Macdonalds of Sky, under their chieftain's eldest son, formed the left. The Camerons, the Macdonalds of Glengary, the followers of Clanronald, and a few Irish auxiliaries, were in the centre. A troop of horse was placed behind, under Sir William Wallace. The officers sent by James from Ireland were distributed through the whole line. His whole army stood in sight of the enemy for several hours on the steep side of a hill which faced the narrow plain where Mackay had formed his line. Dundee wished for the approach of night; a season suited for either victory or flight. At 5 P. M. a kind of slight skirmish began between the right wing of the Highlanders and the left of the enemy. But, neither army wishing to change their ground, the firing was discontinued for three hours. Dundee in the mean time flew from tribe to tribe, and animated them to action. At eight he gave the signal for battle, and charged the enemy in person at the head of the horse. The Highlanders, in deep columns, rushed suddenly down the hill. They kept their shot till they were within a pike's length of the enemy; and having fired their muskets, fell upon them sword in hand. Mackay's left wing could not for a moment sustain the shock. They were driven by the Macleans with great slaughter from the field. The Macdonalds on the left of the Highlanders were not equally successful. Colonel Hastings's regiment of foot stood their ground. They even forced the Macdonalds to retreat. Maclean with a few of his tribe, and Sir Evan Cameron at the head of his clan, fell suddenly on the flank of this gallant regiment, and forced them to give way. The slaughter ended not with the battle; 2000 fell in the field and the flight. The tents, baggage, artillery, and provisions of the enemy, and even king William's Dutch standard, which was carried by Mackay's regiment, fell into the hands of the Highlanders. The victory was now complete. But the Highlanders lost their gallant leader. Perceiving the unexpected resistance of colonel Hastings's regiment, and the confusion of the Macdonalds, Dundee rode rapidly to the left wing. As he was raising his arm, and pointing to the Camerons to advance, he received a ball in his side. The wound proved mortal; and with Dundee fell all the hopes of king James.

KILLIGREW (Thomas), son of Sir Robert Killigrew, knight, was born in 1611. He was page of honor to king Charles I., and groom of the bed-chamber to Charles II., with whom he suffered many years exile; during which he applied his leisure hours to the study of poetry, and

to the composition of several plays. After the Restoration he continued in high favor with the king; and, while he exercised his privilege as a jester, often uttered bold and useful truths. One anecdote will afford a specimen. One day Killigrew called on the king in his private apartments, habited like a pilgrim who was bent on a long journey. The king, surprised at the oddity of his appearance, asked him what was the meaning of it, and whither he was going? 'To fetch back Oliver Cromwell,' rejoined he, 'that he may take some care of the affairs of England, for his successor takes none at all.' Killigrew died in 1682, and was buried in Westminster Abbey.

KILLILEAGH, or KILLY-LEAGH, a town of Ireland, in the county of Down, eighty miles north-east from Dublin. It is the principal town in the barony of Duffrin; and seated on an arm of the lake of Strangford, from which it is supplied with a great variety of fish. The Hamiltons, earls of Clanbrassil, had a castle here at the upper end of the great street; at the lower end is a small bay, where ships lie sheltered from all winds; in the town are some good houses, a horse barrack, and a presbyterian meeting-house. On an eminence at a small distance from the town is a handsome church in the form of a cross. This place suffered much in the year 1641. A linen manufacture is carried on in it, and fine thread made, for which there is a great demand. The celebrated Sir Hans Sloane was born here, and his father Alexander Sloane was at the head of the Scottish colony which king James I. settled in it. The town was incorporated by that monarch.

KILLOUGH, or Port St. Ann's a sea-port town of Ireland, in the county of Down, seventy-six miles from Dublin. It lies north of St. John's Point, and has a good quay, where ships lie very safe. The town is agreeably situated; the sea flowing close by the houses, where ships ride in full view of the inhabitants. It has a good church, and a horse barrack, with good fishing in the bay; but the principal trade consists in the exportation of barley, and the importation of commodities for the adjacent country. A manufacture of salt is also carried on, and five fairs held in it. Near the town is a chartered working-school for the reception of twenty children. There is a remarkable well here, called St. Scordins's well, highly esteemed for the extraordinary lightness of its water. It gushes out of a high rocky bank upon the shore, and never diminishes its quantity in the driest season. There is also a mineral spring near the school, the waters of which are both purgative and emetic. At a small distance from the town near the sea is a rock in which there is an oblong hole, whence, at the ebbing and flowing of the tide, a strange noise is heard, resembling the sound of a huntsman's horn. The harbour is tolerably safe and commodious; some degree of caution is however necessary in entering it, for a rock stands in the middle of the entrance covered at half flood, commonly called the water rock. Either to the east or west of this rock is a secure passage, the inlet lying south by east and north by west. On the west side of the rock, open to Coney Island, is a strong quay, and a basin for ships, where they are defended from all winds, within which the harbour on both sides affords good anchorage for vessels of 150 tons. At the end of the quay the channel is 400 yards wide.

KIL'LOW, *n. s.* This seems a corruption of coal, and low a flame, as soot is thereby produced.

An earth of a blackish or deep blue colour, and doubtless had its name from *kollow*, by which name, in the North, the smut or grime on the backs of chimneys is called. *Woodward.*

KILLYBEGS, a borough of Ireland, in the county of Donegal, and province of Ulster, 123 miles from Dublin. It is situated on the north side of Donegal Bay; but is a place of no great trade, though it has a harbour spacious enough to contain a large fleet; it has a bold and ample opening to the sea on the south, and is secured within by the shelter of high lands surrounding it: so that vessels may enter at any time of the tide, there being from five to eight fathom water. The herring fishery is the most considerable of any carried on here. It has two fairs.

KILMALLOCK, a town of Ireland, in the county of Limerick, sixteen miles from Limerick, and 107 from Dublin.—This town makes a conspicuous figure in the military history of Ireland. In the sixteenth century it was a populous place; and the remains of the wall, which entirely surrounded the town, are still to be seen. Edward the VI. granted a charter to it with many privileges, as did queen Elizabeth another, dated 24th of April 1584. In 1598 it was invested by the Irish forces, when the earl of Ormond hastened to its relief, and arrived in time to raise the siege: here was also some contest during the grand rebellion in 1641 and 1642. By an inquisition, 11th of August 29 Eliz. it appears that there had been an abbey in Kilmallock, called Flacisphaghe; on which a stone house was erected. Sir James Ware informs us that an abbey of Dominicans, was built here in the thirteenth century by the sovereign, brethren, and commonalty. The parish church was formerly an abbey for regular canons, founded by St. Mochoallog, who died between the years 639 and 656. A fair is held on Whitsun-Tuesday.

KILMARNOCK, a populous and flourishing town of Ayshire, noted for its manufacture of carpets, milled hosiery, and Scotch bonnets. It is a burgh of barony, governed by two baillies and seventeen councillors. Its first charter was granted in 1541, in favor of Thomas lord Boyd; its second in 1572, to William earl of Kilmarnock. In 1700 the magistrates obtained a grant from the Kilmarnock family of the whole common good, customs, &c., of the burgh. It has five incorporations, and two flourishing public schools, besides many private ones. In 1810 two acts of parliament were passed for paving, lighting, and watching the burgh and suburbs, for erecting a bridewell and a work-house, and for various other purposes of public utility. Among the other edifices, built under these acts, are, an elegant new town-house, an academy, and coffee-room. It is fifteen miles south-west of Glasgow.

KILMORE, a bishop's see of Ireland in the county of Cavan. It was called in former ages

Clunes, or Clunis, i. e. the sequestered place; and is situated near Loch Ern. St. Fedlimid founded this bishopric in the sixth century; it was afterwards removed to an obscure village called Triburna: where it continued until 1454, when Andrew Mac-Brady, bishop of Triburna, erected a church on the site of that founded by St. Fedlimid, to whose memory it was dedicated, and named Kilmore, or the great church. At present there is neither cathedral, chapter, nor canon, belonging to this see, the small parish church contiguous to the episcopal house serving the purpose of a cathedral.

KILN, *n. s.* Sax. cyln; Swed. *kolna; Lat. culina*, an oven. A stove; a fabric formed for admitting heat, in order to dry or burn things contained in it.

I'll creep up into the chimney.—There they always use to discharge their birding-pieces: creep into the *kiln* hole. *Shakspeare.*

After the putting forth in sprouts, and the drying upon the *kiln*, there will be gained a bushel in eight of malt. *Bacon.*

Physicians chuse lime which is newly drawn out of the *kiln*, and not slacked.

Moxon's Mechanical Exercises.

KILN'DRY, *v. a.* Kiln and dry. To dry by means of a kiln.

The best way is to *kilndry* them. *Mortimer.*

KILWORTH, a town of Ireland, in the county of Cork, 108 miles south-west of Dublin. It is a flourishing place, with six fairs and a good church, at the foot of a large ridge of mountains called Kilworth mountains, through which a good turnpike road is carried from Dublin to Cork; below the town runs the river Funcheon, which is well stored with salmon and trout, and a mile south of this runs into the Blackwater. At this place is Moorpark, the superb seat of lord Mountcashel; and near it stands the castle of Clough-leagh, boldly situated on the Puncheon, and which has stood several sieges.

KI'MBO, *adj.* Ital. *a schembo.* Crooked; bent; arched.

And set his hand in *kenebowe*, he lakked never a faute. *Chaucer. The Merchantes Second Tale.*

The *kimbo* handles seemed with bear's-foot carved,
And never yet to table have been served.
Dryden's Virgil.

He observed them edging towards one another to whisper; so that John was forced to sit with his arms a *kimbo*, to keep them asunder. *Arbuthnot.*

KIMCHI. We have three learned rabbies of this name in the twelfth, and the commencement of the thirteenth centuries. David and Moses were the sons of rabbi Joseph, born in Spain: all three were of considerable literary attainments; yet David exceeded both his father and brother in reputation. He is considered as the best grammarian of his nation. His known works are, a Grammar and Lexicon of the Hebrew tongue, which furnished Buxtorf with the materials for his Thesaurus, and Lexicon Linguæ Hebreæ. His commentaries on the books of the Old Testament are also esteemed. His grammar first appeared at Venice in 1545, and was soon followed by a treatise on the Hebrew radicals. Rabbi David passed the principal part of his life in Narbonne, and in the schism which took place between the Spanish and French Jews in 1232, respecting the books of Maimonides, was appealed to as an arbitrator. He lived to an extreme old age, and died in 1240. The best edition of his Dictionarium Talmudicum is that of 1506, folio.

KIN, *n. s.*
KIND, *adj.* & *n. s.*
KIND'LY, *adv.* & *adj.*
KIND'NESS, *n. s.*
KIN'DRED, *n. s.* & *adj.*
Sax. cynne; Lat. *gigno;* Greek γενος. Relation of consanguinity or affinity; of the same race, family, or generical class; a diminutive termination from kind, a child, Dutch; as manikin, minikin, Thomkin, Wilkin. Kind; benevolent; favorable; affectionate; bland; mild: kindness, benevolence; goodwill; love: kindly, in a courteous or benevolent manner: kind, race; generical class; relation: kindred, relative; congenial; cognate. Kind in Teutonic English answers to genus, and sort to species; though this distinction, in popular language, is not always observed: particular nature, manner, way, or sort.

And though so be that your *kinrede* be more stedefast and siker than the *kin* of your adversaries; yet natheles youre *kinrede* is but a far *kinrede;* they ben litel sibbe to you and the *kin* of youre enemies ben nigh sibbe to them: and, certes, as in that, hir condition is better than yours. *Chaucer. Tale of Melibeus.*

There mighten men the roiall egle finde,
That with his sharpè loke persieth the son;
And other egles of a lower *kinde*,
Of whiche that clerkes well devisen can.
Id. The Assemble of Foules.

Thus far we have endeavoured in part to open of what nature and force laws are, according to their *kinds.* *Hooker.*

The burst
And the ear-deafening voice of the oracle,
Kin to Jove's thunder, so surprised my sense,
That I was nothing. *Shakspeare. Winter's Tale.*

I sometimes lay here in Corioli,
At a poor man's house: he used me *kindly.*
Shakspeare.

The skilful shepherd peeled me certain w nds,
And in the doing of the deed of *kind*,
He stuck them up before the fulsome ewes. *Id.*

An old mothy saddle, and the stirrups of no *kindred.* *Id.*

Tumultuous wars
Shall *kin* with *kin*, and *kind* with *kind* confound. *Id.*

He did give the goods of all the prisoners unto those that had taken them, either to take them in *kind*, or compound for them. *Bacon's Henry VII.*

You must use them with fit respects, according to the bonds of nature; but you are of *kin*, and so a friend to their persons not to their errours.
Id. Advice to Villiers.

Then is the soul from God; so pagans say,
Which saw by nature's light her heavenly *kind*,
Naming her *kin* to God, and God's bright ray,
A citizen of Heaven, to earth confined. *Davies.*

Like them their armour seemed full near of *kin:*
In this they only differ; the' elder bent
His higher soul to Heaven; the younger twin
'Mongst mortals here his love and *kindness* spent.
Fletcher's Purple Island.

This competency I beseech God I may be able to digest into *kindly* juice, that I may grow thereby.
Hammond.

Nor needs thy juster title the foul guilt
Of Eastern kings, who, to secure their reign,
Must have their brothers, sons, and *kindred* slain.
Denham.

These soft fires
Not only enlighten, but with *kindly* heat,

Of various influence, foment and warm,
Temper or nourish. *Milton's Paradise Lost.*
As when the total *kind*
Of birds, in orderly array on wing,
Came summoned over Eden, to receive
Their names of thee. *Id.*
That both are animalia
I grant; but not rationalia;
For though they do agree in *kind*,
Specifick difference we find. *Hudibras.*

The odour of the fixed nitre is very languid; but that which it discovers, being dissolved in a little hot water, is altogether differing from the stink of the other, being of *kin* to that of other alcalizate salts. *Boyle.*

From Tuscan Coritum he claimed his birth;
But after, when exempt from mortal earth,
From thence ascended to his *kindred* skies
A god. *Dryden.*
Through all the living regions do'st thou move,
And scatterest where thou goest the *kindly* seeds of love. *Id.*
Tho' unhappy Palamon,
Whom Theseus holds in bonds, and will not free,
Without a crime, except his *kin* to me. *Id.*
Some of you, on pure instinct of nature,
Are led by *kind* to' admire your fellow-creature. *Id.*
The father, mother, and the *kin* beside,
Were overborne by fury of the tide. *Id.*

Some of the ancients, like *kind* hearted men, have talked much of annual refrigeriums, or intervals of punishment to the damned, as particularly on the great festivals of the resurrection and ascension. *South.*

God and Nature do not principally concern themselves in the preservation of particulars, but *kinds* and companies. *Id. Sermons.*

His grief some pity, others blame;
The fatal cause all *kindly* seek. *Prior.*

Love and inclination can be produced only by an experience or opinion of *kindness* to us. *Rogers's Sermons.*

Some acts of virtue are common to Heathens and Christians; but I suppose them to be performed by Christians after a more sublime manner than among the Heathens; and even when they do not differ in *kind* from moral virtues, yet differ in the degrees of perfection. *Atterbury.*

The tax upon tillage was often levied in *kind* upon corn, and called decumæ, or tithes. *Arbuthnot.*

He with a hundred arts refined,
Shall stretch thy conquest over half the *kind*. *Pope.*
Ye heavens, from high the dewy nectar pour,
And in soft silence shed the *kindly* shower! *Id.*
Who, with less designing ends,
Kindlier entertain their friends;
With good words, and countenance sprightly,
Strive to treat them all politely. *Swift.*
Heaven born who bringest our *kindred* home again,
Rescued, and givest eternity to Troy,
Long have the Laurentum and the Latian plains
Expected thee.
Cowper. Translation from Virgil's Æneid.
The separation of chief friends
Is what their *kindness* most intends;
Their sport is your dissension. *Id. Friendship.*
What avails it?
The wretched have no country: that dear name
Comprises home, *kind kindred*, fostering friends,
Protecting laws, all that binds man to man—
But none of these are mine. *Maturin. Bertram.*
Ripped from all *kindred*, from all home, all things
That make communion sweet, and soften pain—
Byron. Prophecy of Dante.
I say he's innocent! And, were he not so,
Is our own blood and *kin* to shrink from us
In fatal moments? *Id. Two Foscari.*

KINCARDINE, a town of Perthshire, in the parish of Tulliallan. It is seated on the banks of the Forth, and was formerly called West Pans, from fifteen salt pans, wherein a salt manufacture was anciently carried on in it. It has a post-office and two weekly markets on Wednesday and Saturday. It has a good road-stead, where 100 vessels may ride with safety. They import wood, iron, flax, linseed, &c., from Holland and the Baltic; barley from England, &c., and export coals to Norway, Sweden, &c., and some of them are in the Mediterranean and Levant trade. Vessels of 200 and 300 tons have been built here.

KINCARDINESHIRE, or MEARNS. See MEARNS.

KIN'DLE, *v. a.* & *v. n.* } Saxon cyndelan;
KIND'LER, *n. s.* } Welsh cinnu. To set on fire; to make to burn; to inflame the passions; to exasperate; to heat or fire the mind; to catch fire; to bring forth young in rabbits: a kindler, one who lights a fire, or irritates and exasperates.

He hath *kindled* his wrath against me, and counteth me as one of his enemies. *Job* xix. 11.

When thou walkest through the fire, thou shalt not be burnt, neither shall the flame *kindle* upon thee. *Isaiah* xliii. 2.

He will take thereof, and warm himself; yea, he *kindleth* it, and baketh bread. *Id.* xliv. 15

————————, but his enemie
Had *kindled* such coles of displeasure,
That the good man noulde stay his leasure,
But home him hasted with furious heate
Encreasing his wrath with many a threate.
Spenser. Shepheardes Calender.
I've been to you a true and humble wife;
At all times to your will conformable:
Ever in fear to *kindle* your dislike. *Shakspeare.*
Are you native of this place?
As the coney that you see dwells where she is *kindled*. *Id.*

I was not forgetful of those sparks, which some men's distempers formerly studied to *kindle* in parliaments. *King Charles.*

Thus one by one *kindling* each other's fire,
'Till all inflamed, they all in one agree. *Daniel.*
Each was a cause alone, and all combined
To *kindle* vengeance in her haughty mind. *Dryden.*

If the fire burns vigorously, it is no matter by what means it was at first *kindled*: there is the same force and the same refreshing virtue in it, *kindled* by a spark from a flint, as if it were *kindled* from the sun. *South.*

Now is the time that rakes their revels keep
Kindlers of riot, enemies of sleep. *Gay.*
There soon ye shall perceive a *kindling* flame
Glow for that infant God from whom it came.
Cowper. Nativity.
Thou sun! which shinest on these things, and Thou!
Who *kindlest* and who quenchest suns!—Attest!
I am not innocent—but are these guiltless?
Byron. Marino Faliero.

KINDRED, in law, persons related to one another, whereof the law reckons three degrees or lines viz. the descending, ascending, and collateral lines. See CONSANGUINITY, and INHERIT-

ANCE. On there being no kindred in the descending line, the inheritance passes in the collateral one.

KINE, *n. s.* Sax. cuna; plur. of cow.

To milk the *kine*,
Ere the milk-maid fine
Hath opened her eyne. *Ben Jonson.*

A field I went, amid' the morning dew,
To milk my *kine*. *Gay.*

When Aulus the nocturnal thief made prize
Of Hermes, swift-winged envoy of the skies,
Hermes, Arcadia's king, the thief divine,
Who, when an infant, stole Apollo's *kine*.
Cowper. A Thief.

——— in this blazing palace,
And its enormous walls of reeking ruin,
We leave a nobler monument than Egypt
Hath piled in her brick mountains, o'er dead kings
Or *kine*, for none know whether those proud piles
Be for their monarch, or their ox-god Apis.
Byron. Sardanapalus.

KING, *n. s.* & *v. a.*, KING'DOM, *n. s.*, KING'LY, *adj.*, KING'LIKE, *adj.*, KING'SHIP, *n. s.* Teut. *cuning* or *cyning*. Sovereign dignity. In the primitive tongue it signifies stout or valiant, the kings of most nations being, in the beginning, chosen by the people on account of their valor and strength.—Verstegan. Monarch; supreme governor; used by Bacon in the feminine: a card with the picture of a king: king at arms, a principal officer at arms, that has the pre-eminence of the society; of whom there are three in number, viz. Garter, Norroy, and Clarencieux.—Phillips. King, to supply with a king; to make royal; to raise to royalty: kingdom, the territories subject to a monarch; a particular class or order of beings, in the language of naturalists; a region or tract of country: kingly, kinglike, royal; like a monarch: noble; august; magnificent; of or belonging to a king; with an air of superior dignity: kingship, royalty; monarchy.

With Arcita, in stories as men find,
The gret Emetrius the *King* of Inde,
Upon a stede bay, trapped in stele,
Covered with cloth of gold diapred wele,
Came riding like the god of armes, Mars.
Chaucer. The Knightes Tale.

The great *King of kings*
Hath in the table of his law commanded
That thou shalt do no murder.
Shakspeare. Richard III.

True hope is swift, and flies with swallows' wings;
Kings it makes gods, and meaner creatures *kings*.
Shakspeare.

I am far better born than is the *king*;
More like a *king*, more *kingly* in my thoughts.
Id.

The watery *kingdom* is no bar
To stop the foreign spirits; but they come,
As o'er a brook, to see fair Portia. *Id.*

England is so idly *kinged*,
Her sceptre so fantastically borne,
That fear attends her not. *Id. Henry V.*

Sometimes am I a *king*;
Then treason makes me wish myself a beggar,
And so I am: then crushing penury
Persuades me, I was better when a king;
Then am I *kinged* again. *Id. Richard II.*

Ferdinand and Isabella, *kings* of Spain, recovered the great and rich *kingdom* of Granada from the Moors. *Bacon.*

And on his shield kind Jonathan imparts
To his soul's friend, his robes and princely name,
And *kingly* throne; which mortals so adore:
And round about was writ in golden ore,
Well might he give him all, that gave him life before.
Fletcher's Purple Island.

Adam bowed low; he, *kingly* from his state
Inclined not. *Milton's Paradise Lost.*

A letter under his own hand was lately shewed me by Sir William Dugdale, *king at arms*. *Walton.*

He was not born to live a subject life, each action of his bearing in it majesty, such a *kingly* entertainment, such a *kingly* magnificence, such a *kingly* heart for enterprizes. *Sidney.*

Yet this place
Had been thy *kingly* seat, and here thy race
From all the ends of peopled earth had come
To reverence thee. *Dryden's State of Innocence.*

The animal and vegetable *kingdoms* are so nearly joined, that if you take the lowest of one, and the highest of the other, there will scarce be perceived any difference. *Locke.*

Thus states were formed; the name of *king* unknown,
Till common interest placed the sway in one:
'Twas virtue only, or in arts or arms,
Diffusing blessings, or averting harms,
The same which in a sire the sons obeyed
A prince the father of a people made. *Pope.*

His hat, which never vailed to human pride,
Walker with reverence took, and laid aside;
Low bowed the rest, he, *kingly*, did but nod.
Dunciad.

The cities of Greece, when they drove out their tyrannical *kings*, either chose others from a new family, or abolished the *kingly* government, and became free states. *Swift.*

Ye shepherds, monarchs, sages, hither bring
Your hearts an offering, and adore your *king*!
Cowper. Nativity.

Ascend my son! thy father's *kingdom* share!
Id. Elegy.

Beset with all the thorns that line a crown,
Without investing the insulted brow,
With the all-swaying majesty of *kings*.
Byron. Marino Faliero.

But not a *kingly* one—I'll none on't: or
If ever I indulge in 't, it shall be
With *kings* my equals. *Id. Sardanapalus.*

KING. The Latin word *rex*, the Scythian *reix*, the Punic *resch*, the Spanish *rey*, and French *roy*, come all, according to Postel, from the Hebrew ראש, rosch, chief, or head. Kings were not known amongst the Israelites till the reign of Saul, though Abimelech usurped a partial royalty over the Shechemites. See ISRAELITES. Most of the Grecian states were governed at first by kings, who were chosen by the people to decide differences, and execute a power which was limited by laws. They commanded armies, presided over the worship of the gods, &c. This royalty was generally hereditary; but if the vices of the heir to the crown were odious to the people, or if the oracle had so commanded, he was cut off from the succession; yet kings were supposed to hold their sovereignty by the appointment of Jupiter. The ensign of majesty was the sceptre, which was made of wood, adorned with studs of gold, and ornamented at the top with some figure; commonly that of an eagle, the bird of Jove.

Rome also was governed at first by kings, who were elected by the people, with the approbation

of the senate, and concurrence of the augurs. Their power extended to religion, the revenues, the army, and the administration of justice. The monarchy subsisted 244 years in Rome, under seven kings. See ROME. Among the Greeks, the king of Persia had anciently the appellation of the great king; the king of France has that of the most Christian king; and the king of Spain that of Catholic king. The kings of England, by the Lateran council, under pope Julius II., had the title of Christianissimus conferred on them; and that of defender of the faith was added by pope Leo X. The title of grace was first given to our kings about the time of Henry IV., that of majesty first to Henry VIII., before which time our kings were called grace, highness, &c. —In all public instruments and letters, the king styles himself nos, 'we;' though, till the time of king John, he spoke in the singular number.

In great Britain the *power* of the king is subject to great limitations: but they are the limitations of wisdom, and the sources of dignity; being so far from diminishing his honor, that they add a particular glory to his crown: for, while other kings are absolute monarchs over innumerable multitudes of slaves, the king of Britain has the distinguished glory of governing a free people, the least of whom is protected by the laws; he has great prerogatives, and a boundless power in doing good; he is at the same time only restrained from acting inconsistently with his own happiness, and that of his people. To understand the royal rights and authority in Britain, we may here briefly consider the *duties* of the king. By the British constitution there are certain duties incumbent on the monarch; in consideration of which, his dignity and prerogative are established by the laws of the land: it being a maxim in the law, that protection and subjection are reciprocal. And these reciprocal duties are what Blackstone apprehends were meant by the convention in 1688, when they declared that king James had broken the original contract between king and people. But, however, as the terms of that original contract were in some measure disputed, being alleged to exist principally in theory and to be only deducible by reason and the rules of natural law, in which deduction different understandings might very considerably differ; it was, after the Revolution, judged proper to declare these duties expressly, and to reduce that contract to a plain certainty. So that, whatever doubts might be formerly raised by weak and scrupulous minds about the existence of such an original contract, they must now entirely cease; especially with regard to every prince who has reigned since the year 1688. The principal duty of the king is, To govern his people according to law. Nec regibus infinita aut libera potestas. And this is not only consonant to the principles of nature, of liberty, of reason, and of society; but has always been esteemed an express part of the common law of England, even when prerogative was at the highest. 'The king (says Bracton, who wrote under Henry III.), ought not to be subject to man; but to God, and to the law: for the law maketh the king; for he is not truly king, where will and pleasure rule, and not the law.' And Fortescue lays it down as a principle, that 'the king of England must rule his people according to the decrees of the laws thereof; insomuch, that he is bound by oath at his coronation to the observance and keeping of his own laws.' But, to obviate all doubts, it is expressly declared by statute 12 & 13 W. III. c. 2, 'that the laws of England are the birthright of the people thereof; and all the kings and queens who shall ascend the throne of this realm, ought to administer the government of the same according to the said laws, and all their officers and ministers ought to serve them respectively, according to the same: and therefore, all the other laws and statutes of this realm, for securing the established religion and the rights and liberties of the people thereof, and all other laws and statutes of the same now in force, are by his majesty, by and with the advice and consent of the lords spiritual and temporal, and commons, and by authority of the same, ratified and confirmed accordingly.' The terms of the original contract between the king and people are now therefore couched in the coronation oath, which, by the stat. 1 W. & M. c. 6, is to be administered to every king and queen who shall succeed to the imperial crown of these realms, by one of the archbishops or bishops of the realm, in the presence of all the people; who on their parts do reciprocally take the oath of allegiance.

It may not here be improper to take a short comparative review of the power of the executive magistrate, or prerogative of the crown as it stood in former days, and as it stands at present. And we cannot but observe, that most of the laws for ascertaining, limiting, and restraining this prerogative, have been made within little more than 150 years; or from the petition of right in 3 Car. I. to the present time. So that the powers of the crown are to all appearance greatly curtailed and diminished since the reign of king James I., particularly by the abolition of the star-chamber and high commission courts, in the reign of Charles I., and by the disclaiming of martial law, and the power of levying taxes on the subject, by the same prince; by the disuse of forest laws for a century past: and by the many excellent provisions enacted under Charles II.; especially the abolition of military tenures, purveyance, and pre-emption; the habeas corpus act; and the act to prevent the discontinuance of parliaments for above three years; and, since the revolution, by the strong and emphatical words in which our liberties are asserted in the bill of rights, and act of settlement; by the act of triennial, since turned into septennial elections; by the exclusion of certain officers from the house of commons; by rendering the seats of the judges permanent, and their salaries independent; and by restraining the king's pardon from obstructing parliamentary impeachments. Besides all this, if we consider how the crown is impoverished and stripped of all its ancient revenues, so that it greatly depends on the liberality of parliament for its necessary support and maintenance, we may perhaps be led to think that the balance is inclined pretty strongly to the popular scale, and that the executive magistrate has neither independence nor power enough left, to form that check upon the lords and commons which the founders of our constitution intended. But, on the other hand, it is to

be considered that every prince, in the first parliament after his accession, has by long usage a truly royal revenue settled upon him for life; and has never any occasion to apply further to parliament for supplies, but upon some public necessity. This restores to him that constitutional independence, which at his first accession seems to be wanting. And then, with regard to power, we may find perhaps that the hands of government are sufficiently strengthened; and that a British monarch is now in no danger of being overborne by either the nobility or the people.

The instruments of power are not perhaps so public and avowed as they formerly were, and therefore are the less liable to jealous and invidious reflections; but they are not the weaker upon that account. In short, our national debt and taxes (besides other inconveniences) have in their natural consequences, thrown such a weight of power into the executive scale of government, as our patriotic ancestors, who gloriously struggled for the abolition of the then formidable parts of the prerogative, would have been very unwilling to confer. Witness the commissioners, and the multitude of dependents on the customs, in every port of the kingdom; the commissioners of excise, and their numerous subalterns, in every inland district; the postmasters and their servants, planted in every town, and upon every public road; the commissioners of the stamps, and their distributors, which are fully as scattered and fully as numerous: the surveyors of houses and windows; the receivers of the land tax; and the commissioners of hackney-coaches; all which are either mediately or immediately appointed by the crown, and removeable at pleasure without any reason assigned: these must give that power, on which they depend for subsistence, an influence amazingly extensive. To this may be added the frequent opportunities of conferring particular obligations, by preference in loans, and other money transactions, which will greatly increase this influence; and that over those persons whose attachment, on account of heir wealth, is frequently the most desirable. All this is the natural, though perhaps the unforeseen consequence of erecting funds of credit, and, to support them, establishing perpetual taxes; the whole of which is entirely new since the restoration in 1660; and by far the greatest part since the revolution in 1688. The same nay be said with regard to the officers in our iumerous army, and the places which the army as created. All which put together give the executive power so effective an influence with respect to the people as will amply make amends for the loss of external prerogative. But see our article LAW.

KING AT ARMS, an officer of great antiquity, and anciently of great authority, whose business is to direct the heralds, preside at their chapters, and have the jurisdiction of the armoury. In England there are three kings of arms, viz. GARTER, CLARENCIEUX, and NORROY. See these articles. These two last are also called provincial heralds, as they divide the kingdom between them into provinces. They have power to visit noblemen's families, to set down their pedigrees, distinguish their arms, appoint persons their arms, and with Garter to direct the other heralds. Anciently the kings at arms were created and crowned by the kings of England themselves; but of late the earl marshal has a special commission at every creation to personate the king. To these may be added Lyon, king at arms for Scotland, who is the second king at arms for Great Britain; and also Ulster, king at arms for Ireland. The regalia of Lyon are, a crown of gold, with a crimson velvet cap, a gold tassel, and an ermine lining; a velvet robe reaching to his feet, with the arms of the kingdom embroidered thereon before and behind in the proper tinctures; a triple row of gold chain round his neck, with an oval gold medal pendant thereto, on one side of which is the royal bearing, and on the other St. Andrew with his cross enamelled in proper colors, and a baton of gold enamelled green, powdered with the badges of the kingdom. Formerly Scotland was divided into two provinces, the one on the north, and the other on the south side of the Forth; and these provinces were under the management of two deputies appointed by the lord Lyon, to superintend the execution of all the business of his office. Before the revolution, the lord Lyon at his admission into office, was solemnly crowned by the sovereign or his commissioner, in presence of the nobility, the officers of state, &c., after a suitable sermon preached in the royal chapel; and his crown was of the same form with the imperial crown of the kingdom. On solemn occasions he wears the regalia above described; at all other times he wears the oval gold medal or badge on his breast, suspended by a broad green riband. He has the absolute disposal of all the offices in his own court, and of the heralds and pursuivant's places. The messengers at arms throughout Scotland are also created by him, and are amenable to his jurisdiction.

Ulster was substituted, as some say, in the room of Ireland king of arms, by Edward VI.; though the king himself in his journal takes notice of it as a new institution. 'There was a king of arms made for Ireland,' says he, 'whose name was Ulster, and his province was all Ireland: and he was the fourth king at arms, and the first herald of Ireland. The patent passed under the great seal of England, with an ample testimony of the necessity and dignity of the office. Whether Ulster was substituted in the room of Ireland king of arms, or else was newly erected, such an officer of the crown of England, on which Ireland is dependent, still continues, and may execute his heraldic order in this kingdom, though out of his province, in as extensive a manner as either Clarencieux or Norroy may do without the limits of either of their marches.

KING (Dr. John), a learned English bishop in the sixteenth century, born at Wornall in 1559, educated at Westminster, and at Christ Church, Oxford. He was appointed chaplain to queen Elizabeth. In 1605 he was made dean of Christ Church, and was for several years vice-chancellor of Oxford. In 1611 he was appointed bishop of London. Besides his Lectures upon Jonah, delivered at York, he published several sermons. King James I. used to style him the king of preachers; and lord chief-justice Coke often de-

clared, that he was the best speaker in the star-chamber in his time.

KING (John Glen), D.D., an English divine, chaplain to the factory at Petersburg, was born in Norfolk, and educated at Caius College, Cambridge, where he graduated. He was appointed medalist to the empress Catharine II. He wrote, 1. The Rites and Ceremonies of the Greek church; with its Doctrine, Worship, and Discipline: 2. Observations on the Climate of Russia, and the Northern Countries, with a View of the Flying Mountains near Petersburg: 3. Observations on the Barberini Vase. He died in 1787.

KING (Sir Peter), lord high chancellor of England, and nephew of the great John Locke, was born in Exeter, in 1669. His father was a grocer in that city, and intended him for the same business; but, his passion for learning soon appearing, he was allowed to follow his inclination. In this he was also encouraged by his uncle, who left him half of his valuable library. By his advice he went to Leyden, and on his return studied the law at the Inner Temple. In 1691 he published anonymously, An Enquiry into the Constitution, Discipline, Unity, and Worship of the Primitive Church within the first 300 years after Christ. London, 1691; 8vo. He afterwards published a second part of this work; which gave rise to a controversy with Mr. Elys. In 1669 he was elected M.P. for Beer-Alston; which he represented in seven successive parliaments. In 1702 he published his History of the Apostles' Creed, a work of great merit and learning. In 1708 he was chosen recorder of London, and knighted. In 1709 he was appointed one of the managers of Dr. Sacheverel's trial. In 1714, on the accession of king George I., he was made lord chief-justice of the common pleas: in 1725 created a peer, by the title of lord King, baron Ockham, &c., and on the 1st of June appointed lord-chancellor. He resigned the seals in 1733, and died in 1734, leaving four sons and two daughters.

KING (William), a facetious English writer in the beginning of the eighteenth century, who was allied to the noble families of Clarendon and Rochester. He was elected student of Christ Church from Westminster school, in 1681, when aged eighteen. He afterwards studied the civil law, and took the degree of J.C.D. He soon acquired a considerable reputation, and obtained great practice. He attended the earl of Pembroke, lord lieutenant of Ireland, into that kingdom, where he was appointed judge advocate, sole commissioner of the prizes, keeper of the records, and vicar-general to the lord primate of Ireland. He at length, however, returned to England, and retired to his student's place at Christ Church. He died December 25th, 1712. His principal witings are, 1. Animadversions on a Pretended Account of Denmark, written by Mr. Molesworth, afterwards lord Molesworth. This work procured Dr. King the place of secretary to princess Anne of Denmark. 2. Dialogues of the Dead. 3. The Art of Love, in imitation of Ovid De Arte Amandi. 4. A volume of poems. 5. Useful Transactions. 6 An Historical Account of the Heathen Gods and heroes. 7. Several translations. Dr. King hated the business of an advocate; but proved an excellent judge, when appointed one of the court of delegates.

KING (William), D.D., archbishop of Dublin in the eighteenth century, was descended from an ancient family in the north of Scotland, but born in the county of Antrim in Ireland. In 1674 he entered into orders. In 1679 he was promoted by Dr. Parker, archbishop of Dublin, to the chancellorship of St. Patrick. In 1687 Peter Manby, dean of Londonderry, having published at London, in 4to., a pamphlet entitled Considerations which obliged Peter Manby to embrace the Catholic Religion, Dr. King immediately wrote an answer. Mr. Manby published a reply, entitled A Reformed Catechism, &c., in Reply to Mr. King's Answer, &c. Dr. King rejoined in A Vindication of the Answer. Mr. Manby dropped the controversy; but dispersed a loose sheet, entitled A Letter to a Friend, showing the Vanity of this Opinion, that every man's Sense and Reason are to Guide Him in Matters of Faith. This Dr. King refuted in A Vindication of the Christian Religion and Reformation, &c. In 1689 he was twice confined in the tower by order of king James II. and the same year commenced D.D. In 1690, upon king James's retreat to France after the battle of the Boyne, he was advanced to the see of Derry. In 1692 he published at London, in 4to., The State of the Protestants of Ireland under the late King James's Government, &c. He had by him, at his death, attested vouchers of every particular fact alleged in this book, which are now in the hands of his relations. In 1693, finding the great number of Protestant dissenters in his diocese of Derry increased by a vast addition of colonies from Scotland, Dr. King, to persuade them to conformity to the established church, published A Discourse Concerning the Inventions of Men in the Worship of God. Mr. Joseph Boyle, a dissenting minister, wrote an answer. Replies and rejoinders followed. In 1702 he published at Dublin, in 4to., his celebrated Treatise De Origine Mali. Edmund Law, M.A. fellow of Christ's College, Cambridge, published a translation of this, with very valuable notes, in 4to. In the second edition he has inserted a collection of the author's papers on this subject, which he had received from his relations. In this excellent treatise Dr. King proves, that there is more moral good in the earth than moral evil. His sermon, preached at Dublin in 1709, was published under the title of Divine Predestination and Foreknowledge Consistent with the Freedom of Man's Will. This was attacked by Anthony Collins, esq. in a pamphlet entitled A Vindication of the Divine Attributes, &c. He published likewise, A Discourse concerning the Consecration of Churches; showing what is meant by dedicating them, with the grounds of that office. He died in 1720. Dr. King was witty as well as profound. Being disappointed in his expectations of the primacy of Ireland on the death of archbishop Lindsey, and hearing it was assigned as a reason for passing him over, that he was too far advanced in years, he received Dr. Boulter, the new primate, at his first visit, with

out the compliment of rising to salute him, apologising for the incivility by saying, 'My lord, I am sure your grace will forgive me, because you know I am too old to rise.'

KING (William), LL.D., principal of St. Mary's Hall Oxford, was born at Stepney in Middlesex in 1685. He graduated in 1715, was made secretary to the duke of Ormond, and earl of Arran, as chancellors of the university; and principal, on the death of Dr. Hudson, in 1719. When he stood candidate for M.P. for the university, he resigned his office of secretary, but enjoyed his other preferment to his death. Dr. Clark, who opposed him, carried the election; and after this disappointment, he, in 1727, went over to Ireland, where he wrote an epic poem, called The Toast, a political satire, printed and given away to his friends, but never sold. On the dedication of Dr. Radcliff's library, in 1749, he delivered a Latin oration in the theatre at Oxford, which was received with the highest acclamations; but when printed was attacked in several pamphlets. Again, at the contested election in Oxfordshire, 1755, his attachment to the Tory interest drew on him the resentment of the Whigs, and he was libelled in newspapers and pamphlets, against which he defended himself in an apology, and warmly retaliated on his adversaries. He wrote several other pieces, and died in 1762. He was a polite scholar, an excellent orator, an elegant and easy writer, and much esteemed for his learning and wit.

KING AND QUEEN COUNTY, a county of the east part of Virginia, bounded N. N. E. by Essex and Middlesex counties, east by Gloucester county, S. S. W. by King William county, and west by Caroline county. Distance from Washington 140 miles. Chief town, Dunkirk.

KING GEORGE, a county of the north-east part of Virginia, bounded north-west and north by the Potomac, east by Westmoreland county, south by the Rappahannock, and west by Stafford county. Distance from Washington west eighty miles.

KING GEORGE'S ISLANDS, two islands of the South Pacific Ocean, discovered by Byron, in 1765, and visited by captain Cook in 1773. On commodore Byron's attempting to land, he was opposed by the natives, and, a shot or two being fired, one man was killed. The rest fled; but two canoes were brought off to the ship, of curious workmanship. One was thirty-two feet long: they consisted of well-wrought planks sewed together, and over every seam there was a strip of tortoise-shell, cleverly fastened. A mast was hoisted in each of them, and a matting sail. The houses were low hovels, thatched with cocoa-nut branches. The cocoa-nut tree furnished the natives with food, sails, cordage, timber, and vessels to hold water. The shore appeared to be covered with coral, and pearl oysters. Byron got several boat-loads of cocoa-nuts, a great quantity of scurvy-grass, and excellent fresh water here, but the last is scarce. Long. 149° 2' W., lat. 14° 35' S.

KING GEORGE'S SOUND, a name given by captain Cook to NOOTKA SOUND; which see.

KING GEORGE THE THIRD'S ARCHIPELAGO, an extensive group of islands, so called by Vancouver, on the west coast of North America, extending from north to south about 130 miles. It is at its northern part about forty-five miles broad; but, gradually diminishes to little more than one mile. On the eastern shore of this archipelago Vancouver's party discovered some square grounds in a good state of cultivation, and producing a plant not unlike tobacco. Long. 223° 45' to 225° 37' 30" E., lat. 56° 10' to 58° 18' N.

KING GEORGE THE THIRD'S ISLAND, or OTAHEITE. See OTAHEITE.

KING GEORGE THE THIRD'S SOUND, a large bay on the south coast of New Holland, divided into two harbours, Princess Royal Harbour on the west, and Oyster Harbour on the east, which afford many conveniences for shipping. The entrance is between two distant points, Mount Gardner and Bald Head; and several islands are included within its limits. See HOLLAND, NEW.

KING-AN-FOU, or KYGANFAN, a city of China of the first rank, in the province of Kiangsee, and on the river Kankian, the navigation of which is rather dangerous here. The embassy under lord Amherst observed several new buildings going on, and extensive cotton and linen manufactures here. The gardens under the walls occupy a large space.

KING'-APPLE, *n. s.* A kind of apple.

The *kingapple* is preferred before the jennetting. *Mortimer.*

KING'-CRAFT, *n. s.* King and craft. The art of governing. A word commonly used by king James.

KING'-CUP, *n. s.* King and cup. The name is properly, according to Gerard, King Cob. The flower of the crowfoot; the plant itself.

Strow me the grounde with daffadown-dillies,
And cowslips, and *kingcups*, and loved lillies.
Spenser. Shepheard's Calender.

June is drawn in a mantle of dark grass green, and upon his head a garland of bents, *kingcups*, and maidenhair. *Peacham.*

Fair is the *kingcup* that in meadow blows,
Fair is the daisy that beside her grows. *Gay.*

KING'FISHER, *n. s.* Halcyon. A species of bird.

When dew refreshing on the pasture fields
The moon bestows, *kingfishers* play on shore.
May's Virgil.

Bitterns, herons, sea-gulls, *kingfishers*, and water-rats, are great enemies to fish.
Mortimer's Husbandry.

KING-FISHER. See ALCEDO.

KINGS, BOOKS OF, two canonical books of the Old Testament, containing the history of the kings of Israel and Judah from the beginning of the reign of Solomon down to the Babylonish captivity, for the space of near 600 years. It is generally supposed, and seems very probable, that these books were composed by Ezra, who extracted them out of the public records.

KING'S BENCH. See BENCH.

KINGSBURY, a post town of Washington county, New York, on the east side of the Hudson; fifty-five miles north of Albany, Washington 432. Population 2272. It contains two Baptist meeting-houses.

KING'S COUNTY, a county of Ireland, in the

province of Leinster, so named from king Philip of Spain, husband to queen Mary I. It is bounded on the north by West Meath; on the east by Kildare; on the south by Tipperary and Queen's County, from which it is divided by the Barrow; and by part of Tipperary and Galway on the west, from which it is separated by the Shannon. It is a fine fruitful country, containing 257,510 Irish plantation acres, fifty-six parishes, eleven baronies, and two boroughs. It is about thirty-eight miles long, and from seventeen to thirty broad. The chief town is Philipstown.

KING'S COUNTY, a fertile and well cultivated county of New York, on the west end of Long Island, bounded on the east by Queen's County, north by New York county, west by Hudson's River and the Ocean, and south by the Atlantic. It is ten miles long and eight broad; is divided into six townships; and contained 3063 citizens, and 1432 slaves, in 1795.

KING'S COUNTY, a county of Nova Scotia, comprehending the lands on the south-west and south sides of the basin of Minas. It has considerable settlements on the Habitant, the Canaid, and the Cornwallis, which are navigable for about five miles up.

KING'S-EVIL, *n. s.* King and evil. A scrofulous distemper, in which the glands are ulcerated, commonly believed to be cured by the touch of a king.

Sore eyes are frequently a species of the *kingsevil*, and take their beginning from vicious humours inflaming the tunica adnata. *Wiseman's Surgery.*

KING'S EVIL. See MEDICINE.

KING'SHIP, *n. s.* From king. Royalty; monarchy.

They designed and proposed to me the new-modelling of sovereignty and *kingship*, without any reality of power, or without any necessity of subjection and obedience. *King Charles.*

We know how successful the late usurper was, while his army believed him real in his zeal against *kingship*; but when they found out the imposture, upon his aspiring to the same himself, he was presently deserted and opposed by them, and never able to crown his usurped greatness with the addition of that title which he passionately thirsted after. *South.*

KING'S ISLAND, an island at the west-end of Bass' Straits, about thirty miles long from north to south, and twelve or eleven broad. The highest part is 400 or 500 feet above the level of the sea. It is inhabited only by the kangaroo and wombat; but various species of seals are found on its shores. There is a lake of fresh water here. The hills are covered with wood. The north end of the island is in 39° 36′ S. lat., and 143° 54′ E. long. Distance from the main land forty-eight miles.

KING'S ISLAND, a small island in Behring's Straits, so called by captain Cook.

KING'S ISLAND, an island near the north-west coast of North America, so named by Vancouver. It is about thirty miles in length, and little more than six in breadth, being separated from the continental shore of New Albion, by Banke's canal, and by Fisher's canal from the Princess Royal Islands. Long. 232° 9′ to 232° 43′ W., lat. 51° 56′ to 52° 26′ N.

KING'SPEAR, *n. s.* *Asphodelus.* A plant.

KINGSTON (Elizabeth, duchess of), born in 1720, was the daughter of colonel Chudleigh, governor of Chelsea College. From youth to age she was celebrated for intrigue, and owes her place in history to her remarkable trial for bigamy. She was at first maid of honor to the princess of Wales, the mother of George III.; in which situation she received a proposal of marriage from the duke of Hamilton: but being informed, though falsely, that he had forgotten her while on the continent, she gave her hand privately to captain Hervey, R. N., afterwards earl of Bristol. At about this period of her life, attending a masquerade where George II. came incog., his majesty laid his hand on her exposed bosom, and exclaimed, 'A soft place, Eve.' To which, regardless of his rank, she is said to have replied, laying her hand on the king's head, 'A softer place, your majesty.' Her marriage (August 4th, 1744) had been kept a secret, and her subsequent refusal of advantageous proposals of marriage having offended her mother, she now went abroad with a major in the army. They proceeded to Berlin, where they parted. Here she is said to have been well received by the king of Prussia, and on her return to England she resumed her situation at the British court. Desirous of terminating her union with captain Hervey, she adopted at this time the expedient of tearing the leaf out of the parish register, in which their marriage was entered; but, repenting of this step on his succeeding to the peerage, she contrived to have the leaf replaced. Through all these scenes she was only known to the public as Miss Chudleigh. Not long after, the duke of Kingston made her an offer, on which she endeavored to procure a divorce from lord Bristol. This he at first opposed, but at length assented to it, and the wished-for separation was arranged. On the 8th of March, 1769, she was married to Evelyn Pierrepont, duke of Kingston, on whose death in 1773 she found herself left mistress of a large fortune, under the condition of her not marrying again. But the heirs of the duke commenced a suit against her for bigamy, when she was tried before the house of lords, and found guilty: on her pleading the privilege of peerage, however, punishment of burning in the hand was remitted, and she was discharged on paying the fees. The remainder of her life was spent abroad, and she died at a seat near Fontainebleau in France, August 28th, 1788.

KINGSTON, a principal town of Jamaica, is seated on the north side of the bay of Port-Royal. It was founded in 1693, when the repeated desolations by earthquakes and fires had driven the inhabitants from Port Royal. It extends from a mile to a mile and a half, from north to south, and about as much from east to west on the harbour. According to the original plan it was to be built in the form of a parallelogram, one mile in length by half a mile in breadth; but it has of late years been much extended beyond this limit. The principal church is a large and elegant edifice, with four aisles, and a fine organ. There is also a Presbyterian church, a theatre, a free-school established

in 1729, a poor-house, and a public hospital here. The market is well supplied with poultry, butcher's meat, fish, fruits, and European vegetables. There are also great quantities of the finest pine apples and tropical fruits. This town enjoys the benefit of the sea breezes which blow regularly the greatest part of the year, and temper the heat of the climate; but the acclivity on which the town is situated has the inconvenience of admitting, during the wet season, a free passage to torrents of rain, which often render the streets impassable for wheel-carriages. It is governed by a mayor, twelve aldermen, and twelve common councilmen, a recorder, two solicitors, and a treasurer, and returns three members to the house of assembly. The thermometer ranges between 96° and 76°. Ten miles from Spanish Town.

Kingston, the capital of the island of St. Vincent's in the West Indies, is situated at the head of a bay of this name, on the south-western shore of the island, in St. George's parish. Long. 81° W., lat. 13° 6′ N.

Kingston, a considerable town of Upper Canada, is seated on the north side of the river St. Lawrence, on the eastern extremity of Lake Ontario. It was founded in 1784, on the ground upon which formerly stood Fort Frontenac; it now presents a front of nearly three quarters of a mile, extending in depth about 600 yards. The streets run regularly at right angles with each other, but are not paved: the number of the houses may be estimated at about 450; some of them of stone, but the greater number of wood. The public buildings are a government and court-house, a Protestant and Catholic church, market-house, jail, and hospital, besides the garrison, block-houses, and government magazines, wharfs, and spacious warehouses; in fact, this is now the main entrepôt between Montreal and the settlements along the lakes. The harbour is commodious and well sheltered for ships not requiring more than three fathoms water, and has good anchorage close to the north-eastern extremity of the town. The entrance is defended by a battery on Mississaga Point, and another on Point Frederick. Kingston also possesses one of the best harbours on lake Ontario, and it is a very important naval arsenal of Great Britain in this quarter. 190 miles north-west of Montreal. Long. 76° 40′ W., lat. 44° 8′ N.

Kingston, a township of the United States, in Addison county, Vermont. Population 324. There are numerous small towns of this name in the United States.

Kingston upon Hull. See Hull.

Kingston upon Thames, a corporate town in Surry, with a market on Saturday. A national council was held here in 838, at which Egbert, the first king of all England, with his son Ethelwolf, were present; and several of the Saxon monarchs were crowned here; and close to the north side of the church is a large stone, on which, tradition says, they sat during the ceremony. On the same side was formerly a chapel, adorned with the figures of different kings who had been crowned here. By the inscriptions over these figures it appeared that some of them have been crowned in the market-place, and others in the chapel.—This town sent members to parliament in the reigns of Edward II. and III.; but ceased afterward, in consequence of a petition from the corporation praying to be released from the burden! The Lent assizes are held at this place. Here is a free-school, founded by queen Elizabeth, the school-room of which was an ancient chapel to the hospital of St. Mary Magdalen. An alms-house for twelve poor persons was founded here by William Cleve, esq. alderman of London, which was endowed with lands, the present annual income of which is £120. The wooden bridge over the Thames was the most ancient on that river except London Bridge; it has been succeeded by a modern one at an expense of £40,000. It is ten miles south-west of London.

King William, a county of Virginia, bounded N.N.E. by King and Queen county, S.S.W. by York River, and west by Caroline county.

KING-YUEN-FOU, a city of China, in Quangsee, of the first rank. It is situated on a large river, surrounded by mountains, and inhabited by a very unpolished race. Gold is found in the district.

KING'STONE, *n. s.* *Squatina*. A fish.

KINHOA-FOU, a Chinese city of the first rank, in Tche-kiang. It stands nearly in the centre of the province, on the banks of a considerable river, and was formerly of great extent. On the invasion of the Tartars it was almost destroyed, and has never been rebuilt on the same scale. The country round abounds with rice and wine; and a trade is carried on to all parts of the empire in dried plums and hams. Long. 119° 16′ E., lat. 29° 16′ N.

KINIC Acid, in chemistry, acidum kinicum, from kini, the French name of cinchona, from which it is obtained. Let a watery extract from hot infusions of the bark in powder be made. Alcohol removes the resinous part of this extract, and leaves a viscid residue, of a brown color, which has hardly any bitter taste, and which consists of kinate of lime and a mucilaginous matter. This residue is dissolved in water, the liquor is filtered and left to spontaneous evaporation in a warm place. It becomes thick like syrup, and then deposits by degrees crystalline plates, sometimes hexaëdral, sometimes rhomboidal, sometimes square, and always colored slightly of a reddish-brown. These plates of kinate of lime must be purified by a second crystallisation They are then dissolved in ten or twelve times their weight of water, and very dilute aqueous oxalic acid is poured into the solution, till no more precipitate is formed. By filtration the oxalate of lime is separated, and the kinic acid, being concentrated by spontaneous evaporation, yields regular crystals. It is decomposed by heat. While it forms a soluble salt with lime, it does not precipitate lead or silver from their solutions. These are characters sufficiently distinctive. The kinates are scarcely known; that of lime constitutes seven per cent. of cinchona.' We are indebted for the discovery to a Mr. Deschamps, apothecary at Lyons, who described the salt in the 48th volume of the Annales de Chimie. He obtained it by macerating the bark in cold water; afterwards evaporating

the solution, and leaving it to crystallise. The crystals produced were equal to about seven per cent. of the bark employed. He did not prosecute his enquiry further; and it was not until some experiments which were afterwards undertaken upon it by Vauquelin, that the salt in question was found to contain a new acid.

KINO, in chemistry, is an astringent black resinous substance, commonly called a gum, but very improperly; for, as Vauquelin has remarked, it has neither the physical nor chemical properties characteristic of those vegetable products. According to Dr. Duncan, the kino now known in the shops is principally imported from Jamaica; and is an extract from the coccoloba weifera, or sea-side grape. It is nearly wholly soluble in hot water and hot alcohol, and chiefly consists of tannin in a particular state; which has the property of precipitating the salts of iron of a green color, instead of black. With gelatine it forms a rose colored coagulum. It is in appearance very like the resin called sanguis draconis; much redder, more firm, resinous, and astringent than catechu. It is now in common use, and is one of the most efficacious vegetable astringents, or styptics, in the materia medica. Its dose is from twenty to thirty grains.

KINROSS, a populous town in a parish of the same name, the capital of the county Kinross, containing 2917 inhabitants in 1831. It is seated on the west side of Lochleven. The manufactures are cutlery ware, leather, shoes, &c. It was formerly a very mean place, but many good houses have been lately built, and the streets much improved: Silesias and coarse cottons are now a principal manufacture. It is twenty-four miles north of Edinburgh, and fifteen south of Perth.

KINROSS, or KINROSS-SHIRE, a small county of Scotland, bounded on the north-east, east, and south, by that of Fife; and on the west and north by Perthshire. It is almost circular, and about thirty miles in circumference. It sends a member to parliament, conjointly with Clackmannan. It contains only four parishes, viz. Cleish, Kinross, Orwell, and Portmoak. The middle part is occupied by that beautiful expanse of water Loch-Leven, and from its banks the ground rises towards the north, with a gentle declivity; but, towards the south, the rise is more abrupt and rugged. Agriculture is well attended to, and the county is in a high state of improvement, producing good crops; and on the sides of the lake are several seats. In the different districts are abundance of lime-stone and coal. Iron-stone is also met with.

KINSALE, a town of Ireland, in the county of Cork, situated at the mouth of the Bandon, 186 miles from Dublin. It is reckoned the third town in the kingdom, and inferior only to Cork in point of trade. It is neat, well built: is governed by a sovereign and a recorder, and defended by a strong fort, built by king Charles II. called Charles's Fort. On the opposite shore there are two well built villages, called Cove and Scilly. In the town and liberties are six parishes containing 6846 acres. The barracks hold twelve companies of foot. In the centre of the town is a good market-house, and a strong built prison. During the war Kinsale was a place of much business, being frequented by rich homeward bound fleets, and ships of war. The harbour is very commodious, perfectly secure, and so large, that the English and Dutch Smyrna fleets have anchored in it at the same time. There is a dockyard for repairing ships of war, and a crane and gun wharf for landing and shipping heavy artillery. Ships may sail in or out of this harbour, keeping the middle of the channel, with the utmost safety. Within the haven on the west side lies a great shelf, which shoots far off from the land; but leaves an ample passage by the side of it, which is many fathoms deep. Lord Kinsale has the ancient privilege of keeping his hat on in the king's presence, being lineally descended from John de Courcy, earl of Ulster, who first obtained this privilege.

KINS'FOLK, *n. s.*, KINS'MAN, *n. s.*, KINS'WOMAN, *n. s.* } See KIN. Persons of the same family, or consanguinity.

My *kinsfolk* have failed, and my familiar friends forgotten me. *Job* xix. 14.

The jury he made to be chosen out of the nearest *kinsmen*, and their judges he made of their own fathers. *Spenser.*

Those lords, since their first grants of those lands, have bestowed them amongst their *kinsfolks*. *Spenser.*

A young noble lady, near *kinswoman* to the fair Helen, queen of Corinth, was come thither. *Sidney.*

Both fair, and both of royal blood they seemed,
Whom *kinsmen* to the crown the heralds deemed.
Dryden.

Let me stand excluded from my right,
Robbed of my *kinsman's* arms, who first appeared in fight. *Id. Fables.*

There is a branch of the Medicis in Naples: the head of it has been owned as a *kinsman* by the great duke, and 'tis thought will succeed to his dominions. *Addison on Italy.*

Kinsman beloved, and as a son, by me!
When I behold this fruit of thy regard,
The sculptured form of my old favourite bard,
I reverence feel for him, and love for thee.
Cowper. To John Johnson.

A passing beggar hath remembered me,
When with strange eyes my *kinsmen* looked on me.
Maturin. Bertram.

And now I take my leave, imploring you
In all things to rely upon my duty
As doth become your near and faithful *kinsman*,
And not less loyal citizen and subject.
Byron. Marino Faliero.

KINTYRE, or CANTYRE, from Cantierre, i. e. a headland, the south division of Argyleshire. It is a peninsula, stretching thirty-seven miles from north to south, and seven in breadth. It is mostly plain, arable, and populous; inhabited promiscuously by Highlanders and Lowlanders; the latter being invited to settle by the Argyle family in this place to cultivate the lands. It is divided by Lochfyne from Argyle Proper. There are many villages in this district, but no town of consequence, except Campbeltown. Kintyre was granted to the house of Argyle, after suppressing a rebellion of the Macdonalds of the Isles, in the beginning of the seventeenth century, and the grant was afterwards ratified by parliament. The ancient inhabitants were the Macdonalds, Maceachans, Mackays, and Macmaths. See ARGYLE.

KINZIG, a circuit of the grand duchy of Baden, established in 1810. It comprises ten bailiwics, and extends along the Kinzig, from the Rhine on the west, to Wirtemberg on the east; comprehending the southern part of the margraviate of Baden, the trask called the Ortenau, and the lordship of Wolfach. The chief town is Offenburg. Population 118,000.

KIPLING (Thomas), D.D., was a native of Yorkshire, and educated at St. John's College; Cambridge; where he proceeded B.A. in 1768; and M.A. in 1771; bachelor of divinity in 1779; and doctor in 1784; at which time he was appointed deputy professor of divinity, under bishop Watson. In 1793 he rendered himself obnoxious by leading the prosecution of Mr. William Frend, of Jesus College, for professing Unitarianism while he held a fellowship; in consequence of which, that gentleman was expelled the university. The doctor being afterwards selected to superintend the publication of the Codex of Beza, the zealots, who were already embittered against him, attacked this work with great acrimony. He was, however, consoled for the mortifications he endured by being made dean of Peterborough. He died at Holme, in Yorkshire, in 1822. The dean's works are—1. The Elementary Parts of Dr. Smith's Complete System of Optics, 4to. 1778; Codex Theodori Bezæ Cantabrigiensis, Evangelia et Apostolorum Acta Complectens, Quadratis Literis Græco-Latinus, folio, 2 vols. 1793; The Articles of the Church of England, proved not to be Calvinistic, 8vo. 1802; and an 8vo. pamphlet, entitled Certain Accusations brought lately by the Irish Papists against British and Irish Protestants examined, 1809.

KIPPING, or KIPPINGIUS (Henry), a learned German Lutheran, born at Bostock; where, after having received the degree of M.A., he was met by some soldiers who pressed him into the service. This, however, did not prevent his following his studies. One day while he was upon duty, holding his musket in one hand and Statius's Thebaid in the other, a Swedish counsellor, who perceived him in that attitude, came up to him, entered into discourse with him, and then taking him to his house, made him his librarian, and procured him the under-rectorship of the college of Bremen, where he died in 1678. He wrote many works in Latin; the principal of which are, 1. A Treatise on the Antiquities of the Romans. 2. Another On the Works of Creation. 3. Several Dissertations on the Old and New Testament, &c.

KIPPIS (Andrew), D.D. F.R.S., and F.S.A., an English biographer and divine, born at Nottingham, and educated under Dr. Doddridge at Northampton. He first settled as a minister at Boston, Lincolnshire, in 1746; thence removed to Dorking, Surry, in 1750; and in 1753 to a congregation in Prince's Street, Westminster. He afterwards wrote in the Monthly Review, and in another periodical work called the Library, in 1761. In 1763 he was chosen philological tutor to an academy for educating dissenting ministers. In 1773 he published a Vindication of the Protestant Dissenting Ministers, with regard to their late application to parliament, which occasioned a controversy with dean Tucker. In 1777 he became editor of a new edition of the Biographia Britannica. Five volumes were published during his life, and the greater part of the sixth prepared before he died. In 1788 he published the Life of captain Cook, in 1 vol. 4to., and a Life of Dr. Lardner, prefixed to his works. He also wrote the History of Knowledge, Learning, and Taste, in Great Britain, contained in the New Annual Register; with various other tracts, sermons, &c. The university of Edinburgh presented him with the degree of D.D. He died at Westminster in 1795.

KIRCHER (Athanasius), a famous philosopher and mathematician, born at Fulde in 1601. In 1618 he entered into the society of the Jesuits, and taught philosophy, mathematics, the Hebrew and Syriac languages, in the university of Wirtsburg, with great applause till 1631. He then went to France on account of the ravages committed by the Swedes in Franconia, and lived some time at Avignon. He was afterwards called to Rome, where he taught mathematics in the Roman College, collected a rich cabinet of machines and antiquities, and died in 1680. His works amount to twenty-two vols. folio, eleven in 4to., and three in 8vo.; most of them are rather curious than useful; but they display great talent and deep erudition. The principal are, 1. Prælusiones Magneticæ. 2. Primitiæ Gnomonicæ Catoptricæ. 3. Ars magnæ Lucis et Umbræ. 4. Musurgia Universalis. 5. Obeliscus Pamphilius. 6. Oedipus Ægyptiacus, 4 vols. folio. 7. Itinerarium Extaticum. 8. Obeliscus Ægytianus, in 4 vols. folio. 9. Mundus Subterraneus. 10. China Illustrata.

KIRCHER (Conrad), a learned German, who published a Greek and Hebrew Concordance of the Old Testament; with the Hebrew words arranged alphabetically, and the corresponding Greek under them; in 1602.

KIRCHMAN (John), an eminent German divine, born at Lubec in 1575. He studied in several places of Germany; in 1602 was made professor of poetry at Rostock, and in 1613 rector of the university at Lubec. He exercised this last employment with extraordinary application during the rest of his life, and died in 1643. He wrote several works; the most esteemed of which are, 1. De Funeribus Romanorum. 2. De Annulis, Liber Singularis.

KIRIN OULA, an extensive government of Eastern Tartary, to the north of China. It lies between the sea of Japan, the northern frontier of Corea, and the River Seghalien Oula, and is upwards of 700 miles long, and 200 of medium breadth. The climate is severe, considering the latitude, so that no grain, except oats and millet, comes to perfection. It is thus very thinly peopled, containing only three towns surrounded with mud walls. The best plant produced in this country is the ginseng, called by the Manchews the Queen of Plants, and celebrated for its virtues in the cure of various diseases. The country is a favorite scene for the hunting excursions of the emperors of China. The capital of the same name is situated on the river Songarie, which falls into the Seghalien, in long. 126° 24', E., lat. 43° 48' N.

KIRJATH JEARIM, the city of the wood, a city of the Gibeonites, belonging to the tribe of Judah, nine miles from Ælia, in the road to Diospolis. It was also called Baala.—Joshua. The ark, after its recovery from the Philistines, stood for some time in this city. 1 Sam. viii.

KIRK, *n. s.* Sax.cyrce; Gr. Κυριου οικος. An old word for a church, yet retained in Scotland.

> And the fest hold was in tentis,
> (As to tell you mine entent is,)
> In a rome in a largè plane,
> Under a wode in a champaine,
> Betwixt a river and a well;
> Where never had abbay, ne selle,
> Yben, ne *kirke*, house, ne village,
> In time of any manes age.
> *Chaucer's Dreame.*

> Home they hasten the posts to dight,
> And all the *kirk* pillars ere day-light,
> With hawthorn buds, and sweet eglantine.
> *Spenser.*

What one party thought to rivet by the Scots, that the other contemns, despising the *kirk* government and discipline of the Scots. *King Charles.*

> Nor is it all the nation hath these spots,
> There is a church as well as *kirk* of Scots.
> *Cleaveland.*

KIRKALDY, a royal burgh of considerable importance in Fifeshire, extending more than a mile in length, and is about three miles from Kinghorn. The name is supposed to be derived from the Culdees, or Keldei, as they are called in the old charters. The town extends along the sea-shore, consisting principally of one long street, and a few lanes of small extent opening on each side of it. There are from thirty to forty large vessels belonging to this port, which trade to the Mediterranean, Baltic, West Indies, and America. The relative consequence of this burgh may be judged of from the circumstance, that in all public assessments it is rated as the sixth burgh of Scotland, and one-fortieth of the whole supplies levied from it. The principal manufactures of Kirkaldy are cottons, linens, checks, ticks, leather, cotton-spinning, &c. Kirkaldy joins with the neighbouring burghs of Dysart, Kinghorn, and Burntisland, in sending a representative to the imperial parliament.

KIRKCUDBRIGHT, a county of Scotland, which makes a considerable part of Galloway, of which the earls of Nithisdale were hereditary stewards. The face of the country exhibits the appearance of one continued heath, producing nothing but pasture for sheep and small black cattle, which are generally sold in England; yet these dusky moors are intersected with pleasant valleys, and adorned with a great number of castles belonging to private gentlemen, every house being surrounded with an agreeable plantation. It is watered by the Dee; which, taking its rise from the mountains near Carrick, runs through a tract of land about seventy miles in length, and, entering the Irish sea, forms the harbour of Kirkcudbright. Of late years, agriculture has been much improved, and manufactures of cotton and linen have been established, although it wants all the natural advantages of the neighbouring counties. There are several small lakes in this county, but Loch-Kenmure is the largest, being ten miles long: in this loch large pikes are caught, weighing from twenty to thirty pounds and upwards.

KIRKCUDBRIGHT, a royal burgh in the above county. This place, which lies 101 miles southwest from Edinburgh, is a neat, clean, well-regulated burgh. There are twenty-eight brigs and sloops belonging to this port; and it has a harbour equal to any on that coast of Scotland. The present castle is a strong massy building, almost entire, though built in 1582. The town bears several marks of having been at one period fortified. About the middle of the town is a large and elegant court-house, built about the year 1791, for the accommodation of the courts of justice, and the public meetings of the stewartry; and in 1816 a commodious new gaol in the Gothic style was erected near the court-house. A large and elegant academy, containing a room for the public library, was also built in the same year. It never had any considerable trade or manufacture; but about the year 1792 a manufacture of cotton was established, which continues to be carried on to a small extent.

KIRKLAND (Thomas), M. D., an eminent physician, born in 1720. He was a zealous enquirer after medical science, and a successful practitioner. He was a member of the Royal Medical Society in Edinburgh, and of the Medical Society in London. He published An Enquiry into the present State of Medical Surgery, and some other valuable works. He died at Ashby de la Zouch, in Leicestershire, in 1798, aged seventy-eight.

KIRK-SESSION, the fourth and lowest ecclesiastical judicatory in Scotland. Each parish, according to its extent, is divided into several particular districts; every one of which has its own elder or deacon to oversee it. A consistory of the ministers, elders, and deacons of a parish, form a kirk-session. These meet once a week, the minister being their moderator, but without a negative voice. They regulate matters relative to public worship, elections, catechising, visitations, &c. They judge in matters of minor scandal; but in all cases an appeal lies from it to the presbytery. Kirk-sessions have likewise the care of the poor's funds.

KIRKWALL, a royal borough, the capital of the Orkneys. It is built upon an inlet of the sea, near the middle of the island of Pomona, having a very safe road and harbour for shipping. It is governed by a provost, four bailies, and a common council. It was formerly possessed by the Norwegians, who bestowed upon it the name of Crucoviaca. From king James III. of Scotland they obtained a new Charter, empowering them to elect their own magistrates yearly, to hold borough courts, arrest, imprison, make laws and ordinances for the right government of the town; to have a weekly market and three fairs. He also granted them some lands adjoining to the town, with the customs and shore-dues, the power of *pit and gallows*, and exempted them from the expense of sending commissioners to parliament. This charter was confirmed by succeeding monarchs. At present Kirkwall is the seat of justice, where the steward, sheriff, and commissary, hold their several courts of jurisdiction: here is likewise a public grammar-

school, endowed with a competent salary for the master. The town consists of one narrow street about a mile in length; the houses are chiefly covered with slate. The principal edifices are the cathedral church and the bishop's palace. The former, called St. Magnus, from Magnus king of Norway, the supposed founder of the town, is a large Gothic structure; the roof is supported by fourteen pillars on each side, and the spire is built upon four large columns. The gates are decorated with a kind of Mosaic work, of red and white stones elegantly carved and flowered. By the ruins of the king's castle or citadel, it appears to have been a strong and stately fortress. At the north end of the town there is a sort of fortification built by the English in the time of Oliver Cromwell. It is surrounded with a ditch and rampart, and mounted with cannon for the defence of the harbour.

KIRRIEMUIR, a burgh of barony, of considerable antiquity. It is about sixteen miles from Dundee, twenty-five from Perth, and sixty-four from Edinburgh. Situated in a fertile, extensive, and populous district, it is the mart to which the inhabitants of the neighbouring parishes chiefly resort. Hence no town in the county has a better weekly market; in none of its size is more trade carried on. Nine carriers go regularly to Dundee twice, often thrice a-week. There are two great annual fairs here, in July and October.

KIRSTENIUS (Peter), professor of physic at Upsal, and physician extraordinary to the queen of Sweden, was born at Breslaw in 1577. He studied Greek, Latin, Hebrew, Syriac, natural philosophy, anatomy, botany, and other sciences. In order to be able to read Avicenna, he applied himself to the study of Arabic; and not only read Avicenna, but also Mesue, Rhasis, Abenzoar, Abukasis, and Averroes. He visited Spain, Italy, and England, and did not return home, till after seven years. He was chosen by the magistrates of Breslaw to superintend their college and schools. Sickness having obliged him to resign that employment, he went with his family into Prussia. Here he obtained the friendship of chancellor Oxenstiern, whom he accompanied into Sweden; where he was made professor of physic in the University of Upsal, and physician to the queen. He died in 1640. He wrote many works; among which are, 1. Liber secundus Canonis Avicennæ, typis Arabicis, ex MSS. editus, et ad verbum in Latinum translatus, in folio. 2. De vero usu et abusu Medicinæ. 3. Grammatica Arabica, folio. 4. Vitæ quatuor Evangelistarum, ex antiquissimo codice MS. Arabico erutæ, in folio. 5. Notæ in Evangelium S. Matthæi, ex collatione textuum Arabicorum, Syriacorum, Ægyptiacorum, Græcorum, et Latinorum, in folio, &c.

KIRTHIPORE, a town of Hindostan, in the province of Nepaul, and district of Patn. It was formerly the capital of an independent principality, but was taken by the rajah of Nepaul in the year 1768, who, for the resistance they made, most inhumanly ordered the noses of all the inhabitants to be cut off. Long. 85° 37′ E., lat. 27° 30′ N.

KIRTLE, *n. s.* Sax. cẏꞃꞇel. An upper garment; a gown.

> Yclad he was ful smal and proprely,
> All in a *kirtel* of light waget,
> Full faire and thicke ben the pointes set.
> *Chaucer. The Milleres Tale.*
>
> And in a *kirtel* of greene saye,
> The greene is for maydens meet. *Spenser.*
> All in a *kirtle* of discoloured say
> He clothed was. *Faerie Queene.*
>
> What stuff wilt thou have a *kirtle* of? Thou shalt have a cap to-morrow. *Shakspeare. Henry IV.*
>
> Thy gowns, thy shoes, thy beds of roses,
> Thy cap, thy *kirtle*, and thy posies,
> Soon break, soon wither, soon forgotten,
> In folly ripe, in reason rotten. *Raleigh.*

KIRWAN (Walter Blake), an Irish divine, and celebrated preacher, was born at Galway about 1754. He was educated in the English Catholic college at St. Omer's, and next at Louvain, where he entered into priest's orders, and became professor of philosophy. In 1778 he was appointed chaplain to the Neapolitan embassy in London; but in 1787 conformed to the established church in Dublin, where his popularity as a preacher was great to an unparalleled degree. In 1788 the governors of the general daily schools of several parishes in Dublin entered into a resolution, 'That from the effects produced by the sermons of the Rev. Walter Blake Kirwan, from the pulpit, his officiating in this metropolis was considered a peculiar national advantage, and that vestries should be called to consider the most effectual method to secure to the city an instrument, under providence, of so much public benefit.' He was presented this year to a prebend in the cathedral of Dublin, and the living of St. Nicholas; but resigned the former in 1800, on being promoted to the deanery of Killala. He died in 1805. A volume of his sermons has been printed, with an account of his life.

Kirwan (Richard), a distinguished modern geologist, was a native of the county of Galway in Ireland, and educated in the University of Dublin, where he took the degree of LL.D. He devoted himself with great ardor to chemical and mineralogical researches, and became a member of the Royal Irish Academy, and fellow of the Royal Society. He published in the Philosophical Transactions for 1781, 1782, and 1783, Experiments and Observations on the Specific Gravities and Attractive Powers of various Saline Substances; which subject he farther prosecuted in the Transactions for 1785. His Elements of Mineralogy, 2 vols. 8vo., appeared in 1784, and were translated into German by Crell. In 1787 he published an Essay on Phlogiston and the constitution of Acids. This production was translated into French by the advocates for the anti-phlogistic hypothesis, and published with animadversions on the rival system, to which Dr. Kirwan became a convert. He was the author, besides the foregoing works, of An Estimate of the Temperature of different Latitudes, 1787, 8vo.; a Treatise on the Analysis of Mineral Waters, 8vo.; and another on Logic, 2 vols. 8vo., &c. He founded at Dublin an association for the purpose of cultivating mineralogy; and,

as a geologist, distinguished himself by advocating what has been called the Neptunian theory of the earth, in opposition to that of Dr. Hutton. His death took place in 1812.

KISHME, or KISMIS, or Jezira Deraux, (Long Island), the largest island in the Persian Gulf, is about ten miles from Ormus, and runs sixty miles parallel with the Persian shore. It is no where more than twelve miles broad. Formerly considered the granary of Ormus, it had 300 villages upon it, we are told, but it is now much declined. The soil is well adapted to wheat; and the sheep reared upon it are remarkably fine. It is under the rule of an independent Arab chief, who pays tribute to the Imam of Muscat. The town of Kishme, on the eastern side of the island, is defended by a wall and fort, and has a roadstead in which ships may ride securely during the westerly winds. The channel between Kishme and the main land varies from three to eight miles wide. Long. 56° 50′ E., lat. 26° 57′ 30′ N.

KISHTAC, a large island in the North Pacific Ocean, in long. 152° 30′ to 154° 50′ W., lat. 57° to 58° 40′ N. It is about 100 miles in length, and from thirty to fifty in breadth. Also an island on the north-west coast of North America, eastward of Foggy Cape, and opposite the mouth of Cook's River.

KISHTEWAR, a town and district of Hindostan, situated principally between 33° and 34° of N. lat. in the north-east extremity of the province of Lahore, or near the south range of the Cashmere Mountains. The district is in general hilly, cold, and covered with wood. Hence it retains its independence. It is intersected by the Chunaub, over which there are no bridges; but at the village of Nausman, where it is seventy yards wide, a large basket is slung to a tight rope, reaching from side to side, and well secured by posts, and in this the passage is effected.

KISS, *v. a.* & *n. s.*
KISS'ER, *n. s.*
KISS'ING-CRUST, *n. s.*
Welsh *cusan;* Gr. *κυω*. To touch or salute with the lips; to treat with fondness; to touch gently; a salute: kissing-crust, crust formed where one loaf touches another in the oven.

And, mekeley, she to the sergeant praid
(So as he was a worthy gentilman)
That she might *kisse* hire childe, er that it died:
And in her barme, this litel child she laid,
With full sad face; and gan the child to blisse,
And lulled it, and after gan to *kisse*.
Chaucer. The Clerkes Tale.

'Have mercie, Lord! upon us wimmen alle.'
And on hir bare knees adoun they falle;
And would have *kist* his feet ther as he stood.
Chaucer. The Knightes Tale.

Thy love I dare not aske, or mutual fixing,
One *kisse* is all my love and prides aspiring,
And after starve my heart, for my too much desiring.
Spenser. Britain's Ida.

What sense had I of her stolen hours of lust?
I found not Cassio's *kisses* on her lips.
Shakspeare. Othello.

The hearts of princes *kiss* obedience,
So much they love it; but to stubborn spirits,
They swell and grow as terrible as storms.
Shakspeare.

Their lips were four red roses on a stalk,
And in their summer beauty *kissed* each other.
Id.

But who those ruddy lips can miss,
Which blessed still themselves do *kiss?*
Sidney.

Upon my livid lips bestow a *kiss:*
O envy not the dead, they feel not bliss!
Dryden.

These baked him *kissingcrusts*, and those
Brought him small beer. *King's Cookery.*

No lordly patron's hand he deigned to *kiss*,
Nor luxury knew, save liberty, and bliss.
Cowper. A Fowler.

Woman, oh woman, and an urchin's *kiss*,
Rends from thy heart thy love of many years—
Go, virtuous dame, to thy most happy lord,
And Bertram's image taint your *kiss* with poison.
Maturin. Bertram.

With a swimmer's stroke
Flinging the billows back from my drenched hair,
And laughing from my lip the audacious brine,
Which *kissed* it like a wine-cup, rising o'er
The waves as they arose, and prouder still
The loftier they uplifted me. *Byron. Two Foscari.*

KISSER, a cape, bay, and town, on the south coast of Arabia, in long. 51° 20′ E., and lat. 15° 19′ N. No water is nearer than a mile west. There are two inferior towns beside in this bay.

KISSER, in geography, a town of Africa, the ancient Colonia Assuras, as appears from many inscriptions still to be met with in the place. Here is a triumphal arch done in a very good taste; there is also a small temple of a square figure, with several instruments of sacrifice carved upon it. The town is situated in the kingdom of Tunis, on the declivity of a hill, above a large fertile plain; which is still called the plain of Surso, probably from its ancient name Assuras.

KISSING, by way of salutation, or as a token of respect, has been practised in all nations. The Roman emperors saluted their chief officers by a kiss. Kissing the mouth or the eyes was the usual compliment upon any promotion or happy event. Soldiers kissed the general's hand when he quitted his office. The Romans affected such a degree of delicacy, that they never embraced their wives in the presence of their daughters; yet what people ever plunged deeper in the most abominable vices? Near relations were allowed to kiss their female kindred on the mouth, to discover if they smelt of wine; as the Roman ladies sometimes made too free with the juice of the grape. Slaves kissed their master's hand, who used to hold it out to them for that purpose. Kissing was a customary mode of salutation amongst the Jews, as we may collect from Judas approaching his master with a kiss. Relations used to kiss their kindred when dying, and when dead; when dying, out of a strange opinion that they should imbibe the departing soul; and when dead, by way of valedictory ceremony. They also kissed the corpse after it was conveyed to the pile, when it had been seven or eight days dead.

KISTNA, or KRISHNA, a river of the south of India, so called after the celebrated deity of this name. It takes its rise near Sattarah, in the province of Bejapore, fifty miles in a direct line from the western sea-coast. During its course east-

ward, it is joined by the Malpurba, Gutpurba, Beemah, and Toombuddra, and pours a prodigious volume of waters, by various mouths, into the Bay of Bengal. It is 650 miles in length; but, owing to sand at its mouths, it is not navigable by ships. This river formed the southern boundary of the Mahommedan kingdom of the Deccan.

KISTNAGHURRY, a town and fortress of Barramahal in the south of India. It is situated on a rock nearly 700 feet in perpendicular height, and has never yet been taken by force. In November 1791 the British troops were repulsed in attempting to storm it; but it came into our possession along with the province, in 1792, and has been since dismantled. It is surrounded by extensive rice fields. Long. 78° 23′ E., lat. 12° 32′ N.

KIT, *n. s.* Dut. *kitte.* A large bottle: a small diminutive fiddle. A small wooden vessel, in which Newcastle salmon is sent to London and elsewhere.

'Tis kept in a case fitted to it, almost like a dancing master's *kit*. *Grew's Museum.*

KITCH'EN, *n. s.*
KITCH'EN-GARDEN, *n. s.*
KITCH'EN-MAID, *n. s.*
KITCH'EN-STUFF, *n. s.*
KITCH'EN-WENCH, *n. s.*
KITCH'EN-WORK, *n. s.*
Saxon cycene; Welsh *kegin;* Flem. *keg;* Fr. *cuisine;* Ital. *cucina;* Erse. *kyshen.* The room in a house where the provisions are cooked: kitchen-garden, garden in which esculent plants are produced: kitchen-maid, a maid under the cook maid: kitchen-stuff, the fat of meat scummed off the pot, or gathered from the dripping pan: kitchen-wench, scullion; maid employed to clean the instruments of cookery: kitchen-work, cookery, or work done in the kitchen.

These being culpable of this crime, or favourers of their friends, which are such by whom their *kitchens* are sometime amended, will not suffer any such statute to pass. *Spenser.*

Can we judge it a thing seemly for any man to go about the building of an house to the God of heaven, with no other appearance than if his end were to rear up a *kitchen* or a parlour for his own use? *Hooker.*

Laura to his lady was but a *kitchenwench.* *Shakspeare.*

He was taken into service in his court to a base office in his *kitchen;* so that he turned a broach that had worn a crown. *Bacon.*

Gardens, if planted with such things as are fit for food, are called *kitchengardens.* *Id.*

As thrifty wench scrapes *kitchenstuff,*
And barrelling the droppings and the snuff
Of wasting candles, which in thirty year,
Reliquely kept, perchance buys wedding cheer. *Donne.*

To that arch city of this government,
The first three pipes the ready feast convoy:
The other three in baser office spent,
Fling out the dregs which else the *kitchen* cloy. *Fletcher's Purple Island.*

Instead of *kitchenstuff* some cry
A gospel-preaching ministry. *Hudibras.*

A *kitchengarden* is a more pleasant sight than the finest orangery. *Spectator.*

We see no new-built palaces aspire,
No *kitchens* emulate the vestal fire. *Pope.*

Roasting and boiling leave to the *kitchenwench.* *Swift.*

The *kitchen* soon was all on fire,
And to the roof the flames aspire. *Cowper.*

Mr. Griffin, Sir,—This is to let you know, that though I can't write nor read, our Peter writes this for me, and I hear all your papers read in our *kitchen.* *Canning. Microcosm.*

KITCHEN, ARMY, is a space of about sixteen or eighteen feet diameter, with a ditch surround ing it three feet wide; the opposite bank of which serves as a seat for the men who dress the victuals. The kitchens of the flank companies are contiguous to the outline of the camp; and the intermediate space is generally distributed equally for the remaining kitchens. As each tent forms a mess, each kitchen must have as many fire-places as there are tents in the company.

KITCHEN, PUBLIC. See PUBLIC KITCHEN.

KITE', *n. s.*
KITES'FOOT, *n. s.*
Sax. cyte; Welsh *cud.* A bird of prey that infests farms and steals chickens; a name of reproach denoting rapacity; a fictitious bird made of paper: kitesfoot, a plant.

The starling that the counsaile can bewrie;
The tame ruddocke; and the cowarde-kite.
Chaucer. The Assemble of Foules.

Detested *kite!* thou liest.
Shakspeare. King Lear.

More pity that the eagle should be mewed,
While *kites* and buzzards prey at liberty.
Shakspeare.

The heron, when she soareth high, so as sometimes she is seen to pass over a cloud, sheweth winds; but *kites,* flying aloft, shew fair and dry weather. *Bacon.*

A leopard and a cat seem to differ just as a *kite* doth from an eagle. *Grew.*

A man may have a great estate conveyed to him; but if he will madly burn, or childishly make paper *kites* of his deeds, he forfeits his title with his evidence. *Government of the Tongue.*

KITE, in ornithology. See FALCO.

KIT'S, (St.), or St. Christopher's, one of the West India Islands. See CHRISTOPHER'S.

KITTEN, *n. s.* & *v. n.* Teut. *kazgin.* The diminutive of cat. A young cat: to bring forth young cats.

So it would have done
At the same season, if your mother's cat
Had *kittened,* though yourself had ne'er been born.
Shakspeare.

That a mare will sooner drown than an horse, is not experienced; nor is the same observed in the drowning of whelps and *kittens.* *Browne's Vulgar Errours.*

The eagle timbered upon the top of a high oak, and the cat *kittened* in the hollow trunk of it. *L'Estrange.*

Helen was just slipt into bed;
Her eyebrows on the toilet lay,
Away the *kitten* with them fled,
As fees belonging to her prey. *Prior.*

It was scratched in playing with a *kitten.* *Wiseman.*

Close by the threshold of a door nailed fast
Three *kittens* sat; each *kitten* looked aghast.
Cowper. Colubriad.

KIUTAHIA, a city of Asia Minor, the capital of Anatolia, is situated partly at the foot, and partly on the sides of the Poorsac Dag, a range of mountains bounding a fertile valley, on

the south. It occupies the position of the ancient Cotyœum. The town, covering a considerable extent of ground, is of course uneven in its site; but contains several handsome fountains, conveyed from the hills by aqueducts; and, though not so populous as formerly, is said still to contain between 50,000 and 60,000 inhabitants, Armenians and Greeks. There are said to be thirty hummums or public baths, fifty mosques, four Armenian and one Greek church, and twenty caravanseras. Here are also the ruins of a castle, which must have been once of great strength. Long. 29° 52′ E., lat. 39° 25′ N.

KIU-TCHEOU-FOU, a town of China of the first rank, in the province of Tchekiang. It is built on a fine river, and borders on Kiangsee and Footchien, from which last it is separated by a range of mountains, the ascent of which is by stairs. Long. 118° 39′ E., lat. 29° 2′ N.

KIZILERMAK, the ancient Halys, a considerable river of Asia Minor, which rises from Mount Argish, near Kaisarieh; and, after flowing westwards, turns to the south, and falls into the Black Sea, about forty miles south of Samsoon, in long. 36° 10′ E., and lat. 41° 30′ N. It is considered the finest river in Asia Minor.

KIZLAR, a fortified town and district of Asiatic Turkey, in the government of Caucasus. It is situated near the confluence of the Terek with the Caspian, and was built in 1736. It is garrisoned by battalions of the tribes who wander over the steppe between Kizlar and Astrakhan, chiefly Nogays, Troukhmen, and Kalmuks. It is an entrepôt for the commerce of Astrakhan with Persia and the Caucasus. Wine, brandy, and silk are produced and exported in considerable quantity; also the oil of sesamus. Long. 46° 29′ 10″ E., lat. 43° 51′ N.

KLAPROTH (Martin Henry Von), professor of chemistry at Berlin, died there at a very advanced age, January 1st 1817, having been a writer on that science above forty years. He was the fortunate discoverer of uranium, the zirconia, and mellitic acid; and made various interesting experiments on copal, tellurium, and titanium. His works in German make 6 vols. 8vo.

KLATTAU, a circle and town of the south of Bohemia, bounded by Pilsen and Prachatitz, and in part by the north-east frontier of Bavaria. The area of the circle is 870 square miles, with 140,000 inhabitants. The town is well built, and has extensive woollen manufactures. In the neighbourhood are marble quarries, some silver mines, and a celebrated mineral water. The town is said to have been surrounded with walls in the year 1000. In 1810 part of it was destroyed by fire. Population 4000: sixty-nine miles south-west of Prague.

KLEBER (J. B.), a French general, was born in Strasburgh in 1759, and was educated for an architect. Accident led him to enter into the Austrian service, in which he continued eight years, and then, returning to his native country, he became inspector of the public buildings in Upper Alsace. The revolution of France rekindled his military ardor, and he obtained a commission in the service. He displayed great bravery and judgment at the siege of Mayence, after which he was employed in La Vendée; but the sanguinary scenes of that province so disgusted him, that he obtained his recal, and was afterwards engaged in the north, where he defeated the Austrians, took Mons, and drove the enemy from Louvain. He also took Maestricht, and contributed to the capture of several other strong places. Discontented with the directory, he left the army and returned to Paris, where he led a private life, writing his military memoirs, till Buonaparte, being appointed general of the army of Egypt, chose Kleber as his companion. At the siege of Alexandria he was wounded on the head as he was climbing the ramparts, but did not retire till he received a second wound. He defeated the Turks in several actions, and Buonaparte, on quitting Egypt, left him in the chief command. In a short time he signed the treaty of El-Arish with Sir Sydney Smith, by which the French agreed to leave Egypt; but it was annulled by the British government, and hostilities were renewed. Kleber, though reduced, did not bend under his misfortunes, but defeated the Turks at the obelisk of Heliopolis. He next took Cairo by storm, and formed an alliance with Murat Bey; but was assassinated by a Turk named Solyman, who gave him four stabs with a dagger, in the year 1800.

KLEINHOVIA, in botany, a genus of the decandria order, gynandria class of plants; natural order thirty-seventh, columniferæ: CAL. pentaphyllous; the petals five; the nectarium campanulated and pedunculated, containing the stamina: CAPS. inflated and five seeded.

KLEIST (Edward Christian de), a celebrated German poet, and a soldier of distinguished bravery, was born at Zeblin, in Pomerania, in 1715. He studied at Cron in Poland, and afterwards at Dantzic and Koningsberg. Having in vain endeavoured to obtain preferment in the law, at twenty-one years of age he accepted a post in the Danish army. He then studied all the sciences connected with military affairs, with the same assiduity he had before studied civil law. In 1740, at the beginning of the reign of Frederick king of Prussia, he went to Berlin, and was presented to the king, who made him lieutenant of his brother prince Henry's regiment; and he was in all the campaigns which distinguished the first five years of Frederick's reign. In 1749 he was made a captain; and published his excellent poem on the Spring. Before the breaking out of the war with Russia, the king appointed him companion to prince Frederick William, and to eat at his table. In 1756 he was nominated major of Hausen's regiment. After the battle of Rosbach the king gave him, by an order in his own hand writing, the inspection of the great hospital established at Leipsic. In 1758, prince Henry coming to Leipsic, captain Kleist desired to serve in his army, which was readily granted. He also served that prince at the beginning of the campaign of 1759, in Franconia, and in all the expeditions of that army, till he was detached with the troops under general de Fink to join the king's army. On the 12th of August was fought the bloody battle of Kunersdorf, in which he fell. He might have recovered, but the fractured bones having cut

an artery, he died next day by loss of blood, after experiencing mucn kindness from the Russian huzzars. Though the city of Frankfort was then in the hands of the enemy, they buried this Prussian hero with all military honors: the governor, magistrates, professors, and students, with many of the Russian officers, forming the procession, preceded by the funeral music. His poems, which are greatly admired, are elegantly printed in the German tongue, in 2 vols. 8vo.

KLICK, *v. n.* From clack. To make a small sharp noise. In Scotland it denotes to pilfer, or steal away suddenly with a snatch.

KLOPSTOCK (Frederick Theophilus), a celebrated poet of Germany, born at Quedlinburg on the 2nd of July, 1724. After learning at home the elements of the languages, he proceeded in his sixteenth year to college, where his character displayed itself advantageously. He applied very diligently to compositions in prose and verse, and wrote, among other poetical essays, some pastorals, the favorite subjects of the youthful muse in the German universities. At so early a period as the present he took the resolution of writing an epic poem, which had hitherto not existed in the German language. The high opinion he had of Virgil, his favorite poet amongst the ancients; the honor he promised himself in being the first who should offer the German public a work like the Æneid; the warmth of patriotism that early animated him to raise the fame of German literature, in this particular, to a level with that of other European countries; all combined with the consciousness of his own superior powers, to spur him on to the execution of his purpose. He was, however, long undecided in the choice of his subject; he sought out some hero in the German history; but, after choosing and rejecting for some time, at length gave the preference to the Messiah. This was even before his acquaintance with Milton, whose Paradise Lost was but lately become an important subject of his study. In the autumn of the year 1745 he left the college, and repaired to the university at Jena. He now applied to the study of divinity. In the Easter of 1746 he left Jena and went to Leipsic in company with his cousin Schmidt, from Langensalza, afterwards privy counsellor at the court of Vienna. Here he soon became acquainted with the young favorites of the muses, who had formed themselves into a sort of literary society, in order to purify their taste by mutual criticisms on their essays, the best of which were published in the paper entitled Bremen Contributions. Their names were Gærtner, Cramer, Schlegel, Geiseke, Rabener, Zacharia, and others. Our poet was admitted into their society, and attended their meetings. About this time Klopstock began to display his genius in the lyric style, and produced many excellent odes of this description. These, together with the three cantos of the Messiah, appeared at first in the Bremen Contributions. The Messiah acquired, in the space of a few years, its merited attention from all ranks in Germany. It found friends and enemies, admirers and critics, every where; but its approbation was owing as much to the sacredness of the matter as to the beauty of the poetry; Christian readers loved it as a book that afforded them, at length, amidst the themes of cold orthodoxy, some scope for devout feeling: young preachers quoted it in the pulpit, and coupled the name of Klopstock with that of the prophets.

Klopstock now, however, began to find Leipsic unpleasant to him; his friends had one by one left the university, and he felt himself alone. He therefore in 1748 repaired to Langensalza, in which place he remained till 1750, when he was invited by his friend Bodmer to visit him in Switzerland. Klopstock accordingly accompanied the philosopher Sulzer to Zurig, where he remained for a considerable time. He became indeed so pleased with the scenery of the country, and the simple manners of the inhabitants, that he intended to settle and spend the remainder of his life there, when he received an invitation from Bernstorff to settle at Copenhagen with an assurance that such a pension should be given him as should permit him to devote himself solely to literature. Klopstock set off in the spring of the year 1751 for Denmark. He took the road to Copenhagen by Saxony and Quedlinburg, where he saw his relations; and at Brunswick he visited some of his academical friends; at Hamburg he enjoyed the company of Hagedorn, became acquainted with Miss Muller, celebrated in his odes under the name of Cidli, and who was a great admirer of his Messiah. At Copenhagen, Klopstock met with the most cordial reception from Bernstorff. He there lived a very secluded tranquil life, never obtruding his presence at court, but dedicating his time entirely to his poem. During his residence here he appears to have enlivened his mind by the works of Dr. Young and Samuel Richardson. With the former he even kept up a correspondence, and addressed an ode to him expressive of his very high esteem and regard. The lively interchange of letters that passed uninterruptedly between his beloved Cidli and himself, knit the bonds of affection still closer, and in 1754 he travelled to Hamburg, where she at length became his wife. But he enjoyed for a short time only the true bliss of connubial affection. This amíable and affectionate lady was snatched from him in child-bed about nine months after their marriage. To the year 1771 Klopstock made Copenhagen his usual place of residence; but after that time he lived mostly in Hamburg, in the character of royal Danish legate, and counsellor from the court of the Margrave of Baden. This latter title, together with a pension, was the grant of the elector Frederick of Baden, whose invitation to our poet was so pressing, that he spent the year 1775 at the court of Carlsruhe. While sinking into the grave, he was engaged to present posterity with a collection of his works, such as would be worthy the great poet. From the year 1798 they passed through the office of the famous Göschen three different times, and evince the high veneration in which the poet was held by his contemporaries. Klopstock died as he had lived March 14th, 1803. His Messiah will ever remain a monument of his genius, and on the

value of his odes all cultivated Germans have but one opinion. From the superior talents of this poet, in the epic style, it is usual to forget his dramatic pieces, which are, however, certainly of no mean value. Although his tragedies are more fitted for reading than representation, yet they discover the same traits of simplicity, dignity, and force of amplification, as well as elegant language, which characterise all his productions.

KLOSTER-NEUBURG, a town of Lower Austria, on the right side of the Danube, six miles north of Vienna. It was once a Roman colony. It contains several monuments of interest, and takes its name from a monastery of the order of St. Augustine, founded in 1114. The church has several curiosities; and in the treasury has been preserved, since 1616, the crown of the archduke of Austria, which is regularly carried to Vienna on the accession of a new sovereign. The library of this monastery contains 25,000 printed volumes, besides Hebrew, Arabic, and Latin MSS. The cellars are of great extent, and contain a celebrated tun, the largest in Germany, next to that of Heidelberg. In 1688 the lower town was burnt by the Turks, but the upper town resisted all their efforts. Here is a dock-yard for light-armed vessels, and a government manufacture of arms. Long. 16° 17' E., lat. 48° 19' N.

KLOTZ (Christian Adolphus), an eminent German critic, born in the year 1738 at Bischofswerden, near Dresden, where his father was settled as a clergyman. He displayed, at an early period, such an attachment to letters, that his parents spared no expense to gratify his taste, and to enable him to cultivate his talents to the best advantage. He employed those leisure hours, which other youths devote to amusements, in composing and reciting German verses. At Gorlitz he studied, under Baumgarten, the Greek and Roman classics, and gave a specimen of his powers in versification by a poem composed on the Destruction of the Zittau, which was laid waste in the year 1757. In 1758 he proceeded to Leipsic to study jurisprudence, and while here published several papers in the Acta Eruditorum, and some separate pieces. In 1761 he published his Opuscula Poetica, containing twenty-three odes, three satires, and as many elegies. From Leipsic he repaired to Jena, where he opened a school, which was well attended.

Having accepted of an invitation to a professorship at the University of Gottingen, in 1762, he set off for that place, and almost immediately after his arrival he was attacked by a severe illness, from which, however, he recovered, and immediately published a treatise, De Verecundiâ Virgilii, to which were added three dissertations relative to the eclogues of the poet. He also published Miscellanea Critica, and applied himself to the study of ancient paintings, with which he became well acquainted. His celebrity had now so much increased, that he received two offers, one from the prince of Hesse Darmstadt, to be professor of the oriental languages at Giessen, and the other from his Prussian majesty, to be professor of eloquence at Halle. While he was deliberating respecting the choice he should make, he was nominated by his Britannic majesty to be professor of philosophy at Gottingen, with an increased salary. He soon, however, quitted Gottingen, and accepted an offer made him by his Prussian majesty of being professor of philosophy and eloquence at Halle, with the rank and title of aulic counsellor. While preparing for his departure, he published Historia Nummorum Contumeliosorum et Satyricorum, containing a history of these coins; and on his removal to Halle he gave the public another work of the same kind, and at the same time effected the institution of a new society, called the Literary Society of Halle. In 1766 he was invited by his Polish majesty to Warsaw, to superintend the education of the children of the Polish nobility, which he would gladly have accepted, as it afforded him an opportunity of visiting new countries; but the king ordered him to remain at Halle, conferred upon him the rank of privy counsellor, and accompanied this mark of honor with a considerable addition to his salary. He died in 1771, leaving behind him many other works besides those to which we have referred. Before his death he revised every thing which he had written on coins, and published Opuscula, Nummaria quibus Juris Antiqui Historiæque nonulla Capita explicantur.

KNAB, *v. a.* } Belg. *knappen*; Erse.
KNAB'BLE, *v. n.* } *knaap*. To bite. Perhaps properly to bite some brittle, that makes a noise when it is broken.

Horses will *knabble* at walls, and rats gnaw iron. *Browne.*

I had much rather lie *knabbing* crusts, without fear, in my own hole, than be mistress of the world with cares. *L'Estrange.*

An ass was wishing, in a hard winter, for a little warm weather, and a mouthful of fresh grass to *knab* upon. *Id.*

KNACK, *n. s.* & *v. n.* } Sax. cnaꝛunge, skill.
KNACK'ER, *n. s.* } A little machine; a petty contrivance; a toy. (This word is apparently formed from the knacking or snapping of the fingers, used by jugglers.) A readiness; facility; a dexterity; a nice trick: knack, to make a sharp quick noise; perhaps to knock: knacker, a maker of small work; a ropemaker.

The more queinte *knakkes* that they make,
The more wol I stele whan that I take.
Chaucer. The Reves Tale.

For thee, fond boy,
If I may ever know thou dost but sigh
That thou no more shall see this *knack*, as never
I mean thou shalt, we'll bar thee from success.
Shakspeare.

This cap was moulded on a porringer,
A velvet dish; fie, fie, 'tis lewd and filthy:
Why 'tis a cockle, or a walnut shell,
A *knack*, a toy, a trick, a baby's cap. *Id.*

I'll teach you the *knacks*
Of eating flax,
And out of their noses
Draw ribbands and posies.
Ben Jonson's Gypsies.

But is't not presumption to write verse to you,
Who make the better poems of the two!
For all these pretty knacks that you compose,
Alas! what are they but poems in prose? *Denham*

He expounded both his pockets,
And found a watch, with rings and lockets;
A copper-plate, with almanacks
Engraved upon't, with other *knacks*. *Hudibras.*

Knaves, who in full assemblies have the *knack*
Of turning truth to lies, and white to black.
Dryden.

There is a certain *knack* in conversation that gives a good grace by the manner and address.
L'Estrange.

One part for plough-wright, *knacker*, and smith.
Mortimer.

My author has a great *knack* at remarks: in the end he makes another about our refining in controversy, and coming nearer and nearer to the church of Rome. *Atterbury.*

For how should equal colours do the *knack*?
Cameleons who can paint in white and black?
Pope.

The dean was famous in his time,
And had a kind of *knack* at rhime. *Swift.*

KNAG, *n. s.* } Dan. *knag*. A hard knot
KNAG'GY, *adj.* } in wood; knotty.

KNAP, *n. s.* Saxon cnæp, a protuberance; Welsh *cnap*, a protuberance, or a broken piece. A protuberance; a swelling; prominence.

You shall see many fine seats set upon a *knap* of ground, environed with higher hills round about it, whereby the heat of the sun is pent in, and the wind gathered as in troughs. *Bacon.*

Hark on *knap* of yonder hill,
Some sweet shepherd tunes his quill. *Browne.*

It is a *knappe* of a mountaine very steepe and sharpe of all sides, with a narrow point like a pine, apple, by reason whereof we do call it orthopagum.
North's Plut. Sylla.

KNAP, *v. a.* & *v. n.* } Dut. *knappen*; Erse.
KNAP'PLE, *v. n.* } *knaap*. To bite or break short; to make a short sharp noise like that of breaking: knapple, to break off with a sharp noise.

He *knappeth* the spear in sunder.
Common Prayer.

Knap a pair of tongs some depth in a vessel of water, and you shall hear the sound of the tongs.
Bacon's Natural History.

He will *knap* the spears a-pieces with his teeth.
More.

I reduced the shoulders so soon, that the standers-by heard them *knap* in before they knew they were out. *Wiseman.*

KNAP'BOTTLE, *n. s.* *Papaver spumeum*. A plant.

KNAP'SACK, *n. s.* From Belg. *knappen*, bite, or to eat. The bag which a soldier carries on his back; a bag of provisions.

The constitutions of this church shall not be repealed, 'till I see more religious motives than soldiers carry in their *knapsacks*. *King Charles.*

If you are for a merry jaunt, I'll try for once who can foot it farthest: there are hedges in Summer, and barns in Winter: I with my *knapsack*, and you with your bottle at your back: we'll leave honour to madmen, and riches to knaves, and travel till we come to the ridge of the world. *Dryden.*

KNAP'WEED, *n. s.* Lat. *jacea*. A plant.

KNAPWEED. See CENTAUREA.

KNARE, *n. s.* Germ. *knor*. A hard knot.

A forest
In which ther wonneth neyther man ne best;
With knotty, *knarry*, barrein trees olde,
Of stubbes sharpe and hideous to behold.
The Knightes Tale.

A cake of scurf lies baking on the ground,
And prickly stubs instead of trees are found;
Or woods with knots and *knares* deformed and old,
Headless the most, and hideous to behold. *Dryden.*

KNARESBOROUH, a market town and parish of Yorkshire, in the West Riding, 211 miles from London. The town is an ancient borough, and called by foreigners the Yorkshire Spa. It is almost encompassed by the Nid, which issues from the bottom of Craven Hills; and had a priory with a castle, which have long since been demolished, on a craggy rock, whence it took the name. It is about three furlongs in length; and the parish is famous for medicinal springs near each other, and yet of different qualities. 1. The sweet spa, or vitriolic well, in Knaresborough Forest, three miles from the town, which was discovered in 1620. 2. The sulphureous spa, which is used only in bathing. 3. St. Mungo's, a cold bath, four miles from the town. 4. The dropping-well, which is in the town, and the most noted petrifying spring in England, so called by reason of its dropping from the spongy rock hanging over it. The ground which receives it, before it joins the well, is, for twelve yards long, become a solid rock. From the well it runs into the Nid, where the spring water has made a rock that stretches some yards into the river. It has a good market and six fairs. Here is a stone bridge over the river, near one end of which is a cell, dug out of the rock, called St. Robert's chapel. The town is 18 miles west by north of York. It sends 2 members to parliament.

KNAVE, *n. s.* } Sax. cnapa, a page;
KNA'VERY, *n. s.* } a boy; a male child; a
KNA'VISH, *adj.* } servant: all these are
KNA'VISHLY, *adv.* } obsolete. A petty rascal; a scoundrel; a rogue; a card with a soldier painted on it: knavery, dishonesty; petty cheating; mischievous tricks or practices: knavish, wicked; fraudulent; waggish; mischievous.

And to a *knave* a ring she gave, anon;
And prayed him by signes, for to gon
Unto the Queene, and beren hire that clothe.
Chaucer. Legende of Good Women.

Here's no *knavery*! See, to beguile the old folks, how the young folks lay their heads together!
Shakspeare.

Here she comes curst and sad;
Cupid is a *knavish* lad,
Thus to make poor females mad. *Id.*

We'll revel it as bravely as the best,
With amber bracelets, beads, and all this *knavery*.
Id.

For 'twill return, and turn to account,
If we are brought in play upon't,
Or but by casting *knaves* get in,
What power can hinder us to win! *Hudibras.*

For as the moon the eye doth please
With gentle beams not hurting sight,
Yet hath sir sun the greater praise,
Because from him doth come her light:
So if my man must praises have,
What then must I that keep the *knave*?
Sidney.

The cunning courtier should be slighted too,
Who with dull *knavery* makes so much ado;
'Till the shrewd fool, by thriving too too fast,
Like Æsop's fox, becomes a prey at last. *Dryden.*

He eats and drinks with his domestic slaves;
A verier hind than any of his *knaves*. *Id.*

An honest man may take a *knave's* advice;
But idiots only may be cozened twice. *Id.*

When both plaintiff and defendant happen to be crafty *knaves*, there's equity against both. *L'Estrange.*

Most men rather brook their being reputed *knaves*, than for their honesty be accounted fools; *knave*, in the mean time, passing for a name of credit. *South.*

'Tis foolish to conceal it at all, and *knavish* to do it from friends. *Pope's Letters.*

See all our fools aspiring to be *knaves*. *Pope.*

From man to man, or ev'n woman paid,
Praise is the medium of a *knavish* trade,
A coin by craft for folly's use design'd,
Spurious, and only current with the blind.
Cowper. Epistle to a Protestant Lady in France.

It is your knell—swell on thou lusty peal,
Now *knaves*, what ransom for your souls.
Byron. Marino Faliero.

Not to keep my readers longer in suspense, the subject of the poem is, 'The Reformation of the *Knave* of Hearts.' It is not improbable that some may object to me, that a *knave* is an unworthy hero for an epic poem; that a hero ought to be all that is great and good. *Canning. Microcosm.*

KNAUTIA, in botany, a genus of the monogynia order, and tetrandria class of plants; natural order forty-eighth, aggregatæ: common CAL. oblong, simple, quinqueflorous: the proper one simple, superior: the florets regular: the receptacle naked.

KNEAD, *v. a.* } Saxon, cnæðan;
KNEAD'ING-TROUGH, *n. s.* } Belg. *kneden.* To beat or mingle any stuff or substance: kneading-trough, a trough in which dough is mixed together, and worked for making bread.

Frogs shall come into thy *kneading-troughs.* *Exodus.*

He goth and geteth him a *kneding-trough*,
And after, a tubbe,—and a kemelyn.
Chaucer. The Milleres Tale.

Here's yet in the word hereafter, the *kneading*, the making of the cakes, and the heating of the oven. *Shakspeare.*

It is a lump, where all beasts *kneaded* be,
Wisdom makes him an arc, where all agree. *Donne.*

Thus *kneading* up with milk the new-made man
His kingdom o'er his kindred world began:
'Till knowledge misapplyed, misunderstood,
And pride of empire, soured his balmy blood. *Dryden.*

One paste of flesh on all degrees bestowed,
And *kneaded* up alike with moist'ning blood. *Id.*

Prometheus, in the *kneading* up of the heart, seasoned it up with some furious particles of the lion. *Addison's Spectator.*

No man ever reapt his corn,
Or from the oven drew his bread,
Ere hinds and bakers yet were born,
That taught them both to sow and *knead.* *Prior.*

The cake she *kneaded* was the sav'ry meat. *Id.*

KNEE, *n. s.* & *v. a.*
KNEED, *adv.*
KNEE'-DEEP, *adj.* & *adv.*
KNEE'-PAN, *n. s.*
KNEEL, *v. n.*
KNEE'-TRIBUTE, *n. s.*
KNEED'-GRASS, *n. s.*
KNEE'HOLM, *n. s.*

Sax. cneop; Belg. *knie*; Syr. *cnea*; Gr. γονυ; Lat. *genu.* The joint of the leg where the leg is joined to the thigh: a knee is a piece of timber growing crooked, and so cut that the trunk and branch make an angle: knee, to supplicate by kneeling: kneed, having knees or joints, as inkneed, outkneed, and kneed-grass: knee-deep, rising to the knees; sunk in up to the knees: knee-pan, knee and pan, a little round bone which covers the knee joint, convex on both sides, and covered with a smooth cartilage on its foreside: kneel, to bend the knee: knee-tribute, worship, or obedience, shown by kneeling: kneedgrass, a herb: kneeholm, a herb.

A certain man *kneeling* down to him, said, Lord, have mercy upon my son for he is lunatick. *Matt.* xvii. 14.

And they with humble herte ful buxumly,
Kneling upon hir *knees* ful reverently,
Him thonken all. *Chaucer. The Clerkes Tale.*

Ere I was risen from the place that shewed
My duty *kneeling*, came there a reeking post,
Stewed in his haste, half breathless, panting forth
From Goneril his mistress, salutations. *Shakspeare.*

When thou dost ask me blessing, I'll *kneel* down,
And ask of thee forgiveness. *Id. King Lear.*

Go you that banished him, a mile before his tent fall down, and *knee* the way into his mercy. *Id. Coriolanus.*

Thy royal father
Was a most sainted king: the queen that bore thee,
Oftener upon her *knees* than on her feet,
Died every day she lived. *Id. Macbeth.*

Such dispositions are the fittest timber to make great politicks of: like to *knee* timber, that is good for ships that are to be tossed; but not for building houses, that shall stand firm. *Bacon.*

The *kneepan* must be shown, with the knitting thereof, by a fine shadow underneath the joint. *Peacham on Drawing.*

As soon as you are dressed *kneel* and say the Lord's prayer. *Taylor's Guide to Devotion.*

I beg and clasp thy *knees.* *Milton.*

Receive from us
Kneetribute yet unpaid, prostration vile. *Id.*

Wearied with length of ways, worn out with toil,
Iö lay down, and leaning on her *knees*,
Invoked the cause of all her miseries;
And cast her languishing regards above,
For help from Heaven, and her ungrateful Jove. *Dryden.*

The country peasant meditates no harm,
When clad with skins of beast to keep him warm;
In winter weather unconcerned he goes,
Almost *kneedeep*, through mire in clumsy shoes. *Id.*

Him, entering, thou shalt haply see
Beside his spouse, his infant on his *knee.* *Cowper. Elegy IV.*

And tortuous arms,
The shipwright's darling treasure, didst present
To the four quartered winds, robust and bold;
Warped into tough *knee* timber many a load!
But the axe spared thee. *Id. Yardley Oak.*

Ha! art thou there?
Come, *kneel* with me, and witness to the vow
I offer to renounce thee, and to die. *Maturin. Bertram.*

Now—now—he *kneels*—and now they form a circle,
Round him, and all is hidden—but I see
The lifted sword in air.——Oh! Hark! it falls!
Byron. Marino Faliero.

KNEE, in anatomy, the articulation of the thigh and leg bones. See ANATOMY.

KNEE, in ship building, is a crooked piece of

timber, having two branches or arms used to connect the beams of a ship with her sides. The branches of the knees form an angle of greater or smaller extent, according to the mutual situation of the pieces which they are designed to unite. One branch is securely bolted to one of the deck-beams, whilst the other is in the same manner attached to a corresponding timber in the ship's side. Besides the great utility of knees, in connecting the beams and timbers into one compact frame, they contribute greatly to the strength and solidity of the ship, in the different parts of her frame to which they are bolted; and thereby enable her with greater firmness to resist the effects of a turbulent sea. In fixing these pieces, it is occasionally necessary to give an oblique direction to the vertical or side branch, to avoid the range of an adjacent gun-port, or because the knee may be so shaped as to require this disposition; it being sometimes difficult to procure so great a variety of knees as may be necessary in the construction of a number of ships of war. In France the scarcity of these pieces has obliged their shipwrights frequently to form their knees of iron. Knees are either said to be lodging or hanging. The former are fixed horizontally in the ship's frame, having one arm bolted to the beam, and the other across two or three timbers; the latter are fixed vertically, as we have described above.

Knee of the Head, a large flat piece of timber, fixed edgeways upon the fore part of a ship's stem, and supporting the ornamental figure or image placed under the bowsprit. See Ship-Building. The knee of the head, which may properly be defined a continuation of the stem, as being prolonged from the stem forwards, is extremely broad at the upper part, and accordingly composed of several pieces united into one. It is let into the head, and secured to the ship's bows by strong knees fixed horizontally upon both, and called the cheeks of the head. The heel of it is scarfed to the upper end of the fore foot; and it is fastened to the stem above the knee, called a standard. Besides supporting the figure of the head, this piece serves to secure the boom, by which the fore tack is extended to windward; and, by its great breadth, prevents the ship from falling to leeward when close hauled so much as she would otherwise do. It also affords a greater security to the bowsprit, increasing the angle of the bob-stay, so as to make it act more perpendicularly on the bowsprit. The knee of the head is a phrase peculiar to shipwrights; as this piece is always called the cutwater by seamen.

Knee-pan. See Anatomy.

KNELL, n. s. Sax. cnyllan, to ring; Welsh *cnil*, funeral pile. The sound of a bell rung at a funeral.

I would not wish them to a fairer death:
And so his *knell* is knolled. *Shakspeare.*

All these motions, which we saw,
Are but as ice, which crackles at a thaw:
Or as a lute, which in moist weather rings
Her *knell* alone, by cracking of her strings. *Donne.*

Unhappy slave, and pupil to a bell,
Which his hour's work, as well as hours do tell;
Unhappy 'till the last, the kind releasing *knell*. *Cowley.*

At dawn poor Stella danced and sung;
The am'rous youth around her bowed:
At night her fatal *knell* was rung;
I saw, and kissed her in her shrowd. *Prior.*

He, who dies 'mid clarions swelling,
He who dies 'mid requiem's *knelling*.
Maturin. Bertram.

It is our *knell*, or that of Venice.—On.
Byron. Marino Faliero.

KNELLER (Sir Godfrey), a celebrated painter, born at Lubeck in 1648. He received his first instructions under Rembrandt, next under Ferdinand Bol; and afterwards travelled to Rome, where he fixed his particular attention on Titian and the Caracci. He afterwards visited Venice, and distinguished himself so effectually in that city, by his historical pictures and portraits, that his reputation became considerable in Italy. He came at last to England, where he gained the favor of the duke of Monmouth, and, by his recommendation, drew the picture of king Charles II. more than once; who was so taken with his skill that he used to come and sit to him at his house in Covent Garden. The death of Sir Peter Lely left him without a competitor in England, and from that time his fortune and fame were thoroughly established. No painter could have more incessant employment, and no painter could be more distinguished by public honor. He was state painter to Charles II., James II., William III., queen Anne, and George I., equally esteemed and respected by them all: the emperor Leopold I. made him a knight of the Roman empire, and king George I. created him a baronet. Most of the nobility and gentry had their likenesses taken by him, and no painter excelled him in a sure outline, or the graceful disposition of his figures: his works were celebrated by the best poets in his time. He built an elegant house at Whitton near Hampton Court; where he spent the latter part of his life, and died in 1726.

KNEW, the preterite of know. See Know.

KNIFE, n. s. plural knives. Sax. cnif; Dan. *kniff*. An instrument edged, and sometimes pointed, wherewith meat is cut, and animals killed.

Myne handes ben not shapen for a *knife*,
As for to reven no man of his life:
What devill have I with the *knife* to do?
Chaucer. Legende of Good Women.

The *knyff* I gave my fader was yistirday yfound,
Sith I hym apele, let him be fast ybound.
Id. The Merchantes second Tale.

Like raging Ino, when, with *knife* in hand,
She threw her husband's murdered infant out;
Or fell Medea, when on Colchicke stand,
Her brother's bones she scattered all about.
Spenser. Faerie Queene.

In his one hand, as fit for harvests toyle,
He held a *knife*-hook, and in the other hand
A paire of waights. *Id.*

Come, thick night!
And pall thee in the dunnest smoke of hell,
That my keen *knife* see not the wound it makes.
Shakspeare

With him went many a fiend, and ugly spright,
Armed with ropes and *knives*, all instruments of spite.
Fletcher's Purple Island.

Blest powers! forbid thy tender life
Should bleed upon a barbarous *knife*. *Crashaw.*

The sacred priests with ready *knives* bereave
The beast of life, and in full bowls receive
The streaming blood. *Dryden's Æneid.*

Even in his sleep he starts, and fears the *knife*,
And, trembling, in his arms takes his accomplice wife. *Dryden.*

Pain is not in the *knife* that cuts us; but we call it cutting in the *knife*, and pain only in ourselves. *Watts.*

Tell me, *knife*-grinder, how came you to grind *knives*,
Did some rich man tyrannically use you?
Was it the squire, or parson of the parish?
Or the attorney? *Canning.*

KNIGHT (Richard Payne), esq., a late eminent patron of learning and the fine arts, was the son of a man of large landed property, who, from a dread of the effect of the discipline of a public school on his constitution, kept him at home till his fourteenth year. On his father's decease, which took place at that period, Mr. Knight was placed at a seminary, where he soon distinguished himself by his progress in classical literature. This was ever after his favorite study and principal relaxation from his duties, as representative of Ludlow, for which borough he sat in several successive parliaments. The collection of ancient bronzes, medals, pictures, and drawings, assembled in his museum at his house in Soho Square, was an equal proof of his taste and his liberality. The whole of this he bequeathed at his death to the British Museum. As an author, he distinguished himself by great critical acumen, and his perfect familiarity with the domestic habits and customs of the ancients. His principal writings are, An Account of the Remains of the Worship of Priapus, lately existing at Isernia in the kingdom of Naples, and its connexion with the Mystic Theology of the Ancients, 4to. 1786; an Analytical Essay on the Greek Alphabet, 4to. 1791; Analytical Enquiry into the Principles of Taste, 8vo. 1805; and Prolegomena in Homerum, reprinted in the Classical Journal. He published also the Landscape, a didactic poem, 8vo. 1794, a review of which he afterwards printed in 1795; The Progress of Civil Society, a didactic poem, 4to. 1796; and a monody to the memory of Fox, 8vo. 1806; his last work was The Romance of Alfred. He died April 28th, 1824, aged seventy-six.

KNIGHT, *n. s.* & *v. a.*
KNIGHT'LY, *adj.*
KNIGHT'HOOD, *n. s.*
KNIGHT'LESS, *adj.*
Sax. cniþт; Germ. *knecht*, a servant or pupil. A man advanced to a certain degree of military rank. It was anciently the custom to knight every man of rank or fortune, that he might be qualified to give challenges, to fight in the lists, and to perform feats of arms. When the name was not known, it was usual to say *sir* knight. Shakspeare uses it of a female, and it must then be understood in its original meaning, pupil or follower; a champion: to create one a knight, which is done by the king, who gives the person kneeling a blow with a sword, and bids him rise, Sir: knightly, befitting a knight: knighthood, the character and dignity of a knight; knightless, (obsolete); unbecoming a knight.

A *knight* ther was, and that a worthy man,
That fro the time that he first began
To riden out, he loved chevalrie,
Trouthe and honour, freedom and curtesie.
Chaucer. Prologue to Canterbury Tales.

I say as fer as man may ride or go
The world was his; what should I more devise?
For though I wrote or told ever mo
Of his *knighthode*, it might not suffice.
Chaucer. The Man of Lawes Tale.

Arise, thou cursed miscreant,
That hast with *knightless* guile, and treacherous train
Fair *knighthood* foully shamed. *Faerie Queene.*

The sword which Merlin made,
For that his nourslirg, when he *knighthood* swore,
Therewith to doen his foes eternal smart. *Id.*

Sir *knight*, if *knight* thou be,
Abandon this forestalled place. *Spenser.*

Pardon, goddess of the night,
Those that slew thy virgin *knight*;
For the which, with songs of woe,
Round about her tomb they go. *Shakspeare.*

Speak truly, on thy *knighthood*, and thine oath,
And so defend thee, Heaven, and thy valour. *Id.*

The lord protector *knighted* the king: and immediately the king stood up, took the sword from the lord protector, and dubbed the lord mayor of London *knight*. *Hayward.*

He suddenly unties the poke,
Which out of it sent such a smoke,
As ready was them all to choke,
So grievous was the pother;
So that the *knights* each other lost,
And stood as still as any post. *Drayton.*

Is this the sir, who some waste wife to win,
A *knighthood* bought, to go a-wooing in?
Ben Jonson.

This *knight*; but yet why should I call him *knight*,
To give impiety to this reverent stile? *Daniel.*

Favours came thick upon him: the next St. George's day he was *knighted*. *Wotton.*

Did I for this my country bring
To help their *knight* against their king,
And raise the first sedition? *Denham.*

No squire with *knight* did better fit
In parts, in manners, and in wit. *Hudibras.*

Let us take care of your wound, upon condition that a more *knightly* combat shall be performed between us. *Sidney.*

How dares your pride presume against my laws:
As in a listed field to fight your cause:
Unasked the royal grant, no marshal by,
As *knightly* rites require, nor judge to try? *Dryden.*

If you needs must write, write Cæsar's praise,
You'll gain at least a *knighthood*, or the bays.
Pope.

The hero William, and the martyr Charles,
One *knighted* Blackmore, and one pensioned Quarles.
Id.

Arthur the chief, who even now prepares,
In subterraneous being, future wars,
With all his martial *knights*, to be restored,
Each to his seat, around the federal board;
And Oh, if spirit fail me not, disperse
Our Saxon plunderers, in triumphant verse.
Cowper. Manso.

KNIGHT, IN CHESS. See CHESS. The move of this piece in that interesting game has given rise to a curious problem with regard to the various methods by which the chess-board may be covered by the knight. In the life of Kempelen we have given an account of the attempt of an anonymous author to investigate the secret of his celebrated automaton. From his work we

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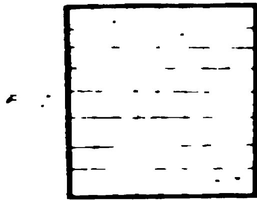
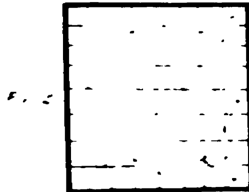
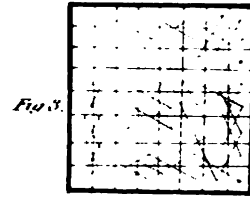
See Article Knight.







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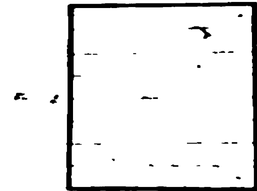

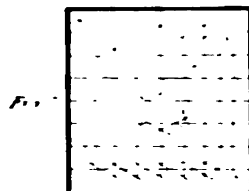

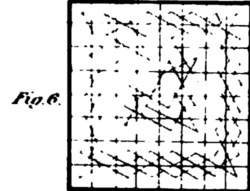

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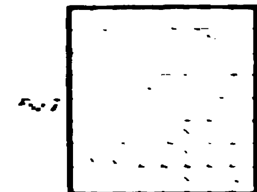

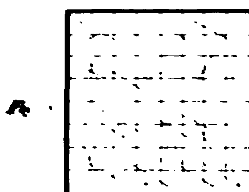

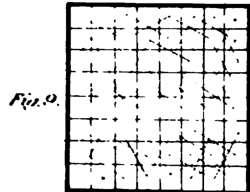

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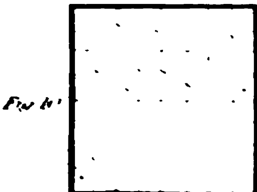

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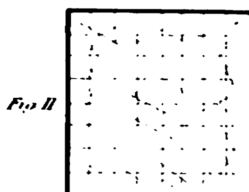

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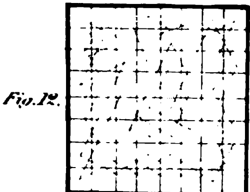

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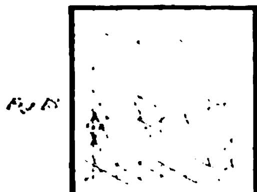

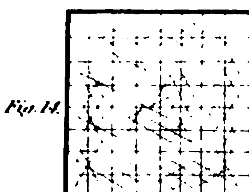

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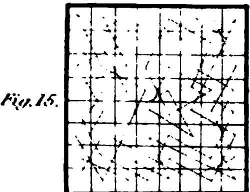

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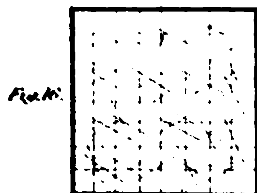

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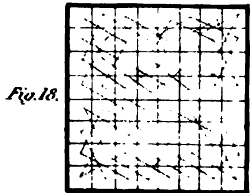

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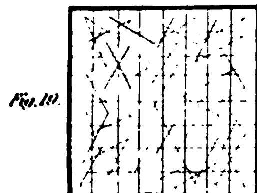


Fig. 19.

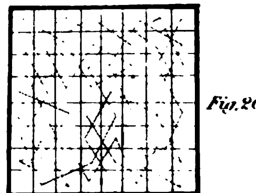


Fig. 20.

London, Published by Thomas Tegg, 73, Cheapside.

J. Shury sculp.

now extract the following account of this problem:—'The curious operation of covering the board by the moves of the knight was often exhibited by the automaton, both over the whole and over half of the board, and the author was thus induced to study the subject, and to determine that this operation might be performed on any parallelogram consisting of twelve squares and upwards, with the exception of fifteen and eighteen squares.

'The path of the knight over the board is of two kinds, terminable and interminable. It is interminable, whenever the last or concluding move of a series is made in a square which lies within the knight's reach of that from which he originally set out; and terminable in every other instance.'

The celebrated Euler published a paper on this subject in the Memoirs of the Academy of Berlin for 1759, and has there given a method of filling up all the squares, setting out from one of the corners. He has likewise given an endless or interminable route, and he explains a principle by which the routes may be varied so as to end upon any square. Solutions of the same problem have also been given by Montmort, Demoivre, and Mairan. These are represented in plate KNIGHT'S MOVES IN CHESS, in the following order:—

Terminable Routes over the whole Board.

No. 1.	By Euler.	No. 6.	By Demoivre.
2.	Ditto.	7.	Mairan.
3.	Ditto.	8.	Montmort.
4.	Ditto.	9.	the Author.
5.	Demoivre.	10.	the Author.

Interminable Routes over the whole Board,

No. 11.	By Euler.	No. 16.	The Author.
12.	Monsieur W.	17.	Ditto.
13.	The Author.	18.	Ditto.
14.	Ditto.	19.	Ditto.
15.	Ditto.	20.	Ditto.

KNIGHTS, in a ship, two short thick pieces of wood, commonly carved like a man's head, having four shivers in each, three for the halyards, and one for the top to run in; one of them stands fast bolted on the beams abaft the fore-mast, and is therefore called the fore-knight; and the other standing abaft the main-mast is called the main-knight.

KNIGHTS OF THE SHIRE, or KNIGHTS OF PARLIAMENT, are two gentlemen of worth, chosen on the king's writ in pleno comitatu, by such of the freeholders of every county as can expend 40*s.* per annum, to represent such county in parliament. These, when every man who held a knight's fee in capite of the crown was customarily constrained to be a knight, were of necessity to be milites gladio cincti, for so the writ runs to this day; but now custom admits esquires to be chosen to this office. They must have at least £500 per annum freehold, and their expenses are to be defrayed by the county, though this is seldom now required.

KNIGHTS OF WINDSOR, or POOR KNIGHTS OF THE CHAPEL, were instituted by Henry VIII. in his testament. Their number was at first thirteen, but has been since augmented to twenty-eight. They assist in the funeral services of the kings of England; they are subject to the office of the canons of Windsor, and live on pensions assigned them by the order of the garter. They bear a blue or red cloak, with the arms of St. George on the left shoulder.

KNIGHT ER'RANT. Chevalier errant. A wandering knight; one who went about in quest of adventures.

> Like a bold *knight errant* did proclaim
> Combat to all, and bore away the dame.
> *Denham.*

> The ancient *errant knights*
> Won all their mistresses in fights
> They cut whole giants into fritters,
> To put them into amorous twitters.
> *Hudibras.*

KNIGHT ER'RANTRY. From knight errant. The character or manners of wandering knights.

> That which with the vulgar passes for courage is a brutish sort of *knight erranty*, seeking out needless encounters. *Norris.*

KNIGHTHOOD is a military order or honor; a mark or degree of ancient nobility, or the reward of personal virtue and merit.

Military KNIGHTHOOD is that of the ancient knights, who acquired it by high feats of arms. They are called milites in ancient charters and titles, by which they were distinguished from mere bachelors, &c. These knights were girt with a sword, and a pair of gilt spurs; whence they were called equites aurati. Knighthood is not hereditary, but acquired. It does not come into the world with a man like nobility; nor can it be revoked. The sons of kings, and kings themselves, with all other sovereigns, heretofore had knighthood conferred on them as a mark of honor. They were usually knighted at their baptism or marriage, at their coronation, before or after a battle, &c.

Regular KNIGHTHOOD is applied to all military orders which profess to wear some particular habit, to bear arms against the infidels, to succour and assist pilgrims in their passage to the Holy Land, and to serve in hospitals where they should be received; such were the knights templars, the knights of Malta, &c.

KNIGHTHOOD, as a system, known under the denomination of chivalry, is to be dated only from the eleventh century. All Europe being reduced to a state of anarchy, on the decline of the Charlemagne empire, every proprietor of a manor became a petty sovereign; the mansion-house was fortified by a moat, defended by a guard, and called a castle. The possessor had a party of 700 or 800 men at his command; and with these he used frequently to make excursions, which commonly ended in a battle with the lord of some petty state of the same kind, whose castle was then pillaged, and the women and treasures carried off by the conqueror. During this state of universal hostility, there was no friendly communication between the provinces, nor any high roads from one part of the kingdom to another: the wealthy traders, who then travelled from place to place with their merchandise and their families, were in perpetual danger; the lord of almost every castle extorted something from them on the road; and, at last,

some one more rapacious than the rest seized upon the whole cargo, and carried off the women for his own use. Thus castles became the warehouses of all kinds of rich merchandise, and the prisons of the distressed females, whose fathers or lovers had been plundered or slain, and who, being therefore seldom disposed to take the robber or murderer into favor, were in continual danger of a rape. At length many lords associated to repress these sallies of violence and rapine, to secure property and protect the ladies. Among these were many proprietors of great fiefs; and the association was at length strengthened by a solemn vow, and received the sanction of a religious ceremony. As the first knights were men of the highest rank, and the largest possessions, admission into the order was deemed the highest honor; many extraordinary qualifications were required in a candidate, and many new ceremonies were added at his creation. After having fasted from sun-rise, confessed himself, and received the sacrament, he was dressed in a white tunic, and placed by himself at a side-table, where he was neither to speak, to smile, nor to eat; while the knights and ladies, who were to perform the principal parts of the ceremony, were eating, drinking, and making merry at the great table. At night his armour was conveyed to the church where the ceremony was performed; and here, having watched it till the morning, he advanced with his sword hanging about his neck, and received the benediction of the priest. He then kneeled down before the lady who was to put on his armour, who, being assisted by persons of the first rank, buckled on his spurs, put a helmet on his head, and accoutred him with a coat of mail, a cuirass, bracelets, cuisses, and gauntlets. Being thus armed cap-a-pee, the knight who dubbed him struck him three times over the shoulder with the flat side of his sword, in the name of God, St. Michael, and St. George. He was then obliged to watch all night in all his armour, with his sword girded, and his lance in his hand. From this time the knight devoted himself to the redress of wrongs, to secure merchants from the rapacious cruelty of banditti, and women from ravishers, to whose power they were, by the particular confusion of the times, continually exposed. The principal lords who entered into the confraternity of knights, used to send their sons to each other at seven years of age, to be educated far from their parents, in the mystery of chivalry. These youths at fourteen were made squires, and at twenty-one were qualified to receive the order of knighthood. See Chivalry, and Feudal System.

Chivalry flourished most during the time of the crusades. These gave rise to new orders of knighthood; hence the knights of the Holy Sepulchre, the Hospitallers, Templars, and an infinite number of religious orders. Various other orders were at length instituted by sovereign princes: the Garter by Edward III. of England; the Golden Fleece, by Philip the Good, duke of Burgundy; and St. Michael, by Louis XI. of France. For an account of these orders see the various titles in the body of the work; as knights of the garter, &c. See Garter, &c. From this time ancient chivalry declined to an empty name; when sovereign princes established regular companies in their armies, knights bannerets were no more, though it was still thought an honor to be dubbed by a great prince or victorious hero; and all who professed arms without knighthood assumed the title of esquire.

Knight of the Post. A hireling evidence; a knight dubbed at the whipping post, or pillory.

KNIGHTON, county of Radnor, South Wales. It is united, under the Reform bill, with Radnor and four other places, in returning one member to parliament.

Knight-Service, servitium militare, and in old French law, chivalry, a species of tenure, the origin and nature of which are explained under the articles Chivalry, and Feudal System. The knights produced by this tenure differed most essentially from the knights above described. See Knighthood. The one class of knights was of a high antiquity; the other was not heard of till the invention of a fee. The adorning with arms, and the blow of the sword, made the act of the creation of the ancient knight; the new knight was constituted by an investment in a piece of land. The former was the member of an order of dignity which had particular privileges and distinctions; the latter was the receiver only of a feudal grant. Knighthood was an honor; knight-service a tenure. The former communicated splendor to an army; the latter gave it strength and numbers. The knight of honor might serve in any station whatever; the knight of tenure was in the rank of a soldier. It is true at the same time, that every noble and baron were knights of tenure, as they held their lands by knight-service. But the number of fees they possessed, and their creation into rank, separated them widely from the simple individuals to whom they gave out grants of their lands, and who were merely the knights of tenure. By the tenure of knight-service, the greatest part of the lands in England was holden, and principally of the king in capite, till the middle of the seventeenth century. It was created, as Sir Edward Coke testifies, for a military purpose, viz. for defence of the realm by the king's own principal subjects, which was judged to be much better than to trust to hirelings or foreigners. The description here given is that of knight-service proper, which was to attend the king in his wars. There were also some other species of knight-service; so called, though improperly, because the service was of a free and honorable nature, and equally uncertain as to the time of rendering, as that of knight-service proper, and because they were attended with similar consequences. Such was the tenure by grand sergeanty, per magnum servitium, whereby the tenant was bound, instead of serving the king generally in his wars, to do some special honorary service to the king in person; as to carry his banner, his sword, or the like; or be his butler, champion, or other officer, at his coronation. It was, in most other respects, like knight-service, only he was not bound to pay aid or escuage; and, when tenant

by knight-service paid £5 for a relief on every knight's fee, tenant by grand sergeanty paid one year's value of his land, were it much or little. Tenure by cornage, which was to wind a horn when the Scots or other enemies entered the land, in order to warn the king's subjects, was like other services of the same nature a species of grand sergeanty. These services, both of chivalry and grand sergeanty, were all personal, and uncertain as to their quantity or duration. But the personal attendance in knight-service growing troublesome and inconvenient in many respects, the tenants found means of compounding for it, by first sending others in their stead, and in process of time making a pecuniary satisfaction to the lords in lieu of it. This pecuniary satisfaction at last came to be levied by assessments, at so much for every knight's fee; and therefore this kind of tenure was called scutagium in Latin, or servitium scuti; scutum being then a well-known denomination of money; and in like manner it was called, in the Norman French, escuage; being indeed a pecuniary instead of a military service. The first time this appears to have been taken was in the 5 Henry II., on account of his expedition to Toulouse; but it soon came to be so universal, that personal attendance fell quite into disuse. Hence we find in history, that, from this period, when the kings of England went to war, they levied scutages on their tenants, that is, on all the landholders of the kingdom, to defray their expenses, and to hire troops: and these assessments, in the time of Henry II., seem to have been made arbitrarily, and at the king's pleasure. Which prerogative being greatly abused by his successors, it became matter of national clamor; and king John was obliged to consent, by his magna charta, that no scutage should be imposed without consent of parliament. But this clause was omitted in his son Henry III.'s charter; where we only find, that scutages or escuage should be taken as they were used to be taken in the time of Henry II.; that is, in a reasonable and moderate manner. Yet afterwards, by stat. 25 Edw. I. c. 5 and 6, and many subsequent statutes, it was enacted, that the king should take no aids or tasks but by the common assent of the realm. Hence it is held, that escuage or scutage could not be levied but by consent of parliament; such scutages being indeed the ground-work of all succeeding subsidies, and the land-tax of later times. Had the escuage been a settled invariable sum, payable at certain times, it had been neither more nor less than a mere pecuniary rent; and the tenure, instead of knight-service, would have been of another kind, called soccage. By the degenerating of knight-service, or personal military duty, into escuage or pecuniary assessments, all the advantages either promised or real of the feudal constitutions were destroyed, and nothing but the hardships remained. Instead of forming a national militia, composed of barons, knights, and gentlemen, bound by their interest, honor, and oaths, to defend their king and country, the whole of this system of tenures now tended to nothing else but a wretched means of raising money to pay an army of occasional mercenaries. In the mean time, the families of all the nobility and gentry groaned under these intolerable burdens, which in consequence of the fiction adopted after the conquest were introduced and laid upon them by the subtlety and finesse of the Norman lawyers. For, besides the scutages to which they were liable in defect of personal attendance, which, however, were assessed by themselves in parliament, they might be called upon by the king or lord paramount for aids, whenever his eldest son was to be knighted, or his eldest daughter married; not to forget the ransom of his own person. The heir, on the death of his ancestor, if of full age, was plundered of the first emoluments arising from his inheritance, by way of relief and primer seisin; and if under age, of the whole of his estate during infancy. And then, as Sir Thomas Smith complains, 'when he came to his own, after he was out of wardship, his woods decayed, houses fallen down, stock wasted, and lands let forth and ploughed to be barren,' to make amends, he was yet to pay half a year's profits as a fine for suing out his livery; and also the price or value of his marriage, if he refused such wife as his lord and guardian had bartered for, and imposed upon him; or twice that value, if he married another woman. Add to this, the untimely and expensive honor of knighthood, to make his poverty more completely splendid. And when, by these deductions, his fortune was so shattered and ruined, that perhaps he was obliged to sell his patrimony, he had not even that poor privilege allowed him, without paying an exorbitant fine for a licence of alienation. A slavery so complicated and so extensive as this called aloud for a remedy in a nation that boasted of her freedom. Palliatives were from time to time applied by successive acts of parliament, which assuaged some temporary grievances; till at length the humanity of king James I. consented, for a proper equivalent, to abolish them all. King James's plan for exchanging our military tenures seems to have been nearly the same as that which has been since pursued; only with this difference, that, by way of compensation for the loss which the crown and other lords would sustain, an annual fee farm rent should be settled and inseparably annexed to the crown, and assured to the inferior lords, payable out of every knight's fee within their respective seignories. An expedient, seemingly much better than the hereditary excise which was afterwards made the principal equivalent for these concessions. For at length the military tenures, with all their heavy appendages, were destroyed at one blow by the statute 12 Car. II. c. 24, which enacts, 'that the court of ward or liveries, and all wardships, liveries, primer seisins, and ousterlemains, values, and forfeitures of marriages, by reason of any tenure of the king or others, be totally taken away. And that all fines for alienations, tenures by homage, knight-service, and escuage, and also aids for marrying the daughter or knighting the son, and all tenures of the king in capite, be likewise taken away. And that all sorts of tenures, held of the king or others, be turned into free and common soccage; save only

tenures in frankalmoign, copyholds, and the honorary services without the slavish part of grand-sergeanty.' A statute which was a greater acquisition to the civil property of this kingdom than even magna charta itself; since that only pruned the luxuriances that had grown out of the military tenures, and thereby preserved them in vigor; but the statute of king Charles extirpated the whole, and demolished both root and branches.

KNIGHT'S ISLAND, one of the Snares Islands of Vancouver, in the Pacific Ocean. It is the largest of them, and was discovered by Mr. Broughton, commander of the Chatham, November 23d, 1791. The south point is in long. 166° 44′ E., lat. 48° 15′ S.

KNIGHT'S ISLAND, an island of Prince William's Sound, about thirty miles in length from north to south, and from two to five broad. Long. 212° 52′ E., lat. 60° 24′ N. Also a small island in Behring's Bay, situated a little to the north-west of Eleanor's Sound, and separated from the continent of America by a narrow navigable channel Long. 220° 47′ E., lat. 59° 45′ N.

KNISTENEAUX, an indigenous tribe of copper-colored Indians, in the British possessions of North America, north of Lake Superior. They are of moderate stature, well proportioned, and of great activity. Mackenzie describes their women as the handsomest of all the Indian females.

KNIT, *v. a.*, *v. n.* & *n. s.* } Saxon cnittan.
KNIT'TER, *n. s.* } Preter knit or knit-
KNIT'TING-NEEDLE, *n. s.* } ted. To make or
KNIT'TLE, *n. s.* } unite by texture
without a loom; to tie; to join or unite; to contract; to tie up; to weave without a loom; knit, texture: knitter, one who weaves or knits: knitting-needle, a wire which is used in knitting: knittle, a string that gathers a purse round.

Nature, the vicaire of the almightie Lorde,
That hote and colde; hevie, light; moiste, and drie
Hath *knit*, by even nomber of accorde,—
In esie voice began to speke and saie.
Chaucer. The Assemble of Foules.

Not anie damzell, which her vaunteth most
In skilful *knitting* of soft silken twyne;
Nor anie weaver, which his worke doth boast
In diaper, in damaske, or in lyrie,
Might with their diverse cunning ever dare
With this so curious networke to compare.
Spenser. Muiopotmos.

The spinsters and the *knitters* in the sun,
And the three maids that weave their thread with bones,
Do use to chant it. *Shakspeare. Twelfth Night.*

Let their heads be sleekly combed, their blue coats brushed, and their garters of an indifferent *knit.*
Shakspeare.

These, mine enemies, are all *knit* up
In their distractions: they are in my power. *Id.*

Our severed navy too
Have *knit* again; and float, threatening most sea-like. *Id.*

Ye *knit* my heart to you by asking this question.
Bacon.

These two princes were agreeable to be joined in marriage, and thereby *knit* both realms into one.
Hayward.

Pride and impudence, in faction *knit*,
Usurp the chair of wit! *Ben Jonson's New Inn.*

God gave several abilities to several persons, that each might help to supply the publick needs, and, by joining to fill up all wants, they be *knit* together by justice, as the parts of the world are by nature.
Taylor's Rule of Holy Living.

Come, *knit* hands, and beat the ground
In a light fantastick round. *Milton.*

A young shepherdess *knitting* and singing: her voice comforted her hands to work, and her hands kept time to her voice's musick. *Sidney.*

A thousand Cupids in those curls do sit;
Those curious nets thy slender fingers *knit.*
Waller.

Make the world distinguish Julia's son
From the vile offspring of a trull, that sits
By the town-wall, and for her living *knits.*
Dryden.

What are the thoughts that *knit* thy brow in frowns,
And turn thy eyes so coldly on thy prince?
Addison.

He gave her a cuff on the ear, she would prick him with her *knittingneedle. Arbuthnot's John Bull.*

A single emanation from one body,
Together *knit* for our oppression!
Byron. Marino Faliero.

KNOB, *n. s.* } Sax. cnæp; Dut. *knoop.*
KNOBBED', *adj.* } A protuberance; any part
KNOB'BINESS, *n. s.* } bluntly rising above the
KNOB BY, *adj.* } rest; having knobs or
protuberances; hard; stubborn: sometimes written knop.

Ne oile of tartre non,
Ne oinement, that wolde clense or bite,
That him might helpen of his whelkes white,
Ne of the *knobbes* sitting on his chekes.
Chaucer. Prologue to Canterbury Tales.

The informers continued in a *knobby* kind of obstinacy, resolving still to conceal the names of the authors. *Howel.*

Just before the entrance of the right auricle of the heart is a remarkable *knob* or bunch, raised up from the subjacent fat. *Ray.*

The horns of a roe deer of Greenland are pointed at the top, and *knobbed* or tuberous at the bottom.
Grew.

KNOCK, *v. n.*, *v. a.* & *n. s.* } Sax. cnucian;
KNOCK'ER, *n. s.* } Welsh *cnoce*, a
blow. To clash; to be driven suddenly together; to beat at a door for admittance: *to knock under*, a common expression, which denotes that a man yields or submits. Submission is expressed among good fellows by knocking under the table. Followed commonly by a particle: as, to *knock up*, to rouse by knocking; to *knock down*, to fell by a blow; to dash together or come in collision: to *knock on the head*, to kill by a blow; to destroy: knock, a sudden stroke or blow; a loud rap at the door: knocker, he that knocks; the hammer which hangs at the door for strangers to strike.

Go up, quod he unto his knave, anon;
Clepe at his dore, or *knocke* with a ston;
Loke how it is and tell me boldely,
This knave goth him up, ful sturdely,
And at the chambre dore while that he stood,
He cried and *knocked* as that he were wood.
Chaucer. The Milleres Tale.

How do ye mean moving him?
—Why, by making him incapable of Othello's place; *knocking out* his brains. *Shakspeare. Othello.*

Villain, I say, *knock* me *at* this gate,
And rap me well, or I'll *knock* your knave's pate.
Shakspeare

Whether to *knock* against the gates of Rome,
Or rudely visit them in parts remote,
To fright them, ere destroy. *Id. Coriolanus.*

Any hard body thrust forwards by another body contiguous, without *knocking*, giveth no noise. *Bacon's Natural History.*

So when the cook saw my jaws thus *knock* it,
She would have made a pancake of my pocket. *Cleveland.*

Some men never conceive how the motion of the earth should wave them from a *knock* perpendicularly directed from a body in the air above. *Browne's Vulgar Errours.*

Guiscard, in his leathern frock,
Stood ready, with his thrice-repeated *knock*:
Thrice with a doleful sound the jarring grate
Rung deaf and hollow. *Dryden's Boccace.*

At him he launched his spear, and pierced his breast;
On the hard earth the Lycian *knocked* his head,
And lay supine; and forth the spirit fled. *Dryden.*

Knock at your own breast, and ask your soul,
If those fair fatal eyes edged not your sword. *Id.*

He that has his chains *knocked off*, and the prison doors set open to him, is perfectly at liberty. *Locke.*

Excess, either with an apoplexy, *knocks* a man *on the head*; or with a fever, like fire in a strong-water shop, burns him down to the ground. *Grew's Cosmology.*

He betook himself to his orchard, and walking there was *knocked on the head* by a tree. *South.*

'Tis the sport of statesmen,
When heroes *knock* their knotty heads together,
And fall by one another. *Rowe.*

He began to *knock down* his fellow citizens with a great deal of zeal, and to fill all Arabia with bloodshed. *Addison.*

They may say, the atoms of the chaos, being variously moved according to this catholick law, must needs *knock* and interfere. *Bentley.*

Shut, shut the door, good John! fatigued, I said,
Tie up the *knocker*, say I'm sick, I'm dead. *Pope.*

Time was, a sober Englishman would *knock*
His servants *up*, and rise by five o'clock;
Instruct his family in every rule,
And send his wife to church, his son to school. *Id.*

KNOLL, *v. a.* & *v. n.* See KNELL. To sound as a bell.

If ever you have looked on better days,
If ever been where bells have *knolled* to church. *Shakspeare.*

Had I as many sons as I have hairs,
I would not wish them to a fairer death:
And so his knell is *knolled*. *Id. Macbeth.*

KNOLL, *n. s.* A little hill.

KNOLLES (Richard), an English historian, born in Northamptonshire about the middle of the sixteenth century, and educated at Oxford, after which he was appointed master of the free school at Sandwich in Kent. He composed Grammaticæ Latinæ, Græcæ, et Hebraicæ Compendium, cum radicibus, London, 1606. He also compiled The General History of the Ottoman Empire, &c. He died in 1610, and this history has been since continued by several hands: the best by Paul Ricaut, consul at Smyrna, folio, London, 1680. Knolles wrote also The Lives and Conquests of the Ottoman Kings and Emperors to the year 1610; printed in 1621; and A Brief Discourse of the Greatness of the Turkish Empire, &c.

KNOP, *n. s.* A corruption of knap. Any tufty top.

KNOP, *n. s.* Ranunculus. A flower

KNOT (Edward), a native of Northumberland, born in 1580, who, having taken orders, entered among the Jesuits in 1606. His real name was Matthias Wilson. He taught at Rome in the English College, and was afterwards appointed sub-provincial, and was twice sent thither as provincial. He was present as provincial at Rome in 1636, and chosen definitor. He died in London in 1646. He published several pieces, particularly Mercy and Truth, or Charity Maintained by the Catholics; against Dr. Potter, who had charged the church of Rome with wanting charity; but is principally known as the antagonist of Chillingworth, on whose Religion of Protestants he wrote some severe strictures, under the title of Infidelit Unmasked.

KNOT, *n. s.* Sax. cn ttra; Goth. *knutt*; Germ. *knot*; Dut. *knut e*; Erse. *knotte*. A complication of a cord o string not easily to be disentangled.

With that her glistening helmet she unlaced,
Which doft, her golden locks, that were upbound,
Still in a *knot*, unto her heeles downe traced,
And like a silken veile in compasse round,
About her backe, and all her bodie wound. *Spenser. Faerie Queene.*

He found that Reason's self now reasons found
To fasten *knots*, which fancy first had bound. *Sidney.*

As the fair vestal to the fountain came,
Let none be startled at a vestal's name,
Tired with the walk, she laid her down to rest,
And to the winds exposed her glowing breast,
To take the freshness of the morning air,
And gathered in a *knot* her flowing hair. *Addison.*

Any figure of which the lines frequently intersect each other.

Garden *knots*, the frets of houses, and all equal figures, please: whereas unequal figures are but deformities. *Bacon.*

Our sea-walled garden, the whole land,
Is full of weeds, her fairest flowers choked up,
Her *knots* disordered. *Shakspeare's Richard II.*

It fed flowers worthy of paradise, which not nice art
In beds and curious *knots*, but nature boon,
Poured forth profuse on hill and dale, and plain. *Milton.*

Their quarters are contrived into elegant *knots*, adorned with the most beautiful flowers. *More.*

Henry in *knots* involving Emma's name,
Had half-expressed, and half-concealed his flame
Upon this tree; and as the tender mark
Grew with the year, and widened with the bark,
Venus had heard the virgin's soft address,
That as the wound, the passion might increase. *Prior.*

Any bond of association or union.

And, for to fasten his hood under his chin,
He hadde of gold ywrought a curious pinne,—
A love-*knotte* in the greten ther was. *Chaucer. Prologue to the Canterbury Tales.*

Whereas I find that whot is whot,
And cold is cold by course of kind;
So shall I knit an endless *knot*:
Such fruit in love alas I find. *Wyatt.*

Confirm that amity
With nuptual *knot*, if thou vouchsafe to grant
That virtuous lady Bona.
Shakspeare. Henry VI.

Richmond aims
At young Elizabeth, my brother's daughter,
And by that *knot* looks proudly on the crown.
Id.

I would he had continued to his country
As he began, and not unknit himself
The noble *knot* he made. *Id. Coriolanus.*

Why left you wife and children,
Those precious motives, those strong *knots* of love?
Id.

Not all that Saul could threaten or persuade,
In this close *knot*, the smallest looseness made.
Cowley.

A hard part in a piece of wood caused by the protuberance of a bough, and consequently by a transverse direction of the fibres. A joint in a herb.

Take in the very refuse among those which served to no use, being a crooked piece of wood, and full of *knots*, he hath carved it diligently, when he had nothing else to do. *Wisdom.*

Such *knots* and crossness of grain is objected here, as will hardly suffer that form, which they cry up here as the only just reformation, to go on so smoothly here as it might do in Scotland.
King Charles.

Difficulty; intricacy.

Some man preiseth his neighbour by a wicked entente, for he maketh, alway, a wicked *knotte* at the last ende; alway he maketh a but at the last ende, that is digne of more blame than is worth all the preising. *Chaucer. The Persones Tale.*

A fretful temper will divide
The closest *knot* that may be tied,
By ceaseless sharp corrosion.
Cowper. Friendship.

A man shall be perplexed with *knots* and problems of business, and contrary affairs, where the determination is dubious, and both parts of the contrariety seem equally weighty; so that, which way so ever the choice determines, a man is sure to venture a great concern. *South's Sermons.*

Any intrigue, or difficult perplexity of affairs.

When the discovery was made that the king was living, which was the *knot* of the play untied, the rest is shut up in the compass of some few lines.
Dryden's Dufresnoy.

A confederacy; an association; a small band.

Oh you panderly rascals! there's a *knot*, a gang, a conspiracy against me.
Shakspeare's Merry Wives of Windsor.

What is there here in Rome that can delight thee,
Where not a soul, without thine own foul *knot*,
But fears and hates thee. *Ben Jonson's Catiline.*

A *knot* of good fellows borrowed a sum of money of a gentleman upon the king's highway.
L'Estrange.

I am now with a *knot* of his admirers, who make request that you would give notice of the window where the knight intends to appear.
Addison's Spectator.

A cluster; a collection.

The way of fortune is like the milky way in the sky, which is a meeting or *knot* of a number of small stars, not seen asunder, but giving light together.
Bacon's Essays.

In a picture, besides the principal figures which compose it, and are placed in the midst of it, there are less groups or *knots* of figures disposed at proper distances, which are parts of the piece, and seem to carry on the same design in a more inferior manner.
Dryden.

But not for any *knot* of men,
Nor sect, nor faction, did I bleed or sweat!
Byron. Marino Faliero.

KNOT, *v. n.* & *v. a.*
KNOT'TED, *adj.*
KNOT'TINESS, *n. s.*
KNOT'TY, *adj.*
KNOT'LESS, *adj.*
To complicate in knots; to entangle and perplex; to unite; to knit knots for fringes; to form buds or joints, in vegetation: knotted, knottiness, knotty, full of knots; unevenness, or intricacy; hard; rugged; rough: knotless, free from knots or obstructions.

But God it wote, er fully monthes two,
She was ful ferre fro that entencioun;
For bothè Troilus and Troiè toun
Shall, *knotlesse*, throughout her hertè slide;
For she wol take a purpose to abide.
Chaucer. Troilus and Cresside.

Where bene the nosegayes that she dight for thee?
The coloured chaplets wrought with a chiefe,
The *knotted* rush-ringes, and gilt rosemaree?
Spenser. Shepheardes Calender.

I have seen tempests, when the scolding winds
Have rived the *knotty* oaks.
Shakspeare. Julius Cæsar.

The timber in some trees more clean, in some more *knotty*: try it by speaking at one end, and laying the ear at the other; for if it be *knotty*, the voice will not pass well. *Bacon.*

King Henry, in the very entrance of his reign, met with a point of great difficulty, and *knotty* to solve, able to trouble and confound the wisest kings.
Bacon.

The party of the papists in England are become more *knotted*, both in dependence towards Spain and amongst themselves. *Id.*

Virtue was represented by Hercules naked, with his lion's skin and *knotted* club: by his oaken club is signified reason ruling the appetite; the *knottiness* thereof the difficulty they have that seek after virtue.
Peacham on Drawing.

Some on the bench the *knotty* laws untie.
Dryden.

The *knotted* oak shall showers of honey weep. *Id.*

Happy we who from such queens are freed,
That were always telling beads;
But here's a queen when she rides abroad
Is always *knotting* threads. *Sedley.*

Princes exercised skill in putting intricate questions; and he that was the best at the untying of *knotty* difficulties, carried the prize. *L'Estrange.*

They compliment, they sit; they chat,
Fight o'er the wars, reform the state;
A thousand *knotty* points they clear,
'Till supper and my wife appear. *Prior*

Yet is thy root sincere, sound as the rock,
A quarry of stout spurs, and *knotted* fangs,
Which, crooked into a thousand whimsies, clasp
The stubborn soil, and hold thee still erect.
Cowper. Yardley Oak.

KNOT, Fr. nœud et bouton fait au bout d'un cordage, a large knob, formed on the extremity of a rope, generally by untwisting the ends thereof, and interweaving them regularly amongst each other. Among seamen there are several sorts of knots, which differ in their form, size, and name, according to the uses for which they are designed; as,

Bowline Knot, Fr. nœud de bouline, is made by laying the end of a rope *a* over the standing part *b*, and turning a bight over the standing part; then leading the end round the standing part, through the bight again. When this knot is drawn close, it makes a loop, and, when fastened to the cringles of the sails, they must break, or the sails split before it will slip. See diagram.

Buoy-rope Knot, nœud de l orin de l'ancre, is made by unlaying the strands of the cable-laid rope, and also one of the small strands out of each large one; laying the large ones again as before, and leaving the small ones out; then single and double wall the small strands round the rope, worm them along the divisions, and stop their ends with spun yarn.

Diamond Knot, Fr. nœud de diamant, is made by unlaying the end of a hawser-laid rope for a considerable length, and with the strands from three bights down its side, holding them fast. Put the end of the strand *a* over the strand *b*, and through the bight of the strand *c*, as represented in the figure: then put the strand *b* over the strand *c*, and through the bite formed at the strand *a*; and the end *c* over *a* and through the bight of *b*. This knot is used for the side ropes, jib-guys, bell-ropes, &c.

Double diamond Knot, Fr. double nœud de diamant, is made with the strands opened out again, following the lead of the single knot through two single bights, the ends coming out at the top of the knot, and leading the last strand through two double bights; then by laying the rope up again as before to where the next knot is to be made.

KNOT'BERRYBUSH, *n. s.* Chamæmorus. A plant.—Ainsworth.

KNOT'GRASS, *n. s.* Knot and grass: polygonum. A plant.

You minimus of hindering *knotgrass* made.
Shakspeare.

KNOUT, a punishment inflicted in Russia, with a kind of whip called knout, and made of a long strap of leather prepared for this purpose. With this whip the executioners dexterously carry off a slip of skin from the neck to the bottom of the back, laid bare to the waist; and repeating their blows, in a little while rend away all the skin off the back in parallel strips. In the common knout the criminal receives the lashes suspended on the back of one of the executioners; but in the great knout he is raised into the air by means of a pulley fixed to the gallows, and a cord fastened to the two wrists tied together; a piece of wood is placed between his two legs also tied together; and another of a crucial form under his breast. Sometimes his hands are tied behind over his back: and when he is pulled up in this position his shoulders are dislocated. The executioners can make this punishment more or less cruel; and, it is said, so dexterous, that when a criminal is condemned to die, they can make him expire either by one or several lashes.

KNOW, *v. a.* & *v. n.*
Know'able, *adj.*
Know'er, *n. s.*
Know'ing, *adj.* & *n. s.*
Know'ingly, *adv.*
Knowl'edge, *n. s.* & *v. a.*

Saxon, cnapan; Armoric, *knau*; Goth. *kna*, *kunna*. Preter. I knew, I have known. To perceive with certainty, whether intuitive or discursive; to be informed or taught; to distinguish or recognise; to be familiar with; to have clear perception; to have commerce with another sex; not to be ignorant: to know *for*, to have knowledge of: to know *of*, to examine: knowable, possible to be discovered or understood: knower, one who has skill: knowing, skilful; well instructed; intelligent; conscious: knowing, an old word for knowledge: knowledge, certain perception; learning; mental illumination; skill; acquaintance with any fact or person; information: to acknowledge; to avow.

And Adam *knew* Eve his wife. *Genesis.*

Shipmen that have *knowledge* of the sea. *Kings.*

And, right anon, she for her conseil sente:
And they, ben comen to *know* what she mente;
And whan assembled wos this folk in fere,
She set hire doun; and sayd as ye shul here.
Chaucer. The Man of Lawes Tale.

But many one with hire loke she herte;
And that sate hire full lyte at herte,
For she *knewe* nothing of hir thought:
But wher she *knewe* or *knewe* it nought,
Algate she ne rought of hem a stre.
Id. Boke of the Duchesse.

I *know* to seek the track of my desired foe,
And fear to find that I do seek: but chiefly this I *know*,
That lovers must transform into the thing beloved
And live, alas! who could believe? with sprite from life removed. *Earl of Surrey.*

No soul, ye *know*, entereth heaven-gate,
Till from the body he be separate:
And whom have ye known die honestly,
Without the help of Poticary?
Heywood. The Four P's.

What art thou, thus to rail on me, that is neither *known* of thee, nor *knows* thee? *Shakspeare.*

Let him be so entertained as suits gentlemen of your *knowing* to a stranger of his quality. *Id.*

Ignorance is the curse of God,
Knowledge the wing wherewith we fly to heaven.
Id.

O that a man might *know*
The end of this day's business ere it come. *Id.*

Do but say to me what I should do,
That in your *knowledge* may by me be done,
And I am pressed unto it.
Id. Merchant of Venice.

You have heard, and with a *knowing* ear,
That he, which hath your noble father slain,
Pursued my life. *Id. Hamlet.*

He said the water itself was a good healthy water; but for the party that owned it, he might have more diseases than he *knew for*. *Id. Henry IV.*

When they *know* within themselves they speak of that they do not well *know*, they would nevertheless seem to others to *know* of that which they may not well speak. *Bacon.*

The prophet Hosea tells us that God saith of the Jews, they have reigned, but not by me; which proveth plainly, that there are governments which God doth not avow: for though they be ordained by his secret providence, yet they are not *knowledged* by his revealed will. *Id. Holy War.*

A state's anger should not take
Knowledge either of fools or women. *Ben Jonson.*

The first in order (nor in worth the last)
Is *knowledge*, drawn from peace, and Muse's spring,
Where, shaded in fair Sinai's groves, his taste
He feasts with words, and works of heavenly king.
Fletcher's Purple Island.

'Tis grief to *know* of grief, and ill to *know* of ill.
Id.

Not from experience, for the world was new,
He only from their cause their natures *knew*.
Denham.

Not to *know* of things remote, but *know*
That which before us lies in daily life,
Is the prime wisdom. *Milton.*

These are resolved into a confessed ignorance, and I shall not pursue them to their old asylum; and yet it may be, there is more *knowable* in these, than in less acknowledged mysteries. *Glanville.*

If we look on a vegetable, and can only say 'tis cold and dry, we are pitiful *knowers*. *Id.*

The dog straight fawned upon his master for old *knowledge*. *Sidney.*

He *knowingly* and wittingly brought evil into the world. *More.*

There is but one mineral body, that we *know* of, heavier than common quicksilver. *Boyle.*

The *knowingest* of these have of late reformed their hypothesis. *Id.*

In the other world there is no consideration that will sting our consciences more cruelly than this, that we did wickedly, when we *knew* to have done better; and chose to make ourselves miserable, when we understood the way to have been happy. *Tillotson.*

Bellino, one of the first who was of any consideration at Venice, painted very drily, according to the manner of his time: he was very *knowing* both in architecture and perspective. *Dryden.*

They who were rather fond of it than *knowingly* admired it, might defend their inclination by their reason. *Id.*

One would have thought you had *known* better things than to expect a kindness from a common enemy. *L'Estrange.*

When a man makes use of the name of any simple idea, which he perceives is not understood, he is obliged by the laws of ingenuity, and the end of speech, to make *known* what idea he makes it stand for. *Locke.*

Knowledge, which is the highest degree of the speculative faculties, consists in the perception of the truth of affirmative or negative propositions.
Id.

'Tis plain, that under the law of works is comprehended also the law of nature, *knowable* by reason, as well as the law given by Moses. *Id.*

What makes the clergy glorious is to be *knowing* in their profession, unspotted in their lives, active and laborious in their charges. *South.*

All animals of the same kind, which form a society, are more *knowing* than others. *Addison.*

These two arguments are the voices of nature, the unanimous suffrages of all real beings and substances created, that are naturally *knowable* without revelation. *Bentley.*

To the private duties of the closet he repaired, as often as he entered upon any business of consequence: I speak *knowingly*. *Atterbury.*

Verse graced of old the feasts of kings, ere yet
Luxurious dainties destined to the gulph
Immense of gluttony were *known*, and ere
Lyacus deluged yet the temperate board.
Cowper. To his Father.

This patron may be sounded; I will try him,
I *know* the people to be discontented.
Byron. Marino Faliero.

But bring me to the *knowledge* of your chiefs.
Id.

KNOWLER (William), LL.D., a learned English divine, born in 1699, educated at St. John's College, Cambridge, and chaplain to the first marquis of Rockingham, who appointed him rector of Irthlingborough and Boddington. He was editor of the earl of Strafforde's Letters, in folio, 1739; and translated St. Chrysostom's Commentary on Paul's Epistle to the Galatians, 1766. He died in 1767, aged sixty-eight.

KNOX (John), the hero of the Reformation in Scotland, was born in 1505, at Gifford near Haddington. His ancestors were originally proprietors of the lands of Knock, in the parish of Renfrew, whence the family derived the surname of the Knocks, or Knox. They afterwards obtained the lands of Craigend and Ranfurly, both in this parish, and resided long at the castle of Ranfurly. He was educated at the University of St. Andrew's, where he took the degree of A. M. and commenced teacher very early in life. At this time the new tenets of Martin Luther were but little known in Scotland. Knox therefore at first was a zealous Roman Catholic; but attending the sermons of a black friar, named Guilliam, he began to waver in his opinions; and afterwards conversing with the famous Wishart, who, in 1544, came to Scotland with the commissioners sent by Henry VIII., he renounced the Romish religion, and became a zealous reformer. Being appointed tutor to the sons of the lairds of Ormistoun and Lang Niddery, he began to instruct them in the principles of the Protestant religion; and on that account was so violently persecuted by the bishop of St. Andrew's, that with his two pupils he was obliged, in 1547, to take shelter in the castle of that place. But the castle was besieged and taken by twenty-one French galleys. He continued a prisoner on board a galley two years, till the end of 1549; when being set at liberty he landed in England, and, having obtained a license, was appointed preacher, first at Berwick, and afterwards at Newcastle. Strype conjectures that in 1552 he was appointed chaplain to Edward VI. He certainly obtained an annual pension of £40, and was offered the living of All-hallows in London; which he refused, not choosing to conform to the liturgy. Soon after the accession of queen Mary I. he retired to Geneva; whence he removed to Frankfort, where he preached to the exiles; but a difference arising on account of his refusing to read the English liturgy, he went back to Geneva; and thence, in 1555, returned to Scotland, where the Reformation had made considerable progress during his absence. He now travelled from place to place, preaching and exhorting the

people with unremitting zeal and resolution. About this time he wrote a letter to the queen regent, earnestly entreating her to examine the Protestant doctrine, which she treated with contempt. In 1556 he was invited by the English Calvinists at Geneva to reside among them, and accepted their invitation. Immediately after his departure from Scotland the bishop summoned him, and, he not appearing, condemned him to death for heresy, and burnt his effigy at the cross of Edinburgh. He continued abroad till 1559, during which time he published his First Blast against the Monstrous Regiment of Women. Being now returned to Scotland, he resumed the great work of reformation with his usual ardor, and was appointed minister at Edinburgh. In 1561 queen Mary arrived from France, and, being attached to the religion in which she was educated, was exposed to continual insults from her reformed subjects. Knox himself frequently insulted her from the pulpit; and when admitted to her presence, regardless of her sex and her high rank, behaved to her with the most unjustifiable freedom. In 1571 he was obliged to leave Edinburgh, on account of the confusion and danger from the opposition to the earl of Lenox, then regent: but he returned in 1572, and resumed his pastoral functions. He died at Edinburgh in November 1572, and was buried in the church-yard of St. Giles's in that city.—His History of the Reformation was printed with his other works at Edinburgh in 1584, 1586, 1644, 1732. He published many pieces, several of which are preserved in Calderwood's History of the Church of Scotland. He left also a considerable number of MSS. Dr. Robertson says, 'Zeal, intrepidity, disinterestedness, were virtues that he possessed in an eminent degree. He was acquainted too with the learning cultivated in that age; and excelled in that species of eloquence which is calculated to rouse and to inflame. His maxims, however, were often too severe, and the impetuosity of his temper excessive. Rigid and uncomplying, he showed no indulgence to the infirmities of others. Regardless of the distinctions of rank and character, he uttered his admonitions with an acrimony and vehemence more apt to irritate than to reclaim; and this often betrayed him into indecent expressions with respect to queen Mary's person and conduct. Those very qualities, however, which now render his character less amiable, fitted him to be the instrument of providence for advancing the reformation among a fierce people, and enabled him to face dangers, and to surmount opposition, from which a person of a more gentle spirit would have been apt to shrink back. By an unwearied application to study and to business, as well as by the frequency and fervor of his public discourses, he had worn out a constitution naturally strong. During a lingering illness he discovered the utmost fortitude, and met the approach of death with a magnanimity inseparable from his character. He was constantly employed in acts of devotion, and comforted himself with those prospects of immortality which not only preserve good men from desponding, but fill them with exultation in their last moments. The earl of Morton, who was present at his funeral, pronounced his eulogium in few words, the more honorable to Knox, as they came from one whom he had often censured with peculiar severity: 'Here lies he who never feared the face of man.'

Knox (Vicesimus), D.D. a modern divine and polite writer, was born December 8th, 1752, and educated at Merchant Tailors' school, whence he proceeded to St. John's College, Oxford. On the death of his father, he was chosen his successor in the head-mastership of Tunbridge school, over which he presided thirty-three years, till, retiring in 1812, he was himself succeeded by his son. He held also the livings of Riemwell and Ramsden Crays in Essex, and the chapelry of Shipbourne in Kent. His works are, Essays Moral and Literary, 3 vols. 8vo. and 12mo.; Liberal Education, 2 vols. ditto; Winter Evenings, 3 vols. ditto; Personal Nobility, or Letters to a Young Nobleman, 1 vol. 12mo.; Christian Philosophy, 2 vols. 12mo.; Considerations on the Nature and Efficacy of the Lord's Supper, 1 vol. 8vo.; and a pamphlet On the National Importance of Classical Education; Sermons, &c. He published, for the use of his school, expurgated editions of Horace and Juvenal, and a series of selections from the works of the best English authors, generally known as Elegant Extracts and Elegant Epistles. On the breaking out of the French Revolution, several opposition pamphlets were attributed to him, and a translation of Erasmus's Bellum dulce inexpertis. He is also said to have been the author of a tract, entitled The Spirit of Despotism, published anonymously in 1794. Dr. Knox wrote Latin with great purity and elegance. He died in September 1821.

Knox, a county in the south-west part of Indiana, United States. Chief town, Vincennes. 2. A county of the south side of Kentucky. Chief town Barboursville: and, 3, A county of East Tennessee. Chief town, Knoxville.

KNOXVILLE, a post town and capital of Knox county Tennessee, is on the Holston, four miles below the mouth of French Broad River, and twenty-two above the junction of the Holston with Tennessee River. It is 134 miles W. S. W. from Abingdon, 190 south of Lexington, and 541 from Washington. Long. 83° 44 W., lat. 35° 45′ N. It is pleasantly situated and well laid out, contains a court house, jail, state barrack, barracks for 700 men, and three places of public worship. It was once the seat of the state government and is still the largest town in East Tennessee. Hampden's Literary Academy established here is a respectable foundation.

KNOXIA, in botany, a genus of the monogynia order, and tetrandria class of plants: natural order forty-seventh, stellatæ: COR. monopetalous, and funnel-shaped: there are two furrowed SEEDS: CAL. has one leaf larger that the rest Species two, natives of Ceylon.

KNUB'BLE, *v. a.* Dan. *knipler*. To beat. —*Skinner*.

KNUCK'LE, *n. s.* & *v. n.* } Saxon cnucle;
Knuck'led, *adj.* } Dut. *knockle*. The joints of the fingers protuberant when the fingers close; the knee joint of a calf; the articulation

or joint of a plant: knuckle (from the noun), to submit; perhaps from an odd custom of striking the under side of the table with the knuckles, in confession of an argumental defeat: knuckled, jointed.

Divers herbs have joints or *knuckles*, as it were stops in their germination; as gillyflowers, pinks, and corn. *Bacon.*

The reed or cane is a watery plant, and groweth not but in the water: it hath these properties, that it is hollow, and it is *knuckled* both stalk and root; that, being dry, it is more hard and fragile than other wood; that it putteth forth no boughs, though many stalks out of one root. *Id. Natural History.*

Jelly, which they used for a restorative, is chiefly made of *knuckles* of veal. *Id.*

Thus often at the Temple stairs we've seen
Two tritons, of a rough athletic mien,
Sourly dispute some quarrel of the flood,
With *knuckles* bruised, and face besmeared in blood. *Garth.*

KNUFF, *n. s.* Perhaps corrupted from knave, or the same with chuff. A lout: an old word preserved in a rhyme of prediction.

The couutry *knuffs*, Hob, Dick, and Hick,
With clubs and clouted shoon,
Shall fill up Dussendale
With slaughtered bodies soon. *Hayward.*

KNUR, *n. s.* } Germ. *knor.* A knot; a
KNURLE, *n. s.* } hard substance.

The stony nodules found lodged in the strata, are called by the workmen *knurs* and knots. *Woodward.*

KNUTZEN (Matthias), a native of Holstein, the only person on record, before the era of the French Revolution, who openly professed and taught atheism. It is said he had about 1000 disciples in different parts of Germany. They were called Conscienciaries, because they asserted there is no other God, no other religion, no other lawful magistracy, but conscience, which teaches every man the three fundamental principles of the law of nature: to hurt nobody, to live honestly, and to give every one his due. Several copies of a letter of his from Rome were spread abroad, containing the substance of his system. It is to be found entire in the last edition of Mecrælius. This speculatist made considerable noise in his day. He is not to be confounded with

KNUTZEN (Martin), professor of philosophy at Konigsberg, who was born in 1713, and died in 1751. He left some learned and excellent works the principal of which are, Systema Causarum efficientium; Elementa Philosophiæ Rationalis, Methodo Mathematico demonstrata; Theoremata de Parabolis Infinitis; and a Defence of the Christian Religion, 4to. in German.

KODIAK, a group of islands in the northwest coast of America, and fifty miles from the entrance of Cook's inlet. They extend about 130 miles in length from south-west to north-east and about fifty miles in breadth. According to the Russian charts, as they were shown to Vancouver, the largest extends from Cape Trinity to Cape Greville, where a separation takes place between it and the land to the westward of St. Hermogenes's Island, and forms, with the land to the southward, what captain Cook called Whitsuntide Bay. A passage, however, leading westward into those straits separates the island of Kodiak from the continent to the southward of Cape Douglas. These straits are said by the Russian navigators to be in general upwards of ten leagues wide, and free from interruption. Long. 206° 12′ to 208° 45′ E., lat. 56° 45 to 58° 28′ N.

KOEHLER (John Bernard), a distinguished classical scholar of the last century, was a native of Lubeck. At the age of seventeen he published a Dissertation on the Deities who presided among the Greeks and Romans over marriage. In 1766 he became professor of history and philosophy in the university of Kiel; and from 1781 to 1786 occupied the chair of the Greek and Oriental languages, at Konigsberg. His death took place April 3d, 1802. His chief works are, Remarks on Dion Chrysostom, 1765; Notes and Observations on Theocritus, 1767; Tracts ou Roman Law; and a German translation of the Iphigenia in Aulis of Euripides.

KOEI-TCHEOU, a province of China, one of the smallest and most rugged in the kingdom, bounded on the south by Quang-si, east by Hou-quang, north by Setcheuen, and west by Yunan. The whole country is almost a desert, and covered with inaccessible mountains: it may justly be called the Siberia of China. The people who inhabit it are mountaineers, accustomed to independence, and who seem to form a separate nation, being no less ferocious than the savage animals among which they live. The mandarins and governors who were sent to this province are sometimes disgraced noblemen, whom the emperor does not think proper to discard entirely. Numerous garrisons are entrusted to their charge, to over-awe the inhabitants; but these troops are found insufficient, and the court despairs of being ever able thoroughly to subdue it. It produces a herb much resembling our hemp: the cloth made of it is used for summer dresses. Mines of gold, silver, quicksilver, and copper, are found here: and of the last metal those small pieces of money are made which are in common circulation throughout the empire.—Koei-tcheou contains ten cities of the first class, and thirty-eight of the second and third. The population was reported to Sir G. Staunton at 9,000,000.

KOEI-TCHOO-FOU, a city of China, in Setchuen of the first rank. Situated on the river Yang-tse-kiang, its trade is very extensive, and, though the country around is mountainous, it is highly cultivated, and abounds with fruits, particularly the orange and lemon. Long. 109° 50′ E., lat. 31° 9′ N.

KŒMPFER (Engelbert), a German physician born in 1651, at Lemgow, in Westphalia. After studying in several towns, he went to Dantzic, where he gave the first public specimen of his proficiency by a dissertation De majestatis divisione. He then went to Thorn; and thence to the university of Cracow, where he took his degree of doctor in philosophy; after which he went to Konigsberg in Prussia, and staid there four years. He next travelled into Sweden, where he was appointed secretary of the embassy to Persia. He set out from Stockholm with the presents for that emperor and went through

Aaland, Finland, and Ingermanland, to Narva, where he met Fabricius the ambassador, who had been ordered to take Moscow in his way. The ambassador, having ended his negociations at the Russian court, set out for Persia. During their stay (two years) at Ispahan, Dr. Kœmpfer took every possible advantage of so long an abode in the capital of the Persian empire. The ambassador, towards the close of 1685, preparing to return into Europe, Dr. Kœmpfer entered into the service of the Dutch East India Company, in quality of chief surgeon to the fleet, then cruising in the Persian Gulf, and which, after touching at many Dutch settlements, came to Batavia in September 1689. He here applied himself chiefly to natural history. Hence he set out for Japan, as physician to the embassy which the Dutch East India Company sends annually to Japan. He returned to Europe in 1692. In 1694 he took his degree of M. D. at Leyden: on which occasion he communicated, in his Inaugural Thesis, several very curious and singular observations made by him in foreign countries. He was afterwards made physician to the count de Lippe; and died in 1716. His principal works are, 1. Amœnitatis Exoticæ, in 4to; a work which contains many curious particulars respecting the civil and natural history of the countries through which he passed. 2. Herbarium Ultra Gangeticum. 3. The History of Japan in German, which is much esteemed; and for which the public is indebted to the late Sir Hans Sloane, who purchased all his curiosities, drawings, and MSS. and prevailed on Dr Scheuchzer to translate this history into English.

KOENIG (Daniel), a Swiss writer, elder brother of Samuel. He translated Arbuthnot's Fables of Ancient Coins into Latin; which were printed at Utrecht in 1756. He died at Rotterdam, in consequence of ill usage from the mob at Franeker, who mistook him for a French spy.

Koenig (Samuel), a learned philosopher and mathematician, professor of philosophy at Franeker, and afterwards at the Hague; where he became librarian to the Stadtholder, and died in 1757 He wrote several works which are esteemed.

KOKORO, or Balee, a rapid river of Western Africa, rising in Manding, not far from the Niger, and flowing through Fooladoo. Here it enters the Brooko, and receives the Ba Woolima. On entering Kajaaga it falls into the Basing or Senegal, eighty miles east of Saltern.

KOLBE, or Kolben (Peter), a Dutch writer only known as the author of an obsolete account of the Cape of Good Hope, and a tract De Aquis Capitis Bonæ Spei in the Acta Eruditorum of Leipsic, 1716.

KOLF, a Dutch game played in an enclosed rectangular area of sixty feet by twenty-three. The floor, composed of sand, clay, and pitch, is made as level as a billiard-table: the enclosing walls are, for two feet upwards, faced with polished stone or sheet lead, to make the ball rebound accurately. At about ten feet from each end wall a circular post, five inches in diameter, is placed in the middle of the breadth of the area. These two posts are about forty feet distant from each other. The balls are about the size of cricket-balls, quite round and elastic, covered with soft leather and sewed with wire. The clubs are from three to four feet long, with stiff shafts. The head is of brass, and the face, which strikes the ball, perfectly smooth. The game may be played by any number, either in parties, or each for himself. The contest is, who shall hit the two posts in the fewest strokes, and make his ball retreat from the last one, so that it shall lie nearest the opposite end wall. Five points make game; and such is the difference between a capital and an ordinary player, that the former will often give four points, and yet be the winner. This game combines the address required both in Golf and Billiards, which see.

KOLKOKRO, a large lake of Kamtschatka, connected with the river of the same name, and supposed to be about 112 miles in circumference. It abounds in sea calves, called by the natives nerpis, a name by which they often call the lake itself.

KOLOMNA, a town and bishop's see in the government of Moscow, European Russia, situated on the Oka, near its junction with the Moskwa. Its traffic is in corn, tallow, and salt meat. Inhabitants 5800.

KOLOR, a large town of Woolly, Central Africa, where Park first saw the exhibition of Mumbo Jumbo.

KOLYVAN, a district of the government of Tomsk, in Asiatic Russia, situated on the upper part of the Obi. Here are extensive copper mines, containing a considerable proportion of silver, and gold. M. Demidoff first discovered their value in 1727, and began in 1730 to extract publicly the copper; but the gold and silver being declared the property of the government, he clandestinely separated those metals. His assistant of the name of Steyger, however, made known his secret, and the mines were confiscated. According to the accounts of the Russian board of mines, these works, from 1725 to 1786, produced about 3,500,000 pounds of silver, and 48,000 pounds of gold, and were once the most considerable in the Altay, but they have of late declined. A line of forts was built here in 1745 to defend them from the incursions of the Tartars. The town of Kolyvan is small and situated on the right bank of the Berda, near its junction with the Obi, in long. 81° 50′ E., lat. 54° 48′ N.

KONG, i. e. a mountain, according to Park, a kingdom of Central Africa, to the south of the Niger, traversed by a high chain of mountains. A large one, Toolilescena, is situated near the capital. The market is supplied from Houssa. The country is populous, and the language is a corruption of the Bambarra or Mandingo. It abounds in horses and elephants. The people fight with spears, and bows and arrows. According to Mr. Bowdich, Kong is nearly midway between Ashantee and Bembarra, or about 200 miles south from the one, and north from the other.

KONG-CHANG-FOU, a city of China, in the province of Shensee, of the first rank. It is near the western frontier, in a mountainous country, abounding with the animal which produces musk. By the river Hoeiho, which falls into the Yellow River, it is enabled to carry on a considerable trade. Long 104° 19′ E., lat. 34° 56′ N

KONGSBERG, a large town of Norway, in the government of Christiana, situated on the River Lowe. In the mountains were formerly silver mines; but they are now exhausted: and gold is occasionally found. The town still contains a mint; a seminary for the education of youth in metallurgy. Population 6800, mostly Germans, engaged in the mines. Thirty-six miles west of Christiana.

KONJEUR, a Mahratta district of Hindostan, province of Orissa, situated principally between 21° and 22° N. lat. It is watered by several streams. Chief towns Konjeur, Ogurapore, and Andapoorgur. Konjeur is the capital. Long. 85° 45′ E., lat. 21° 34′ N.

KONIG (George Matthias), a learned German, born at Altorf in Franconia, in 1616. He became professor of poetry and Greek, and librarian to the university; in which he succeeded his father. He gave several specimens of his learning, particularly by a biographical dictionary, entitled Bibliotheca Vetus et Nova, 4to. Altorf, 1674: which, though defective, is useful to biographers. He died in 1699.

KONIGINGRATZ, a circle of Bohemia, on the Elbe; contiguous to Silesia, Moravia, and Glatz. The northern parts are mountainous, being penetrated by the Reisengebirge: but in the central portion of the circle are many fertile valleys. The linen manufacture is extensive and superior: cotton and woollen stuffs are also made.

The capital is a bishop's see, neatly built and containing 5700 inhabitants. In 1758 and 1762 the Russians attacked this place; and on the latter occasion the powder magazine was blown up, and destroyed a large part of the town. It is 139 miles north of Vienna, and sixty-four east by north of Prague.

KONIGSBERG, a city and government of the Prussian states, comprising the north and west parts of the province of East Prussia. The government contains an area of 8960 square miles, and a population of about 491,000.

The city of Konigsberg is the capital of East Prussia, and stands on the River Pregel, which falls into the sea at the Frische Haff about four miles distant. Part of the city stands on an island formed by the river, and is connected with the other part by bridges. Including the suburbs, Konigsberg is about seven miles in circumference, and contains various stately and magnificent public buildings, with many large and elegant houses. Most of the inhabitants are Lutherans, and several of their churches are handsome. The university is in high repute. This city, which dates its origin in the thirteenth century, was one of the Hanse towns: it is well fortified, and is the most commercial place in the Prussian dominions. But, as the river only admits small vessels to ascend to the town, the merchants have found it expedient to make a depôt at Pillau, which is situated on a bay of the Frische Haff, about thirty miles below. In 1817 the number of vessels that entered the harbour amounted to 1098.

KONKODOO, a mountainous country of Western Africa, between the upper part of the courses of the Faleme and Senegal, bordering on Jallonkadoo, Satadoo, and Dentila. It is considered by Golberry as a district of Bambouk. The streams descending from the mountains are impregnated with gold dust, which the natives separate by a mechanical process. The sand being put into a calabash, water is copiously poured over it, and a constant agitation kept up till the gold dust only remains. The mountains are said in some parts to be cultivated to the very summit. Park was much pleased with the entire appearance of this country.

KOOM, a ruined city of Persia, built by the Saracens in the year 806, on the site of the ancient Choana. It is said by some writers to have been erected out of the ruins of seven towns, which had been destroyed in a civil war. It became one of the first cities of Persia, especially in its silk manufacture; but was taken and completely destroyed in 1722, by the Afghauns. It still however contains a very beautiful college, with a mosque and sanctuary, erected to the memory of Fatima, the daughter of Iman Reza. In the mosque are the tombs of Sefi the First, and Shah Abbas the Second. Long. 50° 29′ E., lat. 34° 45′ N.

KOPAUL, a town and fortress of Bejapore, Hindostan, district of Gugiunderghur, belonging to the Nizam. This place, a sugar-loaf mountain surrounded by three lines of fortifications, is reckoned one of the strongest in the south of India. The magazines, store-houses, &c., are excavated out of the rock. But in the year 1790 it was taken from Tippoo Sultan, by the Mahrattas: the garrison having in a siege of six months expended all their provisions, were forced to capitulate. Long. 76° 6′ E., lat. 15° 28′ N.

KORAN, *n. s.* The alcoran, the bible of the Mahommedans. See ALCORAN.

KORDOFAN, a country of Central Africa, to the west of the Bahr-el-Abiad, between the kingdom of Darfur and that of Sennaar. About the time Mr. Bruce returned from Abyssinia, the Kordofanese renounced the allegiance of Sennaar; but, at the period when Mr. Browne visited the country, it had again been subdued: still the disposition to insurrection had entirely interrupted the communication of Darfur with the eastern regions. The language is Arabic. Ibeil is the chief town.

KORIAKS, a barbarous tribe of Siberia, who inhabit part of the government of Okhotsk, around the gulf of Penginskaia, and north as far as the banks of the Anadir. They do not amount to more than 2000.

KOROS, BLACK, a river of Hungary, which, rising in the palatine of Bihar, passes through that of Sarand, in which it receives the *White Koros*, coming from Transylvania, enters the palatinate of Bekesch, and falls into the Theysse near Czongrad. The Schnelle Koros rises also in the palatinate of Bihar, and joins the two others near Bekesch.

KOS, in Jewish antiquity, a measure of capacity, containing about four cubic inches: this was the cup of blessing out of which they drank when they gave thanks after solemn meals, like that of the passover.

KOSCIUSCO (Thaddeus), a Polish general and patriot, was born of a respectable family, and educated at the military school of Warsaw; after which he went to France and America, where he served as aid-de-camp to general Washington. On his return home he was made

major-general, and distinguished himself in the war of 1792, but without effect. Two years afterwards the Poles again took up arms, and were headed by him; but all his exertions for his country were fruitless, and

Freedom shrieked when Kosciusco fell.

He was made prisoner by the Russians, who treated him with great respect. The emperor Paul gave him an estate. Kosciusco now visited America a second time; and in 1798 returned to Europe, and settled in France, where Buonaparte in vain endeavoured to tempt him into his service. He died at Soleure, in Switzerland, 16th of October, 1817.

KOSIE, a kingdom of Western Africa, on the east bank of the Lagos, about sixty miles from its mouth. The people of Kosie command the trade of all the slaves which are brought down the river.

KOSTROMA, a considerable government of European Russia, lying between 40° 20′ and 48° 20′ of E. long., and 56° 45′ and 59° 13′ of N. lat., and bounded by Vologda, Viatka, Niznei-Novgorod, Vladimir, and Jaroslav. It is in the latitude of Scotland, and its territorial extent 38,400 square miles, divided into twelve circles or districts. It is watered by the Volga, the Vetluga, and the Kostroma, and has several lakes. The surface is in general an undulating plain; but the soil is very various, and in many places covered with heath and wood. The inhabitants are chiefly pastoral. Population about 1,150,000.

Kostroma, a town of European Russia, the capital of the preceding government, is situated on the left bank of the Wolga, near the influx of the Kostroma. It is the see of a bishop, and has manufactures of linen, Russian leather, Prussian blue, salt, wax, and soap, and a trade in corn and wine: 435 miles east by south of St. Petersburgh. Population 9000.

KOTTER, or Kotterus, (Christopher), one of the three fanatics whose visions were published at Amsterdam in 1657, with the title of Lux in Tenebris. He lived at Sprotta in Silesia, and his visions began in 1616. As most of his predictions promised felicity to the elector palatine, and unhappiness to his imperial majesty, the emperor's fiscal in Silesia seized him, set him in the pillory, and banished him the emperor's dominions. Upon this he went to Lusatia, and there lived unmolested till his death in 1647.

KOTZEBUE (Augustus Von), was born at Weimar, May 30th, 1761. He was sent, at the age of sixteen, to the college of Jena, and from thence to Duisburg, where he raised a company of juvenile performers. In 1779 he returned to Jena, and studied the law; but most of his time was spent in the theatre. In 1781 he became secretary to general Bauer, whom he accompanied to Petersburgh, and produced there his tragedy Demetrius, Czar of Muscovy, and married a Russian lady. He was now appointed president of the civil government at Revel, and wrote a number of dramas; some of which obtained great popularity. He lost his wife in 1789, on which he went to Paris, and then to Vienna, where he became superintendant of the imperial theatre; but resigned that place, and returned to Russia. Here he was immediately arrested by the emperor Paul, and sent to Siberia, but did not remain long in exile; and on his arrival at Petersburgh, was taken into the capricious despot's favor. In 1813 he was appointed consul-general at Konigsberg; but, the climate disagreeing with him, he resigned the situation to reside at Manheim, where he was assassinated, March 23rd, 1819, by a fanatical student of Jena, named Sand, who also stabbed himself, but, recovering from his wound, was tried for the murder, and beheaded.

KOUANGNAN-FOU, a city of China, of the first rank, in Yunnan, situated on the border of Koei-tchoo, and separated from the rest of the province by mountains. The soil is fertile, but the inhabitants barbarous. Long. 106° 14′ E., lat. 30° 32′ N.

KOUANG-SI-FOU, a city of China, in Yunnan, of the first rank. It is situated on a plain, by the side of a lake, and surrounded by mountains, in long. 103° 28′ E., lat. 24° 40′ N.

KOUANGSIN, a city of China of the first rank, situated on a stream which falls into the Poyang Lake. It is surrounded by lofty mountains, but the sides are fertile, and highly cultivated. Here are manufactures of paper and candles. Long. 117° 44′ E., lat. 28° 27′ N.

KOUANIN, in the Chinese theology, the tutelary deity of woman. The Chinese make great numbers of the figures of this deity in white porcelain, and send them to all parts of the world, as well as keep them in their own houses. The figure represents a woman with a child in her arms. The women who have no children pay a sort of adoration to these images, and suppose the deity they represent to have power to make them fruitful. The statue always represents a handsome woman modestly attired.

KOUC, Kouch, or Koeck (Peter), a celebrated painter in the sixteenth century, born at Alost. He studied under Bernard Van Orley, who lived with Raphael. He visited Rome, and by studying there formed an excellent taste, and became a very correct designer. On his return home he superintended the execution of some tapestry work after the designs of Raphael. He was afterwards persuaded to go to Constantinople; but finding that the Turks were not allowed, by their religion, to paint any figure, and that there was nothing for him to do but to draw designs for tapestry, he spent his time in designing the particular prospects in the neighbourhood of Constantinople, and the manners of the Turks, of which he has left many prints, that alone suffice to give an idea of his merit. After his return he settled at Antwerp, where he drew several pictures for the emperor Charles V. He was also a good architect, and wrote a Treatise on Sculpture, Geometry, and Perspective; and translated Vitruvius and Serlix into the Flemish tongue. He died in 1550.

KOULI Khan (Thamas), or Schah Nadir, was the son of the chief of a branch of the tribe of Affchars, and governor of a fortress erected by that people against the Turks. Upon his father's death his uncle usurped his government, under pretence of taking care of it during the minority of young Nadir. Disgusted at this affront, he commenced adventurer, and entered

into the service of Beglerbeg, governor of Muschada, in the Khorassan; who, discovering in him a military genius, promoted him to the command of a regiment of cavalry; and, in 1720, when the Usbec Tartars invaded the Khorassan with 10,000 men, raised him to the rank of general, when he defeated the Tartars, and took their commander prisoner. But Beglerbeg, after this, becoming jealous, and not fulfilling his promises of farther promotion, Kouli-khan publicly complained of the governor's ingratitude, who thereupon broke him, and ordered him to be punished with the bastinado so severely, that the nails of his great toes fell off. This affront occasioned his flight, and his joining a banditti of robbers. After various adventures, he was, in 1729, made general of Persia by Schah Thamas, and permitted to take his name Thamas, and that of Khuli, which signifies slave: his title therefore was, The slave of Thamas; but he was ennobled by that of Khan. In 1736 he excited a revolt against his master, for having made an ignominious peace with the Turks; and, having the army at his command, he procured his deposition, and his own advancement to the throne. In 1739 he conquered the Mogul empire; and at length met with the usual fate of tyrants, being assassinated by one of his generals, in league with his nephew and successor, in 1747, aged sixty. See PERSIA.

KOUMISS, a sort of wine made in Tartary, where it is used by the natives as their common beverage, and often serves them instead of all other food. It is said to be so nourishing and salutary, that the Baschkir Tartars, who, towards the end of winter are much emaciated, no sooner return in summer to the use of koumiss, than they become strong and fat. From the Tartars it has been borrowed by the Russians, who use it medicinally. It is made with fermented mare's milk, according to the following recipe communicated by Dr. Grieve:—'Take of fresh mare's milk, on one day any quantity; add to it a sixth part of water, and pour the mixture into a wooden vessel; use then, as a ferment, an eighth part of the sourest cow's milk that can be got; but at any future preparation a small portion of old koumiss will better answer the purpose of souring; cover the vessel with a thick cloth, and set it in a place of moderate warmth; leave it at rest twenty-four hours, at the end of which time the milk will have become sour, and a thick substance will be gathered on the top; then with a stick, made at the lower end in the manner of a churn staff, beat it till the thick substance above mentioned is blended intimately with the subjacent fluid. In this condition leave it again at rest for twenty-four hours more; after which pour it into a higher and narrower vessel, resembling a churn, where the agitation must be repeated as before, till the liquor appears to be perfectly homogeneous; and in this state it is called koumiss. Agitation must be employed every time before it is used.' To prevent changing the vessel, the milk must be put at once into a pretty high and narrow vessel; and, to accelerate the fermentation, some warm milk may be added to it, and more souring. The process may be shortened by heating the milk before the souring is added to it, and as soon as the parts begin to separate, and a thick substance to rise to the top, by agitating it every hour or oftener. It is common among some Tartars to prepare it in one day during summer, and that with only two or three agitations. And though it is commonly used within a few days after the preparation, yet when well secured in close vessels, and kept in a cold place, it may be preserved for three months, or more, without any injury to its qualities. The acid fermentation may also be produced by sour milk, as above, by a sour paste of rye-flower, by the rennet of a lamb's stomach, or by a portion of old koumiss. Pallas says, that cows' milk is also susceptible of the vinous fermentation, and that the Tartars prepare a wine from it in winter, when mares' milk fails them; that the wine prepared from cows' milk they call airen; but that they always prefer koumiss when it can be got, as it is more agreeable and contains a greater quantity of spirit; that koumiss on distillation yields of a weak spirit one-third, but that airen yields only two-ninths of its whole quantity, which spirit they call arika. It appears that cows' milk may be fermented with, or even without souring, provided sufficient time and agitation be employed; that no spirit can be produced from any one of its constituent parts taken separately, nor from any two of them, unless inasmuch as they are mixed with some part of the third; that the milk with all its parts, in their natural proportion, is the most productive of spirit. From six pints of milk, fermented in a close vessel, and set to repose, a Russian chemist, Oscretskowsky, obtained three ounces of ardent spirit, of which one was consumed by burning; but from the same quantity of the same milk, fermented in an open vessel, he could scarcely obtain an ounce.

KOUTOUSOFF, or KUTUZOW SMOLENSKY (Michael Lavrionovitch Golemitcheff, prince of), a modern Russian general and minister of state, was born in 1745, and educated at Strasburgh. At the age of sixteen, he was a corporal in the artillery; and shortly after he became lieutenant in a regiment commanded by Suwarrow. In 1762 he rose to the rank of captain, and went to Livonia; here he made five campaigns against the Poles: he then served under count Romanzow in the war with Turkey, and was distinguished at the battles of Pruth and Kagoul; and in the Crimea in 1772 and 1773. He was appointed a major-general in November 1784, and succeeded against the enemy on various occasions, until in June, 1791, he added to his fame at the battle of Matchine, which terminated the Turkish war. In 1793 and 1794 he was the Russian ambassador at Constantinople; and on his return commanded in Finland. Under Paul I. he was afterwards sent into Holland. Alexander appointed him military governor of St. Petersburgh; and Kutuzow commanded the Russian army first sent to assist the Austrians. He was present at the battle of Austerlitz, which was, however, fought in opposition to his advice. In 1809 he was governor of Lithuania. He concluded the treaty of Bucharest with the Turks, May 16th, 1812, on which he was made a prince of the Russian empire. In 1812 the emperor nominated him

president of the council of state, and generalissimo of his armies; and, though he failed to repulse the enemy in the bloody battle of Borodino, he most ably conducted the Russian forces afterwards, and followed the French into Prussia. He was suddenly attacked at Breslaw with a mortal disease, and died there April 16th, 1813.

KOZLOV, a large town of European Russia, on the Voronet, in the government of Tambov. Its chief trade is derived from horned cattle, which are sold to the Don Cossacks, and in tallow and salt meat with Moscow. Population 7100. Forty-eight miles W.N.W. of Tambov.

KRAKEN is the name given to an imagined monster of the deep, concerning which, so many traditions have been cited, and so much credulity exercised, that the following abridged account of it, from bishop Pontoppidan's History of Norway will probably suffice. As a full grown kraken, says he, has never been seen in all its parts and dimensions, an accurate survey of which must employ some time, it is *impossible* to give a complete description of one. 'Our fishermen unanimously and invariably affirm, that when they are several miles from the land, particularly in the hot summer days, and by their distance, and the bearings of some points of land, expect from eighty to 100 fathoms depth, and do not find but from twenty to thirty; more especially if they find a more than usual plenty of cod and ling, they judge that the kraken is at the bottom; but if they find by their lines that the water in the same place still shallows on them, they know he is rising to the surface, and row off with the greatest expedition till they come into the usual soundings of the place; when, lying on their oars, in a few minutes the monster emerges, and shows himself sufficiently, though his whole body does not appear. Its back or upper part, which seems an English mile and a half in circumference (some have affirmed more), looks at first like a number of small islands, surrounded with something that floats like sea-weeds; at last several bright points of horns appear, which grow thicker the higher they emerge, and sometimes stand up as high and large as the masts of middle sized vessels. In a short time it slowly sinks, which is thought as dangerous as its rising; as it causes such a swell and whirlpool as draws every thing down with it, like that of Malestrom. This slow motion may be necessary to the security of ships of the greatest force and burden, which must be overwhelmed on encountering such an immense animal, if his velocity were equal to his weight; the Norwegians supposing that if his arms, on which he moves, and with which he takes his food, were to lay hold of the largest man of war, they would pull it down to the bottom!'

KRANTZIUS (Albertus), a native of Hamburgh, and a celebrated historian, who travelled over several parts of Europe, and was made rector of the university of Rostoch in 1482. He went thence to Hamburgh in 1508, where he was elected dean of the chapter in the cathedral; and was so famed for his abilities and prudence, that John king of Denmark, and Frederick duke of Holstein, made him umpire in a dispute they had with the Ditmarsi. He wrote 1. Chronica Regnorum Aquilonum, Daniæ, Sueciæ, Norvegiæ; 2. Saxonia, sive de Saxonicæ Gentis vetustâ origine, &c.; 3. Vandalia, sive Historia Vandalorum; 4. Metropolis, sive Hist. Eccles. Saxonicæ; 5. Institutiones Logicæ, 4to. He died in 1517.

KRASICKI (Ignatius), count de Ciczin, a prince, bishop of Warmia, and archbishop of Gnesnia, in the eighteenth century. The partition of Poland in 1772 deprived him of his functions in the senate of his country; and Frederick the Great, who took pleasure in his conversation, having one day said to him, I hope you will take me into Paradise under your episcopal mantle, the archbishop replied—'No, sire, your majesty has cut it too short for it to conceal any contraband commodity.' He excelled in exposing the ridiculous in national manners. Among his works are Myszeidos, an heroic-comic poem, in ten cantos; Monachomachia, or the War of the Monks, in six cantos, thought to be his chef-d'œuvre; Anti-Monachomachia, in six cantos; Fables; The War of Choczim; and imitations of Ossian. He died March 14th, 1801, aged sixty-six.

KRASNOIARSK, a flourishing town of Asiatic Russia, in the government of Tomsk, situated on a river which falls into the Yenisei. It carries on a trade in furs; and the great road from Tomsk to Irkoutsk passes through it. The surrounding country is of remarkable fertility. Population 3450.

KRASSOVA, an extensive palatinate of Hungary, bounded on the east by the palatinate of Hunyad, in Transylvania, and on the east and south by the tract of country adjacent to Turkey, and called the Military Frontier. The western boundary is formed by the palatinate of Temesvar, as far as the Marosch, and the rest by the palatinate of Arad. Population 200,000.

KRISHNA, in Hindoo mythology, one of the avatas or incarnations of the god Vishnu, in which he is said by the sectaries, who exclusively worship him under this name, to have magnified himself in a degree of power and glory far exceeding any other of his forms. They maintain indeed, that under the other avatas he assumed only an ansa, or portion of his divinity, while Krishna was Vishnu himself in mortal mould. A numerous sect called Gokalasta, from Gokala, one of Krishna's names, worship him exclusively, or conjointly with his consort Radha. This sect are immeasurably lavish in their praises, and vehement in their adoration of this deity, while other sects of Hindoos call Krishna a merciless tyrant, an incarnate demon, now expiating his crimes in hell. As information is received from these different descriptions of zealots, so consequently will it differ in the account of the character and actions of this motley personage, of whom as much is recorded as of any of the Hindoo deities. His life and actions have occupied the attention of many voluminous writers; and if taken literally he led a life of excessive libertinism, but his followers maintain such appearances to have been the result of maya, or delusion, for that in reality his life was chaste and holy. The Gita Govinda, a beautiful poem, is a series of mystical rhapsody in praise of Krish-

na, and a relation of his loves with his consort Radha; and although loose, in a degree not admitting of literal translation into our language, is said to be purely mystical, and to signify the 'reciprocal attraction between the divine goodness and the human soul.' This poem was translated or imitated by Sir W. Jones, and appears in his works, and in the third volume of the Asiatic Researches. Krishna's names, like other deified personages, are numerous. He being Vishnu, they enjoy several in common, Murari, Heri, Madhava, and Baghavan, among them; Govinda Gopala, Gokala, are derived from his occupation of herdsman; Gopinatha, or the Gopia's god; Murlidur, the tuneful; Kessu, Kesava, or Kesavi, are said to refer to the fineness of his hair; Vanimali, to his pendent garland; Yadava, Varshneya, and Vasudeva, to his tribe and family. In a curious work translated by Wilkins, entitled Bhagavat-Gita, Arjun, the son of Pandu, addresses Krishna as 'the supreme Brahm; the most holy; the most high god; the divine being before all other gods; without birth; the mighty lord; god of gods; the universal lord.' In different parts of the Gita he says of himself, 'I am, of things transient, the beginning, the middle, and the end; the whole world was spread abroad by me in my invisible form. At the end of the period kalpa all things return into my primordial source; and, at the beginning of another kalpa, I create them all again. I am the creator of all mankind, uncreated, and without decay. There is not any thing greater than I, and all things hang on me, as precious gems on a string. I am the understanding of the wise, the glory of the proud, the strength of the strong. I am the eternal seed of all nature; I am the father and mother of this world, the grandsire and the preserver; I am death and immortality; I am entity and nonentity; I am never failing time; I am all-grasping death, and I am the resurrection.—I am the emblem of the immortal, and of the incorruptible; of the eternal, of justice, and of endless bliss.—Neither the sun nor the moon, nor the fire, enlighteneth that place, whence there is no return, and which is the supreme mansion of my abode.' Sanjay, one of the interlocutors of the Gita, describes Krishna as he revealed his 'million forms divine,' to Arjun, 'covered with every marvellous thing—the eternal god, whose countenance is turned on every side. The glory and amazing splendor of this mighty being may be likened to the sun, rising at once into the heavens with a thousand times more than usual brightness. The son of Pandu then beheld within the body of the god of gods, standing together, the whole universe divided forth into its vast variety.' Arjun, terrified at this wondrous exhibition, exclaims—'Thou art the supreme being! I see thee without beginning, without middle, and without end; of valor infinite, of arms innumerable; the sun and the moon thy eyes; thy mouth a flaming fire; and the whole world shining with thy reflected glory. Having beholden thy dreadful teeth, and gazed on thy countenance, emblem of time's last fire, I know not which way to turn; I find no peace. Have mercy then, O god of gods! thou mansion of the universe! and show me thy celestial form, with the diadem on thy head, and thy hands armed with the club and chakra. Assume then O god of a thousand arms! image of the universe! thy four-armed form.'

KROUTE, Croute, or Sour Croute, (Germ. Sauer Kraut, i. e. sour herb), a preparation of cabbage, which has been found of great efficacy as a preservative in long voyages from the sea-scurvy. The process for making it is this:—The soundest and most solid cabbages are selected, and cut crosswise very small, with a knife or an instrument made for the purpose, like that used for slicing cucumbers. The cabbage thus sliced is put into a barrel in layers, hand high, and over each is strewed a handful of salt and carraway seeds; in this manner it is rammed down with a rammer till the barrel be full, when a cover is put over it, and pressed down with a heavy weight. After standing some time in this state it begins to ferment; and, when the fermentation has entirely subsided, the head is fitted to it, and the barrel is finally shut up and preserved for use. There is not a drop of vinegar employed. Great quantities of sour kroute are consumed in Germany and Holland.

KRUDENER (baroness Valerie de), an enthusiast, the Joanna Southcott of the continent, was born in 1765 at Riga, being the daughter of the governor, count de Wittenkoff. At an early age she became the wife of baron de Krudener, ambassador from the empress of Russia to the court of Berlin, and afterwards at Venice, where the secretary of legation fell in love with her, and committed suicide; on which subject she wrote a romance called Valerie. At the commencement of the revolution in France, madame Krudener resided in that country, but afterwards returned to Germany; and in 1806 first appeared in her character of prophetess, avowing that she had a mission to establish the reign of Christ. She followed the emperor Alexander to Paris, and declared that he was the appointed regenerator of mankind. Her predictions excited great attention, and, when the sovereigns left Paris, she went into Switzerland, where she preached the advent of the millennium, and thousands flocked to her from the mountains. At length the States interfered, and madame Krudener, after making, it is said, a convert of Benjamin Constant, went into the Crimea, and died at Karasubassar, December, 25th, 1824.

KUARA, a very mountainous and unhealthy province, at the western extremity of Abyssinia, near the banks of the Bahr-el-Abiad. It abounds in gold, it is said, not however of its own produce, but brought hither by the Shangalla and other tribes. In the low country, near Sennaar, there is a settlement called Ganjum, which often acts independently of the government.

KUBAN or Kubin, a town of Hungary, in the Bannat, opposite to Semendria. It has 2400 inhabitants, who carry on a brisk trade with the Turks.

KUFT, or Keft, the ancient Coptos, a city of Upper Egypt, which, during the time of the Ptolemies, was the great emporium of its commerce. The productions of Lower Egypt and of Europe were landed from the Nile and conveyed to Berenice, on the coast of the Red Sea. It became still more flourishing under the Roman empire. Coptos, in the early ages of Christi-

anity, was distinguished by the number of its convents, and of those who fled here to escape from persecution. Dioclesian reduced it to ashes. The old city was never afterwards inhabited, but an Arab town has been built in its vicinity, and most of the commerce with the Red Sea is transferred to Kene. The ruins of the ancient city, destroyed by Dioclesian, remain it is said nearly in the same state in which they were left by the fire, and exhibit splendid fragments of porphyry and granite columns.

KUHNIUS, (Joachim), a learned German critic, born at Gripswalde in Pomerania, in 1647. He was, in 1669, made principal of the college at Oettingen in Suabia; in 1676 Greek professor in the college at Strasburg; and ten years after Greek and Hebrew professor. His uncommon skill in the Greek language attracted a great number of scholars from distant parts; and he published some classic authors with very learned explanatory and critical notes. He died in 1697.

KULLA or QUALLA, a country and river of Central Africa, to the south-east of Wangara, represented to Browne as an important state, but he did not enter it.

KUMANIA, GREAT and LITTLE, the name of two districts, in the central part of Hungary, granted in the twelfth and thirteenth centuries to a foreign tribe. They consist properly of three parts; the most northerly, Great Kumania, or Nagy Kunsag, is separated from the others by the great river Theyss, as well as by a considerable tract of country, and forms a plain of 420 square miles of area, with 33,000 inhabitants, chiefly Calvinists. Their chief town is Kardszag. The two other parts are each called Little Kumania, or Kis Kunsag: both being situated on the right side of the Theyss, and the left of the Danube, near the middle of Hungary. The two together are larger than Great Kumania, having an extent of 1000 square miles, with 41,000 inhabitants.

KUNASHIR, a mountainous island of the Eastern seas, forming part of the archipelago of the Kuriles. It is about 100 miles long and thirty-five broad. It contains many valleys capable of cultivation; but is almost uninhabited, not containing more than sixty-eight men, and about twice the number of women. The Russians make occasional excursions, for the purpose of hunting and fishing, and have erected a small fort here

KUNCKEL (John), a celebrated Saxon chemist, born in Sleswick, in 1630. He became chemist to the elector of Saxony, the elector of Brandenburgh, and Charles XI. king of Sweden, who gave him the title of counsellor in metals, and letters of nobility, with the surname of Louwensteing. He employed fifty years in chemistry; in which, by the help of the furnace of a glass-house which he had under his care, he made several excellent discoveries, particularly of the phosphorus of urine. He died in Sweden in 1702; and left several works, some in German, and others in Latin: among which that entitled Observationes Chemicæ, and the Art of Making Glass, printed at Paris in 1752, are the most esteemed.

KUR, the ancient Cyrus, the largest river of Georgia. It rises in Armenia, flowing north for about sixty miles, when it flows in a south-west direction into the Caspian. The banks are high and wooded. Its largest tributary is the Arar and Araxes.

KURDISTAN, or CURDISTAN, a mountainous country of Asia, whence issue the different branches of the Tigris, which, surrounding the upper part of the great Zab, passes to the southward, as far as the frontiers of the Irak-Adjemi, or Persian Irak. It has been regarded as one of the divisions of the Turkish province of Diarbekir, anciently known as Assyria Proper. It lies chiefly on the east side of the Tigris, towards Persia, being bounded by that kingdom on the east, and by the Tigris on the west, by Irak on the south, and Turcomania on the north, and some writers extend it into Armenia, and the Persian province of Irak-Adjemi. Towards the south it scarcely exceeds ninety miles in breadth; but northwards it stretches nearly 300 miles from east to west, or, from 41° to 47° of E. long. from north to south it reaches from 35° 30′ to 37° 20′ N. lat. The mountain of Coatras separates it from Persia on the east, and the Tigris on the west, from Mesopotamia and Chaldæa.

According to the ancients this country was rich and fertile; but it is now desolate, and abounds with deserts, except in those few parts which lie near towns. It was in former ages the field of battle between the Parthians and Romans, and at a later period between the Turks and Persians. Its chief towns and hamlets are Betlis, the capital, Scheresal, Arbela, Harpel, Nineveh, Rehobo, Rhesen, Van, and Holwan.

The Kurds are divided into tribes, which are dispersed over Lower Asia, and have widely extended themselves within the last 100 years. Volney suggests that Gord and Kurd are the same; and they are supposed to be the same people who are mentioned by Xenophon under the denomination of Card-uchi, and who opposed the retreat of the 10,000. In their modern state they are as independent; for, though apparently tributaries to the Porte, they pay little respect to the orders of the grand seignior. According to the account of Niebuhr, who travelled in these countries in 1769, they are subject, in their mountains, to a sort of feudal government, similar to that of the Druses their neighbours. Each village has its chief, and the whole nation is divided into different and independent commands. The disputes inseparable from this state have detached from the nation a great number of tribes and families, which have adopted the wandering life of the Arabs. These are dispered in the Diarbekir, and over the plains of Arzroum, Erivan, Sivas, Aleppo, and Damascus; and all their tribes are estimated to exceed 140,000 armed men. Like the Turkmans, these Kurds are pastors and wanderers; often shifting their position in search of pasture for their numerous flocks and herds. Their tents are large, and formed of a sort of coarse brown cloth; some houses are constructed for temporary use of cane hurdles, disposed in a square form, and having the floor matted, so as to answer the purposes both of bed and board. When they dislodge, in

order to migrate, they take their huts to pieces, and load their oxen and cows with them. The children go almost naked in the coldest weather. The men are generally well mounted, and take great care of their noble horses: the lance is their chief weapon. The women ride both on horses and on oxen. Both sexes are naturally stout and nimble; but not agreeable in their persons, having small eyes, wide mouths, and bad complexions. The Kurds differ from the Turkmans in various respects. The latter give their daughters a marriage portion; the former receive a premium for them. The Turkmans pay no respect to nobility or extraction; the Kurds highly honor it. The Turkmans do not steal; the Kurds are almost every where plunderers; and they are therefore much dreaded in the neighbourhood of Aleppo and Antioch. In this pachalic, and in that of Damascus, their number sometimes exceeds 20,000 tents and huts. They are reputed Mahommedans; but do not trouble themselves about religious rites or opinions. Several of them, distinguished as the Yazdia, worship 'Shaitan' or Satan, according to the ancient system of the good and evil principles, which has more or less prevailed in Diarbekir, and the frontiers of Persia. There are also some few professed Christians among them, under two patriarchs. The Kurds' language is divided into three dialects. It has neither the aspirations nor the gutturals of the Arabic, and Volney says it does not resemble the Persian. Considering the antiquity of the people who speak it, and that they are related to the Medes, Assyrians, Persians, and even the Parthians, he conjectures, that a knowledge of this tongue would throw light on the history of these countries.

Colonel Squire says, 'the Kurds, like the Turcomans, lead a pastoral life; in Syria they occupy the mountains between Aleppo and the sea; and never pass farther to the southward than Antioch. Their number amounts to between 4000 and 5000. The Kurds have villages amongst them, though in summer, like the Turcomans, their ordinary residence is under tents. They also exact a tribute from travellers, though, their faith once plighted in your favor, you need never suspect their sincerity. Their women make a coarse sort of carpet, which is tinged with different colors.' When a Koordish chief takes the field, says Mr. Kinneir, 'his equipment varies but little from that of the knights in the days of chivalry; and the Saracen who fought under the great Salah-ed-deen (Saladin) was probably armed in the very same manner as he who now makes war against the Persians. His breast is defended by a steel corslet, inlaid with gold and silver; whilst a small wooden shield, thickly studded with brass nails, is slung over his left shoulder, when not in use. His lance is carried by his page, or squire, who is also mounted; a carabine is slung across his back; his pistols and dagger are stuck in his girdle, and a light scymitar hangs by his side: attached to the saddle, on the right, is a small case, holding three darts, each about two feet and a half in length; and on the left, at the saddle-bow, you perceive a mace, the most deadly of all his weapons; it is two feet and a half in length, sometimes embossed with gold, at others set with precious stones. The darts have steel points, about six inches long, and a weighty piece of iron or lead at the upper part, to give them velocity when thrown by the hand.' 'The Vàli of Sineh,' he adds, 'resides in a sumptuous palace, where he maintains a degree of state and splendor superior to any thing seen in Persia, except at court. His house is ever open for the entertainment of strangers, and he always retains about his person a chosen body of horse. In short, it was impossible to contemplate this chief, sitting at the head of his hall, surrounded by his friends and relations, without calling to mind the Percys and Douglases of our own country.'

KURILES. The islands north of Jesso are included by the Japanese in the general name of Kuriles, which it would appear signifies the country of sea-weeds. The natives of Jesso reckon thirty-five islands, but the recent charts of Krusenstern mark only twenty-six. This chain is separated into two groups by the Boussole channel of la Perouse, and which may be properly distinguished by the names of the Great, or Japanese Kuriles, and the Less, or Kamschatka Kuriles; the former are inhabited by the Mosins, who have been called the Hairy Kurilians, to distinguish them from the natives of the Little Kuriles, who are of the Kamtschatdale race, and without beards.

The principal islands of the Great Kuriles are Chicotan, or Chi-Kutan (Kutan in the Mosin dialect signifying country), separated from Jesso by a narrow strait: this island is claimed by Japan. Kunaschir, the next island to the north, is diversified by mountains and valleys, covered with maples, pines, and the pinus cembra. Etorpu or Atorku (Staten-Eyland of the Dutch) is also covered with pine forests, and has a burning volcano. Urup (Company's land of the Dutch) is clothed with pines and alders, and is separated from Etorpu by Strait de Vries. Mareekan, the northernmost of the Great Kuriles, has only the same trees as the last: it is twelve leagues long, with an apparently volcanic peak in the centre. On the north-east is a large bay, but whose narrow entrance is crossed by a bar, with only two fathoms. The Russians formed an establishment here, but which had been abandoned before Broughton visited it.

The Little Kuriles, extending to Cape Lopotka of Kamtschatka, present a chain of rugged, sterile, and generally volcanic islands, through whose straits the tides run with great velocity. The names of these islands are so differently written by travellers and geographers, that it is difficult to give a correct list of them. They seem to stand thus from south to north: Raschaooa, in which is a volcanic peak, named Peak of Saritscheff; Rakhoa, or Kockkake; Motua, or Mutova, twenty miles long, on the south has a lofty volcano, in a state of ignition, on the north it is tolerably fruitful, but has not above 100 inhabitants; Keyto, or Ketoi, uninhabited, is nearly the size of the last, rocky, but with wood; Syas, or Schiasch-Kutan, an extinct volcano, uninhabited; Ekarma, or Ikurma, a burning volcano, with sulphurous springs; Etrama-kutan, an extinct volcano, uninhabited; Ana-kutan, twenty

leagues long, with two volcanic peaks, has little wood; Schioutschey; Makan; Kur-assey; Schirinki has steep rocky shores, covered with moss; Poromuschir, or Poroluschir, high and woody; Mavil; Shoom, or Shoomska, four leagues south of Cape Lopatka; Alaid, a conical volcano.

These islands are considered as an appendage of Kamtschatka, belonging to Russia; and their few inhabitants are subject to a tribute of skins, of the different kinds of foxes and of sea otters, with which these islands abound, but of which they have been much thinned. The entire population of the Kurile Islands is not supposed to exceed 1500.

KURSK, a considerable province or government of European Russia, between 35° and 39° of E. long., and 50° 30′ and 52° 30′ of N. lat. It is bounded by the governments of Orel, Voronez, Slobodsk, Ukraine, and Czernigov, and has a territorial extent of 15,000 square miles, divided into fifteen circles. It is reckoned to contain no fewer that thirteen large, and nearly 500 small streams, of which the principal are the Sem, the Donez, the Isla, and the Oskol. Corn is the chief product. Its population is about 1,200,000. Kursk, the capital, stands on the river Tuskara, and has 16,000 inhabitants, a Protestant consistory, and sixteen churches.

KUSTER (Ludolf), a learned writer of the eighteenth century, born at Blomberg in Westphalia. When very young, he was recommended by baron Spanheim as tutor to the two sons of the count de Schwerin, prime minister to the king of Prussia, who, upon our author's quitting that station, procured him a pension of 400 livres. He was promised a professorship in the university of Joachim; and till there should be a vacancy, being then but twenty-five, he resolved to travel. He read lectures at Utrecht; visited England and France, where he collated Suidas with three MSS. in the king's library, which furnished him with many fragments never before published. He was made LL. D. by the university of Cambridge, who made him several advantageous offers to continue there; but he was called to Berlin, where he was installed in the professorship promised him. He afterwards went to Antwerp, and abjured the Protestant religion. The king of France rewarded him with a pension, and ordered him to be admitted supernumerary associate of the academy of inscriptions. But he did not enjoy this new settlement long; for he died in 1716, aged forty-six. He was a great Latin scholar, but chiefly excelled in the Geeek language, to which he almost entirely devoted himself. He wrote many works; the principal of which are, 1. Historia critica Homeri. 2. Jamblicus de vitâ Pythagoræ. 3. An excellent edition of Suidas, in Greek and Latin, 3 vols. fol. 4. Aristophanes, Greek and Latin fol. 5. A new Greek edition of the New Testament, with Dr. Mill's Variations, in folio.

KUTTORE, a celebrated fortress of the province of Cafiristan, Hindostan. It is situated on the top of a perpendicular mountain, and was with difficulty taken by Timour, in the fourteenth century. It is the capital of a district of the same name.

KUTTUBDEA, an island of the bay of Bengal, adjacent to the district of Chittagong. It is about thirteen miles long by four broad, and is covered with wood. Ships, in case of distress, may run in between it and the main land; but there is an extensive sand-bank to the westward. Long. of the north end 91′ 48″ E., lat. 21° 55′ N.

KYD, *v. n.* Corrupted probably from Sax. cuð. To know.

> But, ah! unwise and witlesse Colin Cloute,
> That *kydst* the hidden kindes of many a weede,
> Yet *kydst* not ene to cure heart-roote,
> Whose ranckling wound as yet does rifely bleede.
> *Spenser. Shepheardes Calendar.*

KYNASTON (John), A. B., an English divine, born at Chester in 1728, and educated at Oxford, of which he was elected fellow, June 4th. 1752. He acquired great reputation by an oration entitled De impietate C. Cornelio Tacito falsò objectata, oratio, &c. Oxon. 1761. He took an active part in the trial of the notorious parricide, Miss Blandy; and published some other pieces. He died in June 1783, in consequence of a broken arm.

KYPHONISM, Kyphonismus, or Cyphonismus, an ancient punishment inflicted on the primitive martyrs; wherein the body of the person was anointed with honey, and so exposed to the sun, that the flies and wasps might be tempted to torment him. This was performed in three ways; sometimes they tied the patient to a stake; sometimes they hoisted him up into the air, and suspended him in a basket; and sometimes they stretched him out on the ground with his hands tied behind him. Suidas gives us the fragment of an ancient law, which punished those who contemned the laws with kyphonism for twenty days; after which they were to be precipitated from a rock, dressed in women's clothes.

L.

L, a liquid consonant, which preserves always the same sound in English. In the Saxon it was aspirated as hlaf, loaf; hlæfdig, lady. At the end of a monosyllable it is always doubled: as, shall, still, full, except after a dipthong; as, fail, feel, veal, cool. In a word of more than one syllable it is written single; as, channel, canal, tendril. It is sometimes put before *e*, and sounded feebly after it; as, bible, title.

L is used, 1. as a letter; 2. as a numeral; and 3. as an abbreviation. 1. As a Letter, L is the eleventh of the alphabet, and the eighth consonant. It was derived from the old Hebrew lamed, ל, or Greek lambda, λ. It is sounded by intercepting the breath between the top of the tongue and fore part of the palate, with the mouth open; and makes a sweet sound, with something of an aspiration; and therefore the Britons and Spaniards usually doubled it, or added an h to it, in the beginning of words, as in llan, or lhan, a temple, sounding nearly like fl, &c. 2. As a numeral, L denotes fifty; and with a dash over it, thus $\bar{L}$, 5000. 3. As an Abbreviation, L stands for Lucius; LL.D. for Doctor of Laws; L.S. in copies of deeds, charters, &c. for locus sigilli, the place of the seal; and L.L.S. for a sesterce. See SESTERCE.

LA! *interj.* Sax. and Teut. *lo*, *la*, the imperative of look, behold. An exclamation of surprise.

> *La* you! if you speak ill of the devil,
> How he takes it at heart.
> *Shakspeare. Twelfth Night.*

LAB, or LABBE, *v. a.* & *n. s.* Belg. *labben*, *klappen*. To blab, babble, or slander. A babbler. Obsolete.

> Quod tho this sely man: I am no *labbe*,
> Ne though I say it I nam not lefe to gabbe.
> *Chaucer. Cant. Tales.*
>
> But natheles, as trewe as any stele,
> I have a wif, though that she poure be,
> But of hire tonge a *labbing* shrewe is she;
> And yet she hath an hepe of vices mo. *Id.*

LABADIE (John), a celebrated French enthusiast, son of John Charles Labadie, governor of Bourges, and gentleman of the bed-chamber to the French king, was born in 1610. He entered, when young, into the Jesuits' college at Bourdeaux; which, however, he afterwards quitted. He became a popular preacher; but, being repeatedly detected in improper behaviour towards female devotees, his loss of character among the Catholics is said to have driven him among the Protestants. A reformed Jesuit being thought a great acquisition, he was precipitately accepted as a pastor at Montauban, where he officiated for eight years; but, here again being accused of licentious conduct, and quarrelling with the Catholic priest about the right of interring a dead body, he was at length driven out, and went to seek an asylum at Orange, and then at Geneva. He was afterwards invited to Middleburg, where his eloquence and imposing pretensions procured him many followers, distinguished by the name of Labadists. They increased so rapidly that he excited the attention of the other churches, whose authority he disputed, till he was formally deposed by the synod of Dort. Instead of obeying, he procured a tumultuous support from a crowd of his devotees, broke open the church of Middleburg, and administered the sacrament. At length he formed a little settlement between Utrecht and Amsterdam, where he erected a printing-press, which sent forth many of his works. Some of his followers, however, left him, and exposed his loose private life, until he was finally obliged to retire to Altena in Holstein, where he died in 1674. The sect soon fell into oblivion after his death.

LABARUM, the banner or standard carried before the Roman emperors in the wars. It consisted of a long lance, with a staff a-top, crossing it at right angles; from which hung a rich streamer, of a purple color, adorned with precious stones. Till the time of Constantine it had an eagle painted on it; but that emperor, in lieu thereof, added a cross, with a cipher expressing the name of Jesus. This standard the Romans borrowed from the Germans, Dacæ, Sarmatæ, Pannonians, &c., whom they had overcome. The name labarum was not known before the time of Constantine; but the standard itself in the form we have described, abating the symbols of Christianity, was used by the preceding emperors. Some derive the word from labor, as if this finished their labors; some from Gr. ἐυλαβεια, reverence, piety; others from λαμβανειν, to take; and others from λαφυρα, spoils. See the life of CONSTANTINE.

LABAT (John Baptist), a celebrated traveller, of the order of St. Dominic, born at Paris. He taught philosophy at Nancy, and in 1693 went to America as a missionary. He returned to France in 1705, spent several years in Italy, and died in Paris in 1738. His principal works are, 1. A New Voyage to the American Islands, 6 vols. 12mo. 2. Travels in Spain and Italy, 8 vols. 12mo. 3. A New Account of the Western parts of Africa, 5 vols. 12mo. He also published Chevalier des Marchais's Voyage to Guinea, in 4 vols. 12mo.; and An Historical Account of the western parts of Ethiopia, translated from the Italian of Cavazzi, 5 vols. 12mo.

LABBE (Philip), born at Bourges in France, in 1607, professed philosophy, divinity, and the languages, with great applause; and died in 1667, aged sixty. He was a laborious writer and a good critic; and wrote, 1. Nova Bibliotheca MS. librorum, in 2 vols. fol. 2. De Byzantinæ historiæ Scriptoribus. 3. Galeni vita. 4. Bibliotheca Bibliothecarum. 5. Concordantia Chronologica, &c. He began the last edition of The Councils, and died while the ninth volume was printing. They were finished in 17 vols. by F. Cossart.

LABDANUM, or LADANUM, exudes from a tree of the cistus kind. It is said to have been formerly collected from the beards of goats who browsed the leaves of the cistus: at present a kind of rake, with several straps or thongs of skins fixed to it, is drawn lightly over the shrub,

so as to take up the unctuous juice, which is afterwards scraped off with knives. It is rarely met with pure, even in the places which produce it; the dust, blown upon the plant by the wind, mingling with the tenacious juice: the inhabitants are also said to mix with it a certain black sand. In the shops two sorts are met with. The best, which is very rare, is in dark-colored masses, almost black, of the consistence of a soft plaster, which grows still softer upon being handled; of a very agreeable smell, and of a light pungent bitterish taste. The other sort is harder, not so dark colored, in long rolls coiled up; of a much weaker smell than the first, and has a large admixture of fine sand, which, in the labdanum examined by the French Academy, made up three-fourths of the mass. It is used externally, to attenuate and discuss tumors; internally, it is more rarely used, but is greatly extolled by some against catarrhs and in dysenteries. Rectified spirit of wine almost entirely dissolves pure labdanum, leaving only a small portion of gummy matter, which has no taste or smell; and hence this resin may be thus excellently purified for internal purposes. It is a useful ingredient in the stomachic plaster, now styled emplastrum ladani.

LA BEDOYERE (Charles Angelique François Huchet, count de), descended from an ancient and noble family, was born at Paris in 1786. At the age of twenty he entered the army, and served at the battle of Eylau as an officer in the imperial guard. In 1808 and 1809 he was aide-de-camp to Eugene Beauharnois. He afterwards served in Spain under Lannes, and was severely wounded at Tudela. We find La Bedoyere colonel of the 112th French regiment of infantry during the retreat from Moscow, and again distinguished at the battles of Lutzen and Bautzen, in 1813. On the abdication of Napoleon he was in 1815 made colonel of the seventh regiment of infantry, stationed at Grenoble; and, when his former master landed from Elba, he joined him at Vizille, being the first who brought him a regiment. He was now made general of brigade, lieutenant-general, and aid-de-camp to Napoleon; and raised to the peerage. He is said to have been one of the last officers who left the field of Waterloo, and, retiring to Paris, took his seat in the chamber of peers. On the capitulation of the metropolis, he followed the army, and afterwards was preparing to emigrate to America, but, being discovered in Paris, he was tried by a military commission, August 4th, 1815, and condemned to suffer death: which sentence was executed in a few days.

LAB'EFY, Lat. *labefacio*. To weaken, impair, says Dr. Johnson, but neither his reading nor our own supplies an instance of the word. Perhaps it is connected with the foregoing, lab, obsolete.

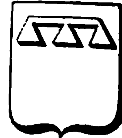
LA'BEL, *n. s.* Lat. *labellum*. Originally, perhaps, derived from the legal use of the word; i. e. a slip or parchment affixed to a deed, or paper, to hold the seal. Minsheu says 'à labando, falling down.' Hence any small slip of paper, or writing, attached to a thing.

When waked, I found
This *label* on my bosom; whose containing
Is so from sense in hardness, that I can
Make no collection of it. *Shakspeare. Cymbeline.*

God joined my heart to Romeo's; thou our hands;
And ere this hand, by thee to Romeo sealed,
Shall be the *label* to another deed,
Or my true heart with treacherous revolt
Turn to another, this shall slay them both.
Shakspeare.

On the *label* of lead, the heads of St. Peter and St. Paul are impressed from the papal seal.
Ayliffe's Parergon.

LABEL, in heraldry, is a fillet usually placed in the middle along the chief of the coat, without touching its extremities. Its breadth ought to be a ninth part of the chief. It is adorned with pendants; and when there are above three of these, the number must be specified in blazoning. It is used on the arms of eldest sons while the father is alive, to distinguish them from the younger; and is esteemed the most honorable of all differences. See HERALDRY.



LABERIUS (Decimus Junius), a Roman knight, who wrote mimes, or short satirical pieces for the stage. Julius Cæsar obliged him, contrary to his inclination, to perform one of his own mimes; whereupon he delivered a prologue, in which he severely satirised Cæsar. This piece is preserved in Aulus Gellius; and fragments of his other works are also extant.

LA'BIAL, *adj*, LA'BIATED, *part. adj.* LABIODEN'TAL, *adj.* } Lat. *labialis*. Formed or uttered by the lips: formed with lips: labiodental is a compound of Holder's, from *labium* and *dentalis*, and means formed by the co-operation of the lips and teeth.

The Hebrews have assigned which letters are *labial*, which dental, and which guttural.
Bacon's Natural History.

Some particular affection of sound, in its passage to the lips, will seem to make some composition in any vowel which is *labial*. *Holder's Elements of Speech.*

The dental consonants are very easy; and first the *labiodentals*, *f*, *v*, also the linguadentals, *t h*, *d h*.
Holder.

The nine Mutes are divided into tenues, or smooth, mediæ, or intermediate, and aspirate, or rough; of which the *labials* or lip letters, the palatines, or palate letters, and the dentals, or teeth letters, are related respectively, and frequently exchanged for each other, one *labial* for another *labial*, &c.
Parkhurst.

Those are called *labials* which are formed by the lips. *Murray.*

LA BLANCHERIE (Mammes Claude Pahin de), a French writer and emigrant, was born at Langres in 1752. He made a voyage early in life to the French colonies, but, disgusted at the treatment of the negro slaves, speedily returned home, and opened at Paris a general board of correspondence, to spread the knowledge of the improvements of different countries throughout Europe. He emigrated afterwards to England, and resided in London in a house once occupied by Sir Isaac Newton. The duke of Buccleugh kindly procured him a pension from government, to which he was principally indebted for his support. He died in London in 1811, being the author of Extrait du Journal de mes Voyages, ou Histoire d'un jeune Homme pour servir d'Ecole aux Peres et aux Meres, Paris, 1776, 2

vols. 12mo.; and a literary journal commenced in January 1779, and continued under different titles to 8 vols. 4to.

LABON, a town of Sumatra, on the west coast, 150 miles S. S. E. of Acheen. It is famous for its camphire and gold dust. Long. 96° 40′ E., lat. 3° 10′ N.

LABOOAN, an island of the Eastern Seas, on the north-west coast of Borneo, opposite the mouth of the river of that name. Long. 115° E., lat. 5° 20′ N.

LAB'ORANT, *n. s.* } Lat. *laborans;* Fr.
LAB'ORATORY. } *laboratoire.* A chemist: the operating room or apartment of a chemist.

I can shew you a sort of fixt sulphur, made by an industrious *laborant*. *Boyle.*

It would contribute to the history of colors, if chemists would in their *laboratory* take a heedful notice, and give us a faithful account, of the colors observed in the steam of bodies, either sublimed or distilled. *Id.*

The flames of love will perform those miracles they of the furnace boast of, would they employ themselves in this *laboratory*. *Decay of Piety.*

The human body is itself somewhat analogous to a *laboratory*, in which, by the varied functions of secretion, absorption, &c., composition and decomposition, are perpetually going on. *Parkes's Chemical Catechism.*

LABORATORY, in chemistry, a place fitted up with various chemical apparatus, and entirely devoted to the different operations of chemical research.

Although very many of the most distinguished laborers in chemical science have been content with such rude apparatus as they had themselves constructed, or converted from the common domestic utensils, it must nevertheless be obvious that they would have succeeded better with well constructed and appropriate apparatus—that we should not then have had so often to complain of investigations so general, of results so inaccurate. The gaseous products of the various substances under examination were indeed entirely neglected by the ancient chemist: he was in the constant habit of cutting a hole in the top of his retort, to admit of the escape of those elastic vapors for the preservation and examination of which instruments innumerable are now constructed.

Under our article CHEMISTRY we have already given a description of most of the principal chemical apparatus with appropriate plates; it is now our task to notice their arrangement in the place destined for their use.

And first, the situation of a laboratory ought to be elevated and dry; the advantages of a low situation for obtaining water, &c., being more than counterbalanced by the dampness of the atmosphere. Constant moisture indeed, though not very considerable and sensible, in many cases is a very great inconvenience in a chemical laboratory. In a damp situation most saline substances become moist, the inscriptions fall off, the bellows rot, the metals rust, the furnaces moulder, and every thing almost spoils. A laboratory, therefore, should never be placed below the ground, and should be as dry as possible. The air must have free access to it; and it should be so constructed that, by means of one or two opposite openings, a current of air may be admitted to carry off noxious vapors, &c.

A chimney ought to be constructed in the laboratory, so high that a person may easily stand under it, and arched forward from one wall to another. The funnel of this chimney ought to be as high as possible, and sufficiently contracted to make a good draught. As charcoal only is burnt under this chimney, it need not be so wide as to allow a chimney-sweeper to pass up into it. Under this chimney may be constructed the brick furnaces, particularly a melting furnace, a furnace for distilling with an alembic, and one or two ovens. The rest of the space ought to be filled up with stands for portable furnaces of all kinds. These furnaces are the most convenient, from the facility of disposing them at pleasure; and they are the only furnaces which are necessary in a small laboratory. A double pair of bellows, of moderate size, must also be placed as commodiously under the chimney as the place will allow, and ought to have a pipe directed towards the hearth where the forge is to be placed. The necessary furnaces are, the simple furnace, for distilling with a copper alembic; a lamp furnace; two reverberatory furnaces of different sizes, for distilling with retorts; an air or melting furnace; an assay furnace: and a forge furnace. Under the chimney, at a convenient height, should be a row of hooks driven into the back and side walls; on which are to be hung small iron shovels, tongs, straight and crooked pincers, pokers, and other utensils for managing the fuel and crucibles.

To the walls of the laboratory ought to be fastened shelves of different breadths and heights, to contain glass vessels, the products of operations, &c. In a laboratory where many experiments are made there cannot be too many shelves. The most convenient place for a stone cistern, to contain water, is a corner of the laboratory; and under it a sink ought to be placed with a waste pipe. As the vessels are always cleaned under this cistern, cloths and bottle brushes ought to be hung upon hooks fastened in the walls near it. In the middle of the laboratory a large table is to be placed, on which mixtures are to be made, preparations for operations, solutions, precipitations, small filtrations; in a word, whatever does not require fire. In convenient parts of the laboratory are to be placed blocks of wood upon mats; one of which is to support a middle-sized iron mortar; another to support a middle-sized hard stone mortar; a third to support an anvil. Near the mortars are to be hung searces of different sizes and fineness; and near the anvil a hammer, files, pincers, sheers, and other small utensils, necessary to give metals a form proper for the several operations.

Two moveable trestles ought to be in a laboratory, which may serve to support a large filter mounted upon a frame, when it is required.

Charcoal is an important article in a laboratory, and it therefore must be placed within reach; but, as the black dust which flies about it

whenever it is stirred is apt to soil every thing in the laboratory, it had better be in some lumber-room near, together with furze, which is very convenient for kindling fires. This place serves, at the same time, for containing bulky things which are not often wanted; such as furnaces, bricks, tiles, fire-clay, quicklime, sand, &c.

Lastly, a middle-sized table, with solid feet, ought to be enumerated among the large moveables of a laboratory, the use of which is to support a porphyry, or levigating stone, or a very hard and dense gritstone, together with a muller made of the same kind of stone.

The other small moveables or utensils of a laboratory are, small hand-mortars of iron, glass, agate, and Wedgewood's ware, and their pestles; earthen, stone, metal, and glass vessels, of different kinds, funnels, and measures.

Some white writing paper, and unsized paper for filters; glass tubes for stirring and mixing corrosive liquors; spatulas of wood, ivory, metal, and glass, should also be if possible provided. Thin pasteboards and horns are very convenient for collecting matters bruised with water upon the levigating stone, or in mortars. Bladders and linen strips for luting vessels, a good portable pair of bellows, a glue-pot, and boxes of various sizes, to be placed upon the shelves, will also be found convenient.

The best construction of a furnace has not been well ascertained from experience. There are facts which show, that a fire made on a grate near the bottom of a chimney, of equal width throughout, and open both above and below, will produce a more intense heat than any other furnace. What may be the limits for the height of the chimney is not ascertained from any precise trials; but thirty times its diameter would not probably be too high. It seems to be an advantage to contract the diameter of a chimney, so as to make it smaller than that of the fire-place, when no other air is to go up the chimney than what has passed through the fire.

M. Chenevix has constructed a wind furnace, which is in some respects to be preferred to the usual form. The sides, instead of being perpendicular, are inverted, so that the hollow space is pyramidical. At the bottom the opening is thirteen inches square, and at the top but eight. The perpendicular height is seventeen inches. This form appears to unite the following advantages: 1. A great surface is exposed to the air, which, having an easy entrance, rushes through the fuel with great rapidity; 2. The inclined sides act in some measure as reverberating surfaces; and, 3, The fuel falls of itself, and is always in close contact with the crucible placed near the grate. The late Dr. Kennedy of Edinburgh, whose opinion on this subject claims the greatest weight, found that the strongest heat in our common wind-furnaces was within two or three inches of the grate. This, therefore, is the most advantageous position for the crucible, and still more so when we can keep it surrounded with fuel. It is inconvenient and dangerous for the crucible to stir the fire often to make the fuel fall, and the pyramidical form renders this unnecessary.

In the diagram annexed *a* is a grate; *c* and *c* are two bricks, which can be let in at pleasure to diminish the capacity; *b* is another grate, which can be placed upon the bricks *c* and *c* for smaller purposes; *d* and *d* are bricks, which can be placed upon the grate *b* to diminish the upper capacity, so that, in fact, there are four different sizes in the same furnace. The bricks should all be ground down to the slope of the furnace, and fit it with tolerable accuracy.

Charcoal is the material most commonly used in furnaces. It produces an intense heat without smoke, but it is consumed very fast. Coke or charred pit-coal produces a very strong and lasting heat. Neither of these produce a strong heat at a distance from the fire. Where the action of flame is required, wood or coal must be burned.

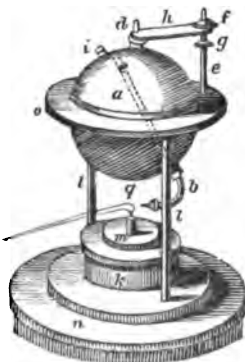
Frequently, however, the flame of an Argand lamp may be employed very conveniently for chemical purposes, a lamp furnace, as it is perhaps not very properly called, will be found very useful. It consists of a brass rod screwed to a foot of the same metal, loaded with lead. On this rod, which may be unscrewed in the middle for rendering it more portable, slide three brass sockets with straight arms, terminating in brass rings of different diameters. These rings serve for supporting glass alembics, retorts, Florence flasks, evaporating basins, gas bottles, &c.; for performing distillations, solutions, evaporations, saline fusions, analyses with the pneumatic apparatus, &c. If the vessels require not to be exposed to the naked fire, a copper sand-bath may be interposed, which is to be previously placed in the ring. By means of a thumb-screw, acting on the rod of the lamp, each of the brass rings may be set at different heights, or turned aside, according to the pleasure of the operator. Below these rings is a fountain-lamp on Argand's plan, which slides on the main brass rod by means of a socket and thumb-screw. It is therefore easy to bring it nearer, or to move it further, at pleasure, from the vessel, which may remain fixed; a circumstance which, independent of the elevation and depression of the wicks of the lamp, affords the advantage of heating the vessels by degrees after they are duly placed, as well as of augmenting' or diminishing the heat instantly; or for maintaining it for several hours at a certain degree, without in the least disturbing the apparatus suspended over it. It may therefore be used for producing the very gentle heat necessary for the rectification of ethers, or the strong heat requisite for distilling mercury. The chief improvement of this lamp consists in its power of affording an intense heat by the addition of a second cylinder, added to that of the common lamp of Argand. This additional cylinder encloses a wick of an inch and a half

in diameter, and it is by this ingenious contrivance, which was first suggested by Mr. Webster, that a double flame is caused, and more than three times the heat of an Argand's lamp of the largest size is produced.

In our article FURNACES we have already described the principles on which these most necessary instruments are constructed, and, in the description of the plates annexed to the article CHEMISTRY, notice is taken of the different kinds now in use. In the latter article will also be found a description of Nooth's and Wolfe's apparatus, Hope's eudiometer, and in fact of almost all the different implements necessary to a chemical laboratory. We shall therefore refer the reader to these articles, as well as to BLOWPIPE, ALEMBIC, BALANCE, and GAS for an account of them.

Under the article BLOWPIPE, however, we have omitted to notice some of the very important modern improvements in that instrument. It has deservedly of late years been considered as an essential instrument in a chemical laboratory; and several attempts have been made to facilitate its use by the addition of bellows, or some other equivalent instruments. These are doubtless very convenient, though they render it less portable for mineralogical researches. It will not here be necessary to enter into any description of a pair of double bellows fixed under a table, and communicating with a blowpipe which passes through the table. Smaller bellows, of a portable size for the pocket, have been made for the same purpose. The ingenious chemist will find no great difficulty in adapting a bladder to the blowpipe, which, under the pressure of a board, may produce a constant stream of air, and may be replenished as it becomes empty, by blowing into it with bellows or the mouth, at another aperture furnished with a valve opening inwards.

The chief advantage these contrivances have over the common blowpipe is, that they may be filled with oxygen gas, which increases the activity of combustion to an astonishing degree. The vapor from alcohol has likewise been employed, and an ingenious contrivance for this purpose by Mr. Hooke is represented in the annexed diagram:



a is a hollow sphere for containing alcohol, resting upon a shoulder in the ring *o*. If the bottom be made flat instead of spherical, the action of the flame will then be greater: *b* is a bent tube with a jet at the end, to convey the alcohol in the state of vapor into the flame at *q*; this tube is continued in the inside up to *c*, which admits of *a* being filled nearly, without any alcohol running over: *d* is a safety valve, the pressure of which is determined at pleasure, by screwing higher or lower on the pillar *e*, the two milled nuts *f* and *g* carrying the steel arm *h*, which rests on the valve: *i* is an opening for putting in the alcohol: *k* is the lamp, which adjusts to different distances from *a*, by sliding up or down the two pillars *l l*. The distance of the flame *q* from the jet is regulated by the pipe which holds the wick being a little removed from the centre of the brass piece *m*, and of course revolving in a circle: *n* the mahogany stand.

Dr. Robert Hare, professor of natural philosophy in the university of Philadelphia, published, in the first volume of Bruce's Mineralogical Journal, an account of very intense degrees of heat, which he had produced and directed on different bodies, by a jet of flame, consisting of hydrogen and oxygen gases, in the proportion requisite for forming water. The gases were discharged from separate gasometers, and were brought in contact only at a common orifice or nozzle of small diameter, in which their two tubes terminated.

In the first number of the Journal of Science and Arts is a description of a blowpipe contrived by Mr. Brooke, and executed by Mr. Newmann, consisting of a strong iron box, with a blowpipe, nozzle, and stop-cock, for regulating the emission of air, which had been previously condensed into the box, by means of a syringe screwed into its top.

John George Children, esq., first proposed to Sir H. Davy the application of Newmann's apparatus to the mixture of oxygen and hydrogen, immediately after Sir H. had discovered that the explosion from oxygen and hydrogen would not communicate through very small apertures; and he first tried the experiment himself with a fine glass capillary tube. The flame was not visible at the end of this tube, being overpowered by the brilliant star of the glass ignited at the aperture.

Dr. Clarke, after being informed by Sir H. Davy that there would be no danger of explosion in burning the compressed gases, by suffering them to pass through a fine thermometer tube one-eightieth of an inch diameter, and three inches in length, commenced a series of experiments, which were attended with most important and striking results. By the suggestion of Professor Cumming there has been enclosed in the iron box a small cylinder of safety, about half filled with oil, and stuffed at top with fine wire gauze. The condensed gases must pass from the large chamber into this small one, up through the oil, and then across the gauze before they can reach the stop-cock and blowpipe nozzle. By this means the dangerous explosions, which had occurred so frequently as would have deterred a less intrepid experimenter than Dr. Clarke, are now obviated. It is still, however, a prudent precaution, to place a wooden screen between the box and the operator. The box is about five inches long, four broad, and three deep. The syringe is joined to the top of the box by a stop-cock. Near the upper end of the syringe, a screw-nozzle is fixed in it at right angles, to which the stop-cock of a bladder containing the mixed gases may be

attached. When we wish to inject the gases, it is proper to draw the piston to the top, before opening the lower stop-cock, lest the flame of the jet should be sucked backward, and cause explosion. It is likewise necessary to see that no little explosion has dislodged the oil from the safety cylinder. A bubbling noise is heard when the oil is present. A slight excess of hydrogen is found to be advantageous.

Platinum is not only fused the instant it is brought in contact with the flame of the ignited gases, but the melted metal runs down in drops. Dr. Clarke has finally fused the astonishing quantity of half an ounce at once by this jet of flame. In small quantities it burns like iron wire. Palladium melted like lead. Pure lime becomes a wax-yellow vitrification. A lambent purple flame always accompanies its fusion. The fusion of magnesia is also attended with combustion. Strontites fused with a flame of an intense amethystine color, and after some minutes there appeared a small oblong mass of shining metal in its centre. Silex instantly melted into a deep orange-colored glass, which was partly volatilised. Alumina melted with great rapidity into globules of a yellowish transparent glass. In these experiments, supports of charcoal, platinum, or plumbago, were used with the same effect. The alkalies were fused and volatilised the instant they came in contact with the flame, with an evident appearance of combustion.

The following refractory native compounds were fused :—Rock crystal, white quartz, noble opal, flint, calcedony, Egyptian jasper, zircon, spinelle, sapphire, topaz, cymophane, pycnite, andalusite, wavellite, rubellite, hyperstene, cyanite, talc, serpentine, hyalite, lazulite, gadolinite, leucite, apatite, Peruvian emerald, Siberian beryl, potstone, hydrate of magnesia, subsulphate of alumina, pagodite of China, Iceland spar, common chalk, Arragonite, diamond.

Gold, exposed on pipe clay to the flame, was surrounded with a halo of a lively rose color, and soon volatilised. Stout iron wire was rapidly burned. Plumbago was fused into a magnetic bead. Red oxide of titanium fused, with partial combustion. Red ferriferous copper blende, oxides of platinum, gray oxide of manganese, crystallised oxide of manganese, wolfram, sulphuret of molybdenum, siliceo-calcareous titanium, black oxide of cobalt, pecublende, siliciferous oxide of cerium, chromate of iron, and ore of iridium, were all, except the second last, reduced to the metallic state, with peculiar, and for the most part, splendid phenomena. Jade, mica, amianthus, asbestus, melt like wax before this potent flame.

But the two most surprising of Dr. Clarke's experiments were the fusion of the meteoric stone from L'Aigle, and its conversion into iron; and the reduction of barium from the earth barytes and its salts. Some nitrate of barytes, put into a cavity, at the end of a stick of charcoal, was exposed to the ignited gas. It fused with vehement ebullition, and metallic globules were clearly discernible in the midst of the boiling fluid, suddenly forming, and as suddenly disappearing. On checking the flame, the cavity of the charcoal was studded over with innumerable globules of a metal of the most brilliant lustre and whiteness, resembling the purest platinum after fusion. Some globules were detached and dropped into naphtha, where they retained for some time their metallic aspect. Their specific gravity was 4·00.

Dr. Clarke fused together a bead of barium and one of platinum, each weighing one grain. The bronze-colored alloy weighed two grains, proving a real combination. The alloy of barium and iron is black and brittle. Barium is infusible before the blow-pipe per se; but with borax it dissolves like barytes, with a chrysolite green color, and disclosing metallic lustre to the file. The alloy of barium and copper is of a vermilion color. When silex is mixed into a paste with lamp-oil, and exposed on a cavity of charcoal to the flame, it runs readily into beads of various colors. If these be heated, in contact with iron, an alloy of silicum and iron is obtained, which discloses a metallic surface to the file. Magnesium and iron may be alloyed in the same way.

By using from two to three volumes of hydrogen to one of oxygen, and directing the flame on pure barytes, supported on pincers of slate, Dr. Clarke more lately revived barium in larger quantities, so as to exhibit its qualities for some time. It gradually, however, passes again into pure barytes. Muriate of rhodium, placed in a charcoal crucible, yielded the metal rhodium, brilliant like platinum. It is malleable on the anvil. Oxide of uranium, from Cornwall, was also reduced to the metallic state.

In order to expel air from solid substances, by means of heat, a gun-barrel, with the touch-hole screwed up and rivetted, may be used instead of an iron retort. The subject may be placed in the chamber of the barrel, and the rest of the bore may be filled with dry sand, that has been well burned, to expel whatever air it might have contained. The stem of a tobacco pipe, or a small glass tube, being luted in the orifice of the barrel, the other extremity must be put into the fire, that the heat may expel the air from its contents. This air will of course pass through the tube, and may be received under an inverted vessel, in the usual manner.

But the most accurate method of procuring air from several substances, by means of heat, is to put them, if they will bear it, into phials full of quicksilver, with the mouths inverted in the same, and then throw the focus of a burning lens or mirror upon them. For this purpose, their bottoms should be round and very thin, that they may not be liable to fly with the sudden application of heat.

Some substances, more especially powders, cannot conveniently be put into a phial, or passed through a fluid. When air is to be extricated from, or added to these, there is no better method, than to place them on a stand under the receiver of the air-pump, and exhaust the common air, instead of excluding it by water or mercury. This process requires a good air-pump, and careful management, otherwise the common air will not be well excluded.

It is frequently an interesting object to pass the electric spark through different kinds of air, either alone or mixed together. In this case a

metallic wire may be fastened in the upper end of a tube, and the sparks or shock may be passed through this wire to the mercury or water used to confine the air. If there be reason to apprehend that an expansion in the air may remove the mercury or water beyond the striking distance, another wire may be thrust up to receive the electricity; or two wires may be cemented into opposite holes in the sides of an hermetically sealed tube. Holes may be made in glass, for this and other chemical uses, by a drill of copper or soft iron, with emery and water; and where this instrument is wanting, a small round file with water will cut a notch in small vessels, such as phials or tubes, though with some danger of breaking them. In some electrical experiments, of the kind here mentioned, there is reason to expect a fallacious result from the wires being burned by the explosion or spark. For this reason, the electricity may be made to pass through the legs of a syphon, containing the air which is under consideration in the upper part of its curvature. One of the vessels, in which the legs of the syphon rest, must therefore be insulated; and, if any watery fluid be used to confine the air, it is generally supposed that no combustion takes place.

We subjoin a list of the chemical substances necessary to be kept in a chemical laboratory. These are divided into wet and dry substances. The first of these must, of necessity, be kept in well-stopped bottles. The latter should also be kept in bottles, the necks of which should be wider than those for liquids.

Substances in common use should be kept in larger quantity than those which are kept as mere specimens, or only used occasionally and in small quantity.

Liquids in Common Use.

Sulphuric acid, pure.
———— common
Nitric acid, pure.
————, common.
Muriatic acid, pure.
————, common.
Acetic acid.
Solution of potassa.
———— carbonate of potassa.
———— potassa.
———— super-carbonate of potassa.
———— soda, and carbonate of soda.
———— carbonate of ammonia.
Lime water.
Distilled water.
Alcohol, pure.
————, common.

The bottles in which the above are kept should hold from a pint to a quart each.

After a change of temperature in the air, from cold to hot, we find at the tops of bottles, about the stopper, a quantity of the liquid which has distilled up to the stopper, and been forced out by the expansion of the air in the bottle. This is very troublesome, especially with acids, and may be remedied by giving to the mouth of the bottle a slight funnel shape, which forms a recess for the liquid.

The following are the dry substances in common use:—

Oxide of manganese and common salt.
Filings and rods of iron, tin, zinc, copper, and lead.
Chalk and powdered marble.
Quick-lime, pipe-clay, and sand.
Magnesia, common and calcined.
Sulphurets of potassa, iron, and lime
Isinglass and nutgalls.
Brasil wood and turmeric.
Calcined plaster of Paris, and bone ashes
Black flux and white flux. See FLUX.
Charcoal powder and saw dust.
Sulphate of lead, as a body for lutes.
Nitre in crystals.
Borax and alum.

The following are bodies in solution, used as tests and kept in small quantities, in bottles from one to two ounces in size. The bottles should be shaped at the mouth as above recommended, and the diameter should be half the height in the cylindric part:—

Sulphate of potassa.
———— soda.
———— alumine.
———— ammonia.
———— magnesia.
———— zinc.
———— silver.
Oxisulphate of iron.
Nitrate of potassa.
———— soda.
———— barytes.
———— strontian.
———— lime.
———— silver.
———— copper.
———— lead.
———— bismuth.
Muriate of potassa.
———— soda.
———— barytes.
———— strontian.
———— lime.
———— ammonia.
———— gold.
———— platina.
———— tin.
———— cobalt.
Oximuriate of mercury.
Phosphate of soda.
———— ammonia.
Fluate of potassa.
———— ammonia.
Borate of soda.
Carbonate of potassa.
———— soda.
———— ammonia.
Acetate of potassa.
———— barytes.
———— strontian.
———— alumine.
———— silver.
———— copper.
———— lead.
Oxiacetate of iron.
Oxalate of soda and ammonia.
Succinate of ammonia.
Tartrate of ammonia.

Prussiate of potassa and iron.
——— lime and iron.
Pure gallic acid in alcohol.
Infusion of galls in alcohol.
——— litmus.
Acetic acid, pure.
Hydrosulphuret of potassa.

The following substances should be kept in the solid state, and free from the contact of air and moisture :—

Sulphate of iron kept in alcohol.
Muriate of lime.
Oximuriate of potassa.
Barytic earth.
Strontian earth, and all pure earths.
Pure potassa.
—— soda

Every vessel and utensil in a chemical laboratory, says the celebrated Macquer, ought to be well cleansed as often as it is used, and put again into its place; labels ought to be put upon all the substances. These cares, which seem to be trifling, are however very fatiguing and tedious; but they are also very important, though frequently little observed. When a person is keenly engaged, experiments succeed each other quickly; some seem nearly to decide the matter, and others suggest new ideas; he cannot but proceed to them immediately, and he is led from one to another: he thinks he shall easily know again the products of the first experiments, and therefore he does not take time to put them in order; he prosecutes with eagerness the experiments which he has last thought of; and in the mean time the vessels employed, the glasses and bottles, so accumulate, that he cannot any longer distinguish them; or, at least, he is uncertain concerning many of his former products. This evil is increased, if a new series of operations succeed, and occupy all the laboratory; or if he be obliged to quit it for some time, every thing then goes into confusion. Thence it frequently happens, that he loses the fruits of much labor, and that he must throw away almost all the products of his experiments.

When new researches and inquiries are made, the mixtures, results, and products of all the operations ought to be kept a long time, distinctly labelled and registered; for these things, when kept some time, frequently present phenomena that were not at all suspected. Many fine discoveries in chemistry have been made in this manner; and many have certainly been lost by throwing away too hastily, or neglecting the products.

LA'BOUR, or LABOR, *n.s.*, *v.n.* [& *v.a.*
LABO'RIOUS, *adj.*
LABO'RIOUSLY, *adv.*
LABO'RIOUSNESS, *n. s.*
LA'BORER.
LA'BORSOME, *adj.*

Fr. *labeur*; Span. & Lat. *labor*, which Minsheu and Parkhurst derive from the Heb. לבט. Work; the exertion of strength; exercise; travail in child-birth: as a verb neuter, to toil; take pains; act with painful efforts; be diseased or distressed; be in child-birth: as an active verb to work at or upon; to form with toil; proceed in, or accomplish with difficulty; to beat: laborer, laboriousness, and the adjectives and adverb, follow these senses: laborious is also used as meaning assiduous, diligent.

Let more work be laid upon the men that they may *labour* therein. *Exod.* v. 9.

That in the night they may be a guard to us, and *labour* in the day. *Neh.* iv. 22.

Epaphras saluteth you, always *labouring* fervently for you in prayers, that ye may stand perfect. *Col.* iv. 12.

A *labouring* man that is given to drunkenness, shall not be rich. *Ecclus.* xix. 1.

To use brevity, and avoid much *labouring* of the work, is to be granted to him that would make an abridgement. 2 *Mac.*

Sith of women's *labours* thou hast charge,
And generation goodly doest enlarge,
Incline thy will to effect our wishful vow.
Spenser.

Being a *labour* of so great difficulty, the exact performance thereof we may rather wish than look for. *Hooker.*

If I find her honest, I lose not my *labour*; if she be otherwise, it is *labour* well bestowed. *Shakspeare.*

The base o' the mount
Is ranked with all deserts, all kind of natures,
That *labour* on the bosom of this sphere
To propagate their states. *Id.*

Sir, I am a true *labourer*; I earn that I eat; get that I wear; owe no man hate; envy no man's happiness. *Id.*

If you had been the wife of Hercules,
Six of his *labours* you'd have done, and saved
Your husband so much sweat. *Id. Coriolanus.*

He hath, my lord, by *laboursome* petition,
Wrung from me my slow leave. *Id. Hamlet.*

If a state run most to noblemen and gentlemen, and that the husbandmen be but as their work-folks and *labourers*, you may have a good cavalry, but never good stable foot. *Bacon.*

They abound with horse,
Of which one want our camp doth only *labour*.
Ben Jonson.

The parallel holds in the gainlessness, as well as the *laboriousness* of the work; those wretched creatures, buried in earth and darkness, were never the richer for all the ore they digged; no more is the insatiate miser. *Decay of Piety.*

The folly of him who pumps very *laboriously* in a ship, yet neglects to stop the leak. *Id.*

Moderate *labour* of the body conduces to the preservation of health, and curing many initial diseases; but the toil of the mind destroys health, and generates maladies. *Harvey.*

The matter of the ceremonies had wrought, for the most part, only upon light-headed, weak men, whose satisfaction was not to be *laboured* for. *Clarendon.*

I to the evil turn
My obvious breast; arming to overcome
By suffering, and earn rest from *labour* won.
Milton.

Not one woman of two hundred dies in *labour*. *Graunt.*

Take, shepherd, take a plant of stubborn oak,
And *labour* him with many a sturdy stroke. *Dryden.*

Not knowing 'twas my *labour*, I complain
Of sudden shootings and of grinding pain;
My throws come thicker, and my cries increased,
Which with her hand the conscious nurse suppressed.
Id.

To this infernal lake the fury flies,
Here hides her hated head, and frees the *labouring* skies. *Id.*

Had you required my helpful hand
The' artificer and art you might command,
To *labour* arms for Troy. *Id. Æneid.*

There lay a log unlighted on the earth,
When she was *labouring* in throes of birth;
For the' unborn chief the fatal sisters came,
And raised it up, and tossed it on the flame. *Id. Ovid.*

As a man had a right to all he could employ his *labour* upon, so he had no temptation to *labour* for more than he could make use of. *Locke.*

His heart is in continual *labour*; it even travails with the obligations, and is in pangs till it be delivered. *South's Sermons.*

That which makes the clergy glorious, is to be knowing in their professions, unspotted in their lives, active and *laborious* in their charges, bold and resolute in opposing seducers, and daring to look vice in the face; and, lastly, to be gentle, courteous, and compassionate to all. *South.*

Do'st thou love watchings, abstinence, and toil,
Laborious virtues all? learn them from Cato. *Addison.*

To his *laborious* youth consumed in war,
And lasting age, adorned and crowned with peace. *Prior.*

I was called to another, who in childbed *laboured* of an ulcer in her left hip. *Wiseman.*

Labourers and idle persons, children and striplings, old men and young men, must have divers diets. *Arbuthnot.*

The stone that *labours* up the hill,
Mocking the *lab'rer's* toil, returning still,
Is love. *Granville.*

This exercise will call down the favour of Heaven upon you, to remove those afflictions you now *labour* under from you. *Wake's Preparation for Death.*

A person who is too nice an observer of the business of the crowd, like one who is too curious in observing the *labour* of the bees, will often be stung for his curiosity. *Pope.*

Here, like some furious prophet, Pindar rode,
And seemed to *labour* with the inspiring God. *Id.*

Not balmy sleep to *lab'rers* faint with pain,
Not showers to larks, or sun-shine to the bee,
Are half so charming, as thy sight to me. *Id.*

I chuse *laboriously* to bear
A weight of woes, and breathe the vital air. *Id.*

The prince cannot say to the merchant, I have no need of thee; nor the merchant to the *labourer*, I have no need of thee. *Swift.*

O how *laborious* is thy way to ruin. *Young.*

Which consideration, as it suggesteth to us the strongest motive to induce us to *labour* after a true knowledge of them ourselves, so it directs us at the same time how we may attain this knowledge. *Mason.*

Ah, Melancholy! how I feel thy power!
Long have I *laboured* to elude thy sway!
But, 'tis enough, for I resist no more. *Beattie.*

LA'BRA. Span. A lip.

Word of denial in thy *labras* here;
Word of denial: froth and scum, thou ly'st. *Shakspeare.*

LABOUREUR (John Le), a French historical writer, was born in 1623, at Montmorency. In 1644 he attended the embassy to Poland. On entering into orders he was made almoner to the king, and commander of the order of St. Michael. He died in 1675, leaving as his works, 1 The History of Charles VI. 2. History of the Marshal Guebriant. 3. Genealogies of Noble Families. 4. Memoirs of Michael du Castelnau, 2 vols. fol. It was an uncle of this writer, Claude le Laboureur, provost of the abbey of St. Barbe, who wrote the history of that house; a Treatise on the Origin of Arms; History of the House of St. Colombe; and Notes on the Breviary of Lyons.

LABRADOR, an extensive barren region of North America, lying between 50° and 60° of N. lat., being bounded south by Canada and the Gulf of St. Lawrence; north by Hudson's Straits; west by Hudson's Bay; and east by the Atlantic Ocean.

Its general aspect is most dreary, the whole district being mountainous and rugged, and every part of the soil strewed with stones. Coarse plants, adapted to the sustenance of the deer and wild goats, are its chief productions; but in the interior iron ore and some inferior timber is found. Here also the arctic fox and bear appear. Black peat earth appears occasionally in patches, according to Mr. Cartwright, who resided here about sixteen years; but he fully confirms the report of other travellers as to the general infertility of this region. The waters only seem animated with life; and here fish and fowl and a variety of amphibious creatures abound. A few miles from the sea, he says, the air is warm and agreeable. He describes the black, white, and red spruce, larch, silver fir, birch, and aspen, as valuable trees; but they do not grow to a large size. The alimentary vegetables found here are wild celery, scurvy-grass, and other antiscorbutic plants. The fruits are currants, raspberries, partridge-berries, apples, pears, empetrum nigrum, whortle-berries, crane-berries, and a small pink berry, the plant of which resembles the strawberry, but the fruit, which is delicious, is granulated like the mulberry. The birds of the country are the white-tailed eagle, the falcon, hawks, owls; the raven, grouse, ptarmigan, spruce game, curlew, plover, sandpiper, geese and ducks, swallows, martins, snipes, and doves.

The natives are of two races. The Mountaineers, or Indians, who it would seem have a mixture of French Canadian blood, are Christians, and live in wigwams, or huts of birch-rind and deers' skins. Their sole employment is hunting, and the skins of the animals they take they dispose of to the Canadians.

The Esquimaux are a totally different race, of very short stature, with small limbs, of a copper color, flat-visaged, with short noses, black and very coarse hair. In language, person, and manners, they much resemble the Greenlanders. Their dress is entirely of skins, and their food chiefly seals, deer, and birds' flesh and fish. Their winter dwellings are sunk in the ground; and in summer they construct huts with poles, covered with skins. Unlike the Indians they have no relish for spirits. They are not known to have any religion, nor any object of worship, and are without government or laws. The men take a plurality of wives, who are considered as the property of the husband, and are transferred, bartered, or lent from one to another. On them falls all the labor except procuring food, which is the sole occupation of the men. They cannot

reckon numerically beyond six, and their compound arithmetic goes no further than twenty-one. Their chief occupations consist in hunting deer and seals, and collecting furs. They are wonderfully sagacious at the first of these occupations, otherwise they would starve; and when they are in a part of the country, in the winter time, where deer are scarce, they will follow a herd day and night, until they tire them quite down, when they are sure to kill them all, if the night is light enough; they rest only four or five hours, and then pursue again; which space of time being too short for the deer to obtain either food or rest, they are jaded out by the fourth day. The Esquimaux were formerly settled in different parts of the coast; but in consequence of their quarrels with the Mountaineers, with whom they wage perpetual hostility, they have removed farther north.

Their canoes are of ribs of wood, covered with seal-skins; they are twenty feet long, and but two broad, holding but one man. Their arms are the dart, and bow and arrow. They keep great numbers of dogs, as well for food as for their skins, and to draw their sledges in winter. These animals cannot bark, but make a hideous howl. The chief establishment of the Moravians is at Nain, on the east coast, in lat 57°. The whole settlement includes about 600 inhabitants. The English visit the country for furs, whalebone, oil, and cod fish.

Labrador Stone, a curious species of feldt spar, or rhombic quartz, which exhibits all the colors of a peacock's tail. It was discovered first by the Moravians, who have a colony among the Esquimaux in Labrador. It is found of a light or deep gray color, but for the most part of a blackish-gray. When held in the light in various positions it discovers a variety of colors, such as the blue of lapis lazuli, grass-green, apple-green, pea-green, and sometimes, but more seldom, a citron yellow. Sometimes it has a color between that of red copper and tombuck-gray; at other times the colors are between gray and violet. For the most part these colors are in spots, but sometimes in stripes on the same piece. The stones are found in pretty large angular pieces, appear foliated when broken, and the fragments are of a rhomboidal figure. Their specific gravity is about 2·755.

LABRUS, in ichthyology, a genus of fishes belonging to the order of thoracici. The characters are these: the covers of the gills scaly; the branchiostegous rays unequal in number: teeth conic, long, and blunt at their ends: one tuberculated bone in the bottom of the throat: two above, opposite to the other: one dorsal fin reaching the whole length of the back: a slender skin extending beyond each ray, with a rounded tail. There are forty-one species, which vary from each other, even those of the same species, almost infinitely in color; some of them being of a dirty red mixed with a certain duskiness; others most beautifully striped, especially about the head, with the richest colors, such as blue, red, and yellow. Care must therefore be taken not to multiply the species from these accidental teints, but to attend to the form, which never varies. Pennant mentions his having seen a species of labrus taken about the Giant's Causeway in Ireland, of a most beautiful vivid green, spotted with scarlet; and others at Bandooran, in the county of Sligo, of a pale green. To this genus belongs the fish called by the English the old wife.

LABUN, a town in the government of Volhynia, European Russia, containing a population of about 3000 souls.

LABY, a large town of Western Africa, in the kingdom of Foota Jallo. It is said to be two miles and a half in circumference, and trades with Timbuctoo, which is four months' journey beyond. This place manufactures narrow cloth and leather, wood, iron, and various articles in silver. Population about 5000.

LAB'YRINTH, *n. s.* Lat. *labyrinthus;* Gr. λαβυρινθος. A maze; an intricate edifice or combination of walks. Any thing puzzling or perplexing.

My clamours tear
The ear's soft *labyrinth*, and cleft the air. *Sandys.*

Suffolk, stay!
Thou may'st not wander in that *labyrinth;*
There Minotaurs, and ugly treasons lurk. *Shakspeare.*

Words, which would tear
The tender *labyrinth* of a maid's soft tear. *Donne.*

My soul is on her journey; do not now
Divert, or lead her back, to lose herself
I' th' maze and winding *labyrinths* o' the world. *Denham.*

The earl of Essex had not proceeded with his accustomed wariness and skill; but ran into *labyrinths* from whence he could not disentangle himself. *Clarendon.*

How shall the blessed day of our discharge
Unwind, at once, the *labyrinths* of fate,
And straighten its inextricable maze! *Young.*

(Not that I have not several merits more,
But this will more peculiarly be seen)
They so embellish, that 'tis quite a bore
Their *labyrinth* of fables to tread through,
Whereas this story's actually true. *Byron.*

Labyrinth, among the ancients, was a large intricate edifice cut out into various aisles and meanders running into each other, so as to render it difficult to get out of it. Mention is made of several of these edifices, but the most celebrated are the Egyptian and the Cretan labyrinths. The word literally signifies a circumscribed space, intersected by a number of passages, some of which cross each other in every direction, like those in quarries and mines, and others make larger or smaller circuits round the place from which they depart, like the spiral lines on certain shells. In a figurative sense it was applied to obscure and captious questions, to indirect and ambiguous answers, and to those discussions which, after long digressions, bring us back to the point from which we set out.

The Labyrinth of Crete is the most noted in history or fable; having been rendered particularly remarkable by the story of the Minotaur, and of Theseus, who found his way through all its windings by Ariadne's clue. Diodorus Siculus relates as a conjecture, and Pliny as a fact, that Dædalus constructed this labyrinth on the model of that of Egypt, though on a smaller scale. They add, that it was formed by the command of Minos, who kept the Minotaur

shut up in it: and that in their time it no longer existed. Diodorus and Pliny, therefore, considered this labyrinth as a large edifice; while other writers represent it simply as a cavern hollowed in the rock, and full of winding passages. But if this labyrinth had been constructed by Dædalus under Minos it is surprising that we find it mentioned, neither in Homer, who more than once speaks of Minos and Crete; nor in Herodotus, who describes that of Egypt, after having said that the monuments of the Egyptians are much superior to those of the Greeks; nor in the more ancient geographers; nor in any of the writers of the ages when Greece flourished. Diodorus and Pliny suppose, that in their time no traces of the labyrinth existed in Crete, and that even the date of its destruction had been forgotten. Yet it is said to have been visited by the disciples of Apollonius of Tyana, who was contemporary with those two authors. The Cretans, therefore, then believed that they possessed the labyrinth. 'I would request the reader,' says abbé Barthelemi, 'to attend to the following passage in Strabo. At Napulia, near the ancient Argos (continues that judicious writer) are still to be seen vast caverns, in which are constructed labyrinths that are believed to be the work of the Cyclops: the meaning of which is, that the labors of men had opened in the rock passages which crossed and returned upon themselves, as is done in quarries. Such is the idea we ought to form of the labyrinth of Crete. Were there several labyrinths in that island? Ancient authors speak only of one, which the greater part place at Cnossus, and some at Gortyna. Belon and Tournefort have given us the description of a cavern at the foot of Mount Ida, on the south side of the mountain, at a small distance from Gortyna. This was only a quarry, according to the former; and the ancient labyrinth, according to the latter, whose opinion I have followed.' The abbé has some farther conjectures on this subject, for which see his *Travels of Anacharsis*, vol. VI. p. 441.

The Labyrinth of Egypt, according to Pliny, was the oldest of all the known labyrinths, and was subsisting in his time, after having stood 3600 years. He says it was built by king Petesucus, or Tithoes, but Herodotus makes it the work of several kings. It stood on the banks of the lake Mœris, and consisted of twelve large contiguous palaces, containing 3000 chambers, 1500 of which were under ground. Strabo, Diodorus Siculus, Pliny, and Mela, speak of this monument with the same admiration as Herodotus: but not one of them says it was constructed to bewilder those who went into it; though it is manifest that, without a guide, they would be in danger of losing their way. It was this danger, no doubt, which introduced a new term into the Greek language.

Labyrinth Isles, a cluster o' small islands in the Pacific Ocean, discovered by Roggewein in 1722; seventy-five miles west from the Pernicious Islands.

LAC, Fr. *laque*; Hind. and Sans. *lakh*. A substance deposited by the coccus lacca, used in varnishes. See the article following.

Lac is usually distinguished by the name of a gum, but improperly, because it is inflammable, and not soluble in water. We have three sorts of it, which are all the product of the same tree. 1. The stick *lac*. 2. The seed *lac*. 3. The shell *lac*. Authors leave us uncertain whether this drug belongs to the animal or the vegetable kingdom. *Hill.*

White *lac* is a peculiar substance distinct from the shell *lac* and stick *lac* of commerce, and is brought from the East Indies. This substance, which has a resemblance to bees'-wax, is secreted by an opaque rough insect, of a grey colour.

Parkes's Chemical Catechism.

Lac, in the arts, is a substance well known in Europe, under the different appellations of stick-lac, shell-lac, and seed-lac. The first is the lac in its natural state, encrusting small branches or twigs. Seed-lac is the stick-lac separated from the twigs, appearing in a granulated form, and probably deprived of part of its coloring matter by boiling. Shell-lac is the substance which has undergone a simple purification, as mentioned below. Beside these we sometimes meet with a fourth, called lump-lac, which is the seed-lac melted and formed into cakes.

Lac is the product of the coccus lacca, which deposits its eggs on the branches of a tree called bihar, in Assim, a country bordering on Thibet, and elsewhere in India. It appears designed to answer the purpose of defending the eggs from injury, and affording food for the maggot in a more advanced state. It is formed into cells, finished with as much art and regularity as a honeycomb, but differently arranged; and the inhabitants collect it twice a-year, in the months of February and August. For the purification, it is broken into small pieces, and put into a canvas bag of about four feet long, and not above six inches in circumference. Two of these bags are in constant use, and each of them held by two men. The bag is placed over a fire, and frequently turned, till the lac is liquid enough to pass through its pores; when it is taken off the fire, and twisted in different directions by the men who hold it, at the same time dragging it along the convex part of a plantain-tree prepared for this purpose; and, while this is doing, the other bag is heating, to be treated in the same way. The mucilaginous and smooth surface of the plantain-tree prevents its adhering; and the degree of pressure regulates the thickness of the coating of lac, at the same time that the fineness of the bag determines its clearness and transparency.

Analysed by Mr. Hatchett, stick-lac gave in 100 parts, resin 68, coloring extract 10, wax 6, gluten 5·5, extraneous substances 6·5; seed lac, resin 88·5, coloring extract 2·5, wax 4·5, gluten 2; shell-lac, resin 90·9, coloring extract 0·5, wax 4, gluten 2·8. The gluten greatly resembles that of wheat, if it be not precisely the same; and the wax is analogous to that of the myrica cerifera.

In India, lac is fashioned into rings, beads, and other trinkets; sealing-wax, varnishes, and lakes for painters, are made from it; it is much used as a red dye, and wool tinged with it is employed as a fucus by the ladies; and the resinous part, melted and mixed with about thrice its weight of finely-powdered sand, form-

polishing stones. The lapidaries mix powder of corundum with it in a similar manner.

The coloring matter is soluble in water; but one part of borax to five of lac, renders the whole soluble by digestion in water, nearly at a boiling heat. This solution is equal for many purposes to spirit varnish, and is an excellent vehicle for water-colors, as, when once dried, water has no effect on it. Lixivium of potassa, soda, and carbonate of soda, likewise dissolve it. So does nitric acid, if digested upon it in sufficient quantity forty-eight hours.

The coloring matter of the lac loses considerably of its beauty by keeping any length of time; but when extracted fresh, and precipitated as a lake, it is less liable to injury. Mr. Stephens, a surgeon in Bengal, sent home a great deal prepared in this way, which afforded a good scarlet to cloth previously yellowed with quercitron: but it would probably have been better, if, instead of precipitating with alum, he had employed a solution of tin, or merely evaporated the decoction to dryness.

Lac is the basis of the best sealing-wax. Lac is likewise employed for medicinal purposes. The stick-lac is the sort used. It is of great esteem in Germany, and other countries, for laxity and sponginess of the gums proceeding from cold or a scorbutic habit: for this use the lac is boiled in water, with the addition of a little alum, which promotes its solution; or a tincture is made from it with rectified spirit. This tincture is recommended also internally in the fluor albus, and in rheumatic and scorbutic disorders; it has a grateful smell, and not unpleasant, bitterish, astringent taste.

Lac de la Pluie, a lake of Upper Canada, North America, formed by the water connecting Lake Superior with the Lake of the Woods.

Lac des Illinois, the connecting lake between lakes Huron and Michigan, North America. It is fifteen miles long, and of an oval figure.

LACARRY (Giles), a learned Jesuit of the seventeenth century, born in the diocese of Castres in Languedoc in 1605. He taught philosophy and theology: was rector of the college of Cahors, and well skilled in history. He wrote many works; among which are, 1. Historia Galliarum sub Præfectis Prætorii Galliarum, 4to. a work which is much esteemed, and extends from the reign of Constantine to that of Justinian. 2. Historia Romana a Julio Cesare ad Constantinum Magnum, per numismata et marmora antiqua, an excellent work. 3. Epitome Historiæ Reg. Franciæ, ex Dionysio Petavio excerpta, also much esteemed. 4. An edition of Velleius Paterculus, with learned notes.

LACCADIVA, or Laccadive Islands, are a cluster of low islands lying off the Malabar coast, at the distance of thirty-eight leagues, and between lat. 12° and 10°. Thirty-two have been counted. They are all low, surrounded by reefs of coral; producing abundance of cocoa-nuts, areka, plantains, and other fruits. Generally the islands are on the east edge of the reefs, and the latter stretches off from them to the west. They are inhabited by Malabar Mopleys, who visit the Malabar coast in boats, constructed of the trunks of the cocoa-palm, loaded with cocoa-nuts, coir cordage of their manufacture (from the fibrous parts of the cocoa-nut), jagory, and areka. Vessels also visit these islands from the coast for coral-reef stone (madrepore), for the purpose of making Hindoo images and burning into lime. Ambergris is also found on the beaches. These islands are under nominal allegiance to Cannanore.

Being rarely visited by European ships, they are little known in detail; the two southernmost are Seuhelipar and Kalpeni, each composed of two islets: those of Seuhelipar are distant eight miles from each other, but surrounded by reefs. Kalpeni is also two islets joined by a reef; it is four miles long, and one broad. On the south-west side is a town, and an opening in the reef for the boats to land. Underoot, north of Kalpeni, is less than the latter, and has a village of a few scattered houses on the north side, whose inhabitants are poor and inoffensive.

The bank of Cherbaniani is a dangerous reef, north-west of the Laccadivas. The sea breaks violently on it; and in the north-east monsoon some of the rocks are dry. The safest channel of this neighbourhood is between Manicoy Island and the Laccadivas, and is called by the Arabs Mamal, and by the Europeans the Nine Degree Channel: that between it and the Maldivas is named by the former Sindal, and by the latter the Eight Degree Channel.

LACCIC Acid (acidum laccicum, from lac, the substance in which it exists). 'Dr. John made a watery extract of powdered stick-lac, and evaporated it to dryness. He digested alcohol on this extract, and evaporated the alcoholic extract to dryness. He then digested this mass in ether, and evaporated the ethereal solution; when he obtained a syrupy mass of a light yellow color, which was again dissolved in alcohol. On adding water to this solution, a little resin fell. A peculiar acid united to potassa and lime remains in the solution, which is obtained free, by forming with acetate of lead an insoluble laccate, and decomposing this with the equivalent quantity of sulphuric acid. Laccic acid crystallises; it has a wine-yellow color, a sour taste, and is soluble, as we have seen, in water, alcohol, and ether. It precipitates lead and mercury white; but it does not affect lime, barytes, or silver, in their solutions. It throws down the salts of iron white. With lime, soda, and potassa, it forms deliquescent salts, soluble in alcohol.'

LACE, *n. s.* & *v. a.*, Lace'man, *n. s.*, Laced', *part. adj.* } Fr. *lace, lacet*; Ital. *laccio*; Teut. *less, lasse*; Span. *lazo*; all, perhaps, from Lat. *laqueus*, a noose. A string or cord; twisted or worked threads; a particular kind of net-work formed of cotton, linen, or silk; see below. Prior uses it in a cant way for sugar. As a verb, to fasten or adorn with cord or lace; to embellish: also, to beat (i. e. with a lace or cord): laced 'mutton' is a pun used by Shakspeare (with Lat. *muto*) for a loose woman: a laceman, one who sells lace.

There the fond fly entangled, struggled long,
Himself to free thereout; but all in vain:
For striving more, the more in *laces* strong

Himself he tied, and wrapt his winges twain
In limy snares, the subtil loops among.
Spenser.

Look, love, what envious streaks
Do *lace* the severing clouds in yonder East;
Night's candles are burnt out, and jocund day
Stands tiptoe on the misty mountains' tops.
Shakspeare.

O! cut my *lace*, lest my heart cracking, it
Break too. *Id.*

Aye, sir, I, a lost mutton, gave your letter to her a *laced mutton*, and she gave me nothing for my labour. *Id.*

It is but a night-gown in respect of yours; cloth of gold and coats, and *laced* with silver. *Id.*

Our English dames are much given to the wearing of costly *laces*; and, if they be brought from Italy, they are in great esteem. *Bacon.*

The king had snared been in love's strong *lace*.
Fairfax.

He wears a stuff, whose thread is coarse and round,
But trimmed with curious *lace*. *Herbert.*

These glittering spoils, now made the victor's gain,
He to his body suits; but suits in vain:
Messapus' helm he finds among the rest,
And *laces* on, and wears the waving crest. *Dryden.*

At this, for new replies he did not stay,
But laced his crested helm, and strode away.
Id.

Go, you, and find me out a man that has no curiosity at all, or I'll *lace* your coat for ye.
L'Estrange.

I met with a nonjuror, engaged with a *laceman*, whether the late French king was most like Augustus Cæsar, or Nero. *Addison. Spectator.*

When Jenny's stays are newly *laced*,
Fair Alma plays about her waist. *Prior.*

If aptly he the sect pursues,
That read and comment upon news;
He takes up their mysterious face,
He drinks his coffee without *lace*. *Id.*

Like Mrs. Primly's great belly; she may *lace* it down before, but it burnishes on her hips.
Congreve.

I caused a fomentation to be made, and put on a *laced* sock, by which the weak parts were strengthened.
Wiseman.

Then clap four slices of pilaster on't,
That, *laced* with bits of rustic, makes a front.
Pope.

Doll ne'er was called to cut her *lace*,
Or throw cold water in her face. *Swift.*

But with our damsel this was not the case:
Her dress was many-coloured, finely spun;
Her locks curled negligently round her face,
But through them gold and gems profusely shone;
Her girdle sparkled, and the richest *lace*
Flowed in her veil, and many a precious stone
Flashed on her little hand; but, what was shocking,
Her small snow feet had slippers, but no stocking.
Byron.

Lace, in the arts, is formed of cotton, thread, or silk, and is in the manufacture a species of weaving. See Weaving.

We may notice in this place, however, the manner in which it is made by hand in Bedfordshire, Buckinghamshire, &c. A pillow or cushion being furnished with a stiff piece of parchment, having a number of holes pricked in it, through these holes pins are stuck into the pillow and the threads wound upon bobbins are woven round the pins, and twisted round each other so as to form the required pattern. The process is tedious, and since the invention of the Nottingham machinery confined to a small part of the country. Still there is this difference between Nottingham and Buckinghamshire lace. In the hand-made, or pillow lace, the net or meshes may be described, by supposing a number of ropes, each formed of two or more threads twisted round each other: these are extended parallel; but, at every two or three spiral turns of these ropes, the strands or threads composing one rope are twisted around with those of its neighbour, and then return to be twisted with its own: and this reciprocally of the whole number forms a netting; the figure of the meshes depending upon the number of turns which are made, before the twist is changed from one rope to the next. To form a lace of this description, it is essential that the ends of each thread be detached, and capable of being twisted over the adjacent threads. This is easily done by the hand upon the pillow, by twisting the bobbins round each other; but has difficulties which prevent its performance by machinery. The Nottingham lace is a modification of the stitch or loop of which stockings are made; all the meshes being formed by a continuance of one thread, which is, by the machine, formed into loops a whole course (that is, length of the intended piece of lace) at once, by pressing it down alternately over and under between a number of parallel needles; a second course is then made of similar loops on the same needles, and the loops of the first are drawn through those of the second, in such a manner as to form meshes by retaining the first loops; the second are then retained by a third course, and this by a fourth, and so on. The machine is very nearly like a common stocking-frame, but provided with an additional apparatus. It consists of a frame, containing a number of needles, or points; these are introduced between the fixed needles of the stocking-frame, and a certain number (one half, for instance) of the loops in the thread are taken off the fixed needles upon these points, which are moved endways, the space of two, three, or more fixed needles, and put down upon them again. Another set of loops is now taken upon the points, and moved in the opposite direction; by this means, crossing the loops over each other, and forming meshes, the figure of which will depend upon the number of needles it is thus carried over. But, as this admits of no great variety of patterns, another machine has been invented, which is much more extended in its applications. Like the former, it has the parts of the stocking-frame, but differently made. The thread is, in this, rolled upon a cylinder, in the same manner as the weaver's beam; as many being wound round it as there are needles in the frame. These threads pass through eyes in the ends of small points, called guides, which are opposite the needles; and these guides are fixed on two bars, each of which has half the guides fastened in it, that is, one guide is fast in one bar, and the next in the other, and so on alternately of the whole, Each of the guides presents a thread to its needle, and they are all at once moved by the hand to twist the threads two or three times round the needles which are opposite them: the loop is now made in a manner similar to the other

mals agree in the number of teeth; and the general manners and habits of both are found to be similar in the old and new continents. The more accurate discrimination, however, of Blumenbach, and some others, seems in reality to prove that the American crocodile is specifically distinct from the Nilotic. The leading difference appears to be, that the head of the alligator is smooth on the upper part, and not marked with those very strong rugosities and hard carinated scales which appear on that of the crocodile; the snout is considerably flatter and wider, as well as more rounded at the extremity. The alligator arrives at a size not much inferior to that of the crocodile, specimens having often been seen of eighteen or twenty feet in length.

'Though the largest and greatest numbers of alligators,' says Catesby, 'inhabit the torrid zone, the continent abounds with them ten degrees more north, particularly as far as the river Neus, in North Carolina, in the latitude of about 33°, beyond which I have never heard of any, which latitude nearly answers to the northernmost parts of Africa, where they are likewise found. They frequent not only salt rivers near the sea, but streams of fresh water in the upper parts of the country, and in lakes of salt and fresh water, on the banks of which they lie lurking among reeds, to surprise cattle and other animals. In Jamaica, and many parts of the continent, they are found about twenty feet in length: they cannot be more terrible in their aspect, than they are formidable and mischievous in their natures, sparing neither man nor beast they can surprise, pulling them down under water, that, being dead, they may with greater facility, and without a struggle or resistance devour them. As quadrupeds do not so often come in their way, they almost subsist on fish; and as, by the close connexion of the vertebræ they can neither swim nor run away, but strait forward, and are consequently disabled from turning with that agility requisite to catch their prey by pursuit, therefore they do it by surprise in the water as well as by land.

L. Carolinensis, the green lizard of Carolina, is so denominated from its color. This species is very slender; the tail is near double the length of the body, and the whole length about five inches. It inhabits Carolina; where it is domestic, familiar, and harmless. It sports on tables and windows, and amuses with its agility in catching flies. Cold affects the color; in that uncertain climate, when there is a quick transition in the same day from hot to cold, it changes instantly from the most brilliant green to a dull brown. They are a prey to cats and ravenous birds. They appear chiefly in summer; and at the approach of cold weather retire to their winter recesses, and lie torpid in the hollow crevices of rotten trees. A few warm sun-shiny days often so invigorate them, that they will come out of their holes and appear abroad; when on a sudden the weather, changing to cold, so enfeebles them, that they are unable to return to their retreats. and die of cold.

L. caudiverbera has a depressed pinnatified tail, and palmated feet. It is larger than the common green lizard, is found in Peru, and has obtained its name from its beating the ground with its tail.

L. Cayman, or the Antilles crocodile, has been confounded with the alligator and Gangetica, but is evidently different from both; and has accordingly been properly distinguished by the abbé Bonaterre in the Encyclopedie Methodique. The greatest strength of this animal, according to M. Merian, consists in its teeth, of which there are two rows crossing one another, by means of which it grinds with the greatest ease whatever it seizes upon. The Cayman is so called from some small isles of that name among the Antilles, where these creatures are said to be very numerous. They are of exceeding strength, and equally the dread both of men and animals; for they live on land as well as in the water, and devour every creature they meet with. See Cayman.

L. chamæleon, the chamæleon, has a crooked cylindrical tail. The head of a large chamæleon is almost two inches long, and thence to the beginning of the tail it is four inches and a half. The tail is five inches long, and the feet two and a half. The thickness of the body is different at different seasons; for sometimes from the back to the belly it is two inches, and sometimes one; for he can blow up and contract himself at pleasure. This swelling and contraction is not only of the back and belly, but also of the legs and tail. The chamæleon will continue blown up for two hours together, and then grow less and less insensibly; for the dilatation is always more quick and visible than the contraction. In this last state he appears extremely lean; the spine of the back. is sharp, and all his ribs might be told; the tendons of the arms and legs might also be seen distinctly. The skin is very cold to the touch; and, notwithstanding he seems so lean, there is no feeling the beating of the heart. The surface of the skin is unequal, and has a grain not unlike shagreen, but very soft, because each eminence is as smooth as if it was polished. Some of these are as large as a middling pin's head on the arms, legs, belly, and tail; but on the shoulders and head they are of an oval figure, and a little larger. Those under the throat are ranged in the form of a chaplet, from the lower lip to the breast. Some of the head and back are amassed together in clusters, with spaces between them, on which are almost imperceptible spots of a pale red and yellow color, as well as the ground of the skin itself, which plainly appears between these clusters. This ground changes color when the animal is dead, becoming of a grayish-brown, and the small spots are whitish. The head is like that of a fish, being joined to the breast by a very short neck, covered on each side with cartilaginous membranes resembling gills. There is a crest directly on the top of the head, and two others on each side above the eyes, and between these there are two cavities near the top of the head. The muzzle is blunt, like that of a frog: at the end there is a hole on each side for the nostrils; but there are no ears, nor the sign of any. The jaws are furnished with a bone in the form of teeth, of which he makes but little use, as he lives by swallow-

ing flies and other insects without chewing them; and hence arose the vulgar notion of his living upon air, because he was never seen to eat. The tongue, which Linnæus says resembles an earthworm, is of considerable length, and is enlarged and somewhat flattened at the end. From this member there continually oozes out a very glutinous liquor, by means of which it catches such insects as come within its reach, and it is surprising to see with what quickness it retracts its tongue the instant it has arrested any prey. The form, structure, and motion of the eyes, have something very peculiar; for they are very large, being almost half an inch in diameter, of a globular figure, and stand out of the head. They have a single eye-lid like a cap, with a small hole in the middle, through which the sight of the eye appears, no bigger than a pin's head, and a shining brown, encircled by a little ring of a gold-color. This eye-lid has a grain like shagreen, as well as the other parts of the skin; and when the rest of the body changes color, and assume spots of different shape, those on the lid always keep the same form, though they are tinctured with the same color as the skin. But the most extraordinary thing relating to the eyes is, that this animal often moves one when the other is entirely at rest; nay, somtimes one eye will seem to look directly forward and the other backward, and one will look up to the sky when the other regards the earth. The trunk of the body comprehends the thorax and the belly, but is almost all thorax, with little or no belly. The four feet are al! of equal length; but those before are turned backwards, and those behind forwards. There are five toes on each paw, which have a greater resemblance to hands than feet. They are all divided into two, which gives the appearance of two hands to each arm, and two feet to each leg; and though one of these parts has three toes, and the other but two, yet they seem to be all of the same size. These toes lie together under the skin; their shape, however, may be seen through the skin. With these paws the chamæleon can lay hold of the small branches of trees like a parrot. When he is about to perch he parts his toes differently from birds, placing two behind and two before. The claws are little, crooked, very sharp, and of a pale yellow, proceeding but half way out of the skin, while the other half is hid beneath it. His walk is slower than that of a tortoise, and he seems to move along with an affectation of gravity. He seems to seek for a proper place to set his feet upon; and, when he climbs up trees, he does not trust to his feet like a squirrel, but endeavours to find out clefts in the bark, that he may get a surer hold. His tail is like that of a viper when it is puffed up and round; at other times the bones may be seen in the same manner as on the back. He always wraps his tail round the branches of trees, and it serves him instead of a fifth hand. He is a native of Africa and Asia. Wormius believes the change of color to depend upon the feelings of the animal, or upon the different degrees of heat or cold to which it is subjected. It seems similar to blushing, and is probably produced by the greater or less quantity of blood sent into the minute vessels, assisted also by the distension of their immense lungs, which, being expanded with air, render the animal nearly transparent. Mr. Barrow observes, that 'previously to the chamæleon's assuming a change of color, it makes a long inspiration, the body swelling out to twice its usual size; and, as this inflation subsides, the change of color gradually takes place. The only permanent marks are two small dark lines passing along the sides.' According to D'Obsonville, the blood of the chamæleon is of a violet blue color; the vessels and cutis yellow; the epidermis transparent: hence he conceives, that, in consequence of more or less blood being sent to the external arteries, all the shades of color which the animal presents may be produced.

L. crocodylus, the crocodile, has a compressed jagged tail, five toes on the fore, and four on the hind feet. This is the largest animal of the genus. A young one that was dissected at Siam, an account of which was sent to the Royal Academy at Paris, was eighteen feet and a half long; the tail was no less than five feet and a half, and the head and neck above two and a half. He was four feet nine inches in circumference where thickest. The hinder legs, including the thigh and the paw, were two feet two inches long; the paws from the joint to the extremity of the longest claws, were above nine inches. They were divided into four toes; of which three were armed with large claws, the longest of which was an inch and a half, and seven lines and a half broad at the root. The fourth toe was without a nail, and of a conical figure; but was covered with a thick skin like shagreen leather. These toes were united with membranes like those of ducks, but much thicker. The fore legs had the same parts and conformation as the arms of a man, but were somewhat shorter than those behind. The hands had five fingers, the last two of which had no nails, and were of a conical figure, like the fourth toe on the hind paws. The head was long, and had a little rising at the top; but the rest was flat, especially towards the extremity of the jaws. It was covered with a skin, which adhered firmly to the skull and jaws. The skull was rough and unequal in several places; and about the middle of the forehead there were two bony crests, about two inches high. They were not quite parallel, but separated from each other in proportion as they mounted upwards. The eye was very small in proportion to the rest of the body; and so placed within its orbit, that the outward part, when shut, was only a little above an inch in length, and ran parallel to the opening of the jaws. The nose was placed in the middle of the upper jaw, near an inch from its extremity, and was perfectly round and flat, being two inches in diameter, of a black, soft, spongy substance, like the nose of a dog. The form of the nostrils was somewhat like the Greek Σ; and there were two caruncles which filled and closed them very exactly, and which opened as often as he breathed through the nose. The jaws seemed to shut one within another by means of several apophyses, which proceeded from above downwards, and from below upwards, there being cavities in the oppo-

site jaw to receive them. They had twenty-seven dog-teeth in the upper jaw, and fifteen in the lower, with several void spaces between them. They were thick at the bottom, and sharp at the point; being all of different sizes, except ten large hooked ones, six of which were in the lower jaw, and four in the upper. The mouth was fifteen inches long, and eight and a half broad where broadest; and the distance of the two jaws, when opened as wide as possible, was fifteen inches and a half. The skull, between the two crests, was proof against a musket ball, which only rendered the part a little white that it struck against. The color of the body was dark brown on the upper part, and whitish citron below, with large spots of both colors on the sides. From the shoulders to the extremity of the tail he was covered with large square scales, disposed like parallel girdles, fifty-two in number; but those near the tail were not so thick as the rest. In the middle of each girdle were four protuberances, which became higher as they approached the end of the tail, and composed four rows; of which the two in the middle were lower than the other two, forming three channels, which grew deeper the nearer they came to the tail, and were confounded with each other about two feet from its extremity. The skin was defended by a sort of armour, which, however, was not proof against a musket-ball. Probably, however, if the ball had struck obliquely against the shell, it would have flown off. The parts of the girdles under the belly were whitish, and made up of scales of divers shapes. They were about one-sixth of an inch thick, and not so hard as those on the back. Some crocodiles have measured forty feet in length. They have no tongue, but in place of it a membrane, attached by its edges to the two sides of the under jaw. The crocodile lays eggs which she leaves to be hatched by the heat of the sun. The Egyptians use the fat against the rheumatism and stiffness of the tendons, esteeming it a powerful external remedy. They say the gall is good for the eyes; they use it as a certain remedy for barrenness in women, taking about six grains internally, and outwardly they apply a pessus made of cotton and the gall of a crocodile. The eyes of the crocodile are the best aphrodisiacs of any known by the Arabs; who prefer them to all confections, and even to ambergris. In the stomach of one of these animals, dissected before the English consul, they found the bones of the legs and arms of a woman, with the rings which they wear in Egypt as ornaments. These animals are seen in some places lying for hours, and even whole days, stretched in the sun, and motionless; so that one not used to them might mistake them for trunks of trees covered with rough and dry bark: but the mistake would soon be fatal: for the seemingly torpid animal, at the near approach of any living creature, instantly darts upon it, and carries it to the bottom. In the times of an inundation they sometimes enter the cottages of the natives, where they seize the first animal they meet with. The crocodile, however, except when pressed with hunger, or with a view of depositing its eggs, seldom leaves the water. Its usual method is to float along upon the surface, and seize whatever animals come within its reach; but, when this method fails, it then goes close to the bank. There it waits in patient expectation of some land animal that comes to drink; the dog, the bull, the tiger, or man himself. It seizes the victim with a spring, and goes at a bound much faster than such an unwieldy animal could be supposed to do; then, having secured the creature both with teeth and claws, it drags it into the water, instantly sinks with it to the bottom, and in this manner quickly drowns it. Sometimes it happens that the creature wounded by the crocodile makes its escape; in which case the latter pursues it with great celerity, and often takes it a second time. In these depredations, however, this terrible animal often seizes on another as formidable as itself and meets with desperate resistance. Combats often occur between the crocodile and the tiger. All tigers are continually oppressed by a parching thirst, that makes them frequent great rivers, whither they descend to drink. On these occasions they are seized by the crocodile, upon whom they instantly turn with the greatest agility, and force their claws into his eyes, while he plunges with his fierce antagonist into the river. There they continue to struggle, till at last the tiger is drowned. A negro, however, with no other weapon than a knife in his right hand, and his left arm wrapped round with a cow-hide, will often venture boldly to attack this animal in its own element. As soon as he approaches the crocodile, he presents his left arm, which the animal swallows, but as it sticks in his throat, the negro has time to give it several stabs below the chin, where it is easily vulnerable; and the water also getting in it at the mouth, which is held involuntarily open, the creature soon expires. The natives of Siam are particularly fond of the capture of crocodiles, which they take by throwing three or four strong nets across a river, at proper distances; so that if the animal breaks through the first it may be caught by one of the rest. When first taken it employs the tail, which is the grand instrument of strength, with great force; but, after many unsuccessful struggles, the animal's strength is at last exhausted.

M. Denon, speaking of the French army in Egypt, says that the soldiers and himself bathed in the Nile, and yet they were never once attacked by them, nor did they ever meet with a single crocodile at a distance from the water. Hence he inferred that they find in the river a sufficient quantity of easily procured food, which they digest slowly, being, like the lizard and serpent, cold blooded, and of an inactive stomach. 'Besides,' says the traveller, 'having in the Egyptian part of the Nile no enemies but each other and man, they would be truly formidable, if, covered as they are with an almost impenetrable defensive armour, they were skilful and alert in making use of those means which nature has given them for attack.' He farther adds, that they saw three crocodiles, one of which was nearly twenty-five feet in length; they were all asleep, so that they could approach them within about twenty yards, and had an opportunity of distinguishing them very accurately. He says, that in that position they resembled dismounted

cannon: he fired on one, the ball struck him and rebounded from his scales. He made a leap of ten feet, and dived into the river.

All crocodiles breed near fresh waters, though they are sometimes found in the sea. They produce their young by eggs, and for this purpose the female chooses a place by the side of the river, or some fresh water lake, to deposit her brood in. She always pitches upon an extensive sandy shore, where she may dig a hole without danger of detection from the ground being fresh turned up. The shore must be gentle and shelving to the water, for the greater convenience of her going and returning; and a convenient place must be found near the edge of the stream, that the young may have a shorter way to go. When all these requisites are adjusted, the animal is seen cautiously stealing up on shore to deposit her burden. The presence of a man, a beast, or even a bird, is sufficient to deter her at that time; and, if she perceives any creature looking on, she infallibly returns. If, however, nothing appears, she then goes to work, scratching up the sand with her fore-paws, and making a hole pretty deep in the shore. There she deposits from eighty to 100 eggs, of the size and form of a tennis-ball, covered with a tough white skin like parchment. She takes above an hour to perform this task; and then, covering up the place so artfully that it can scarcely be perceived, she goes back to return again the next day. Upon her return, with the same precaution as before, she lays about the same number of eggs; and the day following also a like number. Thus having deposited her whole quantity, and having covered them closely up in the sand, they are soon vivified by the heat of the sun; and at the end of thirty days the young ones begin to break open the shell. At this time the female is instinctively taught that her young ones want relief; and she goes upon land to scratch away the sand and set them free. Her brood quickly avail themselves of their liberty; a part run unguided to the water; another part ascend the back of the female, and are carried thither in greater safety. But the moment they arrive at the water, when the female has introduced her young to their natural element, the male becomes their formidable enemy, and devours as many of them as he can. The whole brood scatters into different parts at the bottom; by far the greatest number are destroyed, and the rest find safety in their agility or minuteness. The eggs of this animal are not only a delicious feast to the savage, but are eagerly sought after by every beast and bird of prey. The ichneumon was erected into a deity among the ancients, for its success in destroying the eggs of these monsters: at present the gallinazo, a species of vulture, is their most prevailing enemy. All along the banks of great rivers, for thousands of miles, the crocodile propagates in such numbers as would soon over-run the earth, were not the vulture appointed by providence to counteract its fecundity. Among the various animals that were produced to fight in the amphitheatre at Rome, the combat of the crocodile was one. Marcus Scaurus produced them living in his unrivalled exhibitions.

One of the greatest curiosities in the fossile world, which the late ages have produced, is the skeleton of a large crocodile, almost entire, found at a great depth under ground, bedded in stone. This was in the possession of Linkius, who wrote many pieces in natural history, and particularly an accurate description of this curious fossile. It was found in the side of a large mountain, in the midland part of Germany, and in a stratum of a black fossile stone, somewhat like our common slate, but of a coarser texture, the same with that in which the fossile fish of many parts of the world are found. This skeleton had the back and ribs very plain, and was of a much deeper black than the rest of the stone, as is also the case in the fossile fishes, which are preserved in this manner. The part of the stone where the head lay was not found, this being broken off just at the shoulders, but that irregularly, so that, in one place, a part of the back of the head was visible in its natural form. The two shoulder bones were very fair, and three of the feet were well preserved; the legs were of their natural shape and size, and the feet preserved, even to the extremities of the five toes of each.

L. Gangetica, or Gangetic crocodile. This animal has long, roundish, or sub-cylindric jaws: its tail on the upper side has two crests running into one. This species is found in the Ganges, where it is nearly equal in size to the common crocodile. In this the structure of the snout is very remarkable, it being nearly three times as long as the head. The eyes are extremely prominent, and it is said they are so constructed, that they may be raised above the water, when the rest of the body is under the surface, by which the animal is enabled to see its prey either on the surface of the water, or on the banks of rivers. In the general form and color of the body and limbs, this species resembles the common crocodile. In the British Museum is a specimen of this creature, measuring eighteen feet in length.

L. gecko has a cylindrical tail, concave ears, and a warty body. It is the Indian salamander of Bontius. 'This animal is very frequent in Cairo,' says Hasselquist, 'both in the houses and without them. Its poison is very singular, as it exhales from the lobuli of the toes. The animal seeks all places and things impregnated with sea-salt, and, passing over them several times, leaves this very noxious poison behind. In July, 1750, I saw two women and a girl at Cairo at the point of death, from eating cheese new salted, bought in the market, and on which this animal had dropt its poison. Once, at Cairo, I had an opportunity of observing how acrid the exhalations of the toes of this animal are, as it ran over the hand of a man who endeavoured to catch it; there immediately rose little pustules over all those parts the animal had touched; these were red, inflamed, and smarted a little, greatly resembling those occasioned by the stinging of nettles. It emits an odd sound, especially in the night, from its throat, not unlike that of a frog.'

L. iguana, or guana, has the top of the back and tail, and the gullet, strongly serrated, and is

sometimes found five feet long. It has small teeth, and bites hard. It inhabits the rocks of the Bahama Islands, and lurks in cliffs or hollow trees. It feeds entirely on vegetables; and the fat of the abdomen assumes the color of that which it has last eaten. It is slow of motion, and has a most disgusting look; yet it is esteemed a most delicate and wholesome food. It is not amphibious, yet on necessity will continue long under water; it swims by means of the tail, keeping its legs close to the body. Guanas are the support of the natives of the Bahama Islands, who go in their sloops from rock to rock in search of them. They are taken with dogs trained for the purpose; and, as soon as caught, their mouths are sewed up, to prevent them from biting. Some are carried alive for sale to Carolina; others salted and barrelled for home consumption.

L. palustris has a lanceolated tail, and four toes on the fore feet; and inhabits the stagnant waters of Europe. It has a slow and crawling pace. Pennant more than once found, under stones and old logs, some very minute lizards that had much the appearance of this kind: they were perfectly formed, and had not the least vestiges of fins; which circumstance, joined to their being found in a dry place remote from water, seems to indicate, that they had never been inhabitants of that element, as many of our lizards are in their first state. At that period they have a fin above and below their tail; that on the upper part extends along the back as far as the nead; but both drop off as soon as the animal takes to the land, being then no longer of any use. Ellis has remarked certain pennated fins at the gills of one very common in most of our stagnated waters, and which is frequently observed to take a bait like a fish.

L. salamandra, the salamander, has a short cylindrical tail, four toes on the fore feet, and a naked porous body. This animal has been said, even in the Philosophical Transactions, to live in the fire: but this is a mistake. It is found in the southern countries of Europe. The following account of this species is extracted from the count de la Cepede's Natural History of Serpents. Whilst the hardest bodies cannot resist the violence of fire, the world have endeavoured to make us believe that a small lizard can not only withstand the flames, but even extinguish them. As agreeable fables readily gain belief, every one has been eager to adopt that of a small animal so highly privileged, so superior to the most powerful agent in nature, and which could furnish so many objects o. comparison to poetry, so many emblems to love, and so many brilliant devices to valor. The ancients believed this property of the salamander; and wishing that its origin might be as surprising as its power, and, desirous of realising the fictions of the poets, they pretended that it owes its existence to the purest of elements, which cannot consume it, and called it the daughter of fire, giving it however a body of ice. The moderns have followed the ridiculous tales of the ancients; and some have gone so far as to think that the most violent fire could be extinguished by the land salamander. Quacks sold this small lizard, affirming that, when thrown into the greatest conflagration, it would check its progress. It was necessary that philosophers should prove by facts what reason might have demonstrated; but it was not till after the light of science was diffused abroad, that the world gave over believing in this wonderful property of the salamander. This lizard, which is found in so many countries of the ancient world, and even in very high latitudes, has been very little noticed, because it is seldom seen out of its hole, and because for a long time it has inspired much terror. Even Aristotle speaks of it as of an animal with which he was scarcely acquainted. One of the largest of this species, preserved in the late French king's cabinet, is seven inches five lines in length, from the end of the muzzle to the root of the tail, which is three inches eight lines. The skin does not appear to be covered with scales, but it is furnished with a number of excrescences like teats, containing many holes, several of which may be very plainly distinguished by the naked eye, and through which a kind of milk oozes, that generally spreads itself in such a manner as to form a transparent coat of varnish above the skin of this oviparous quadruped, naturally dry. The eyes are placed in the upper part of the head, which is a little flatted; their orbit projects into the interior part of the palate, and is there almost surrounded by a row of very small teeth, like those in the jaw bones: these teeth establish a near relation between lizards and fishes; many species of which have also several teeth placed in the bottom of the mouth. The color of this species is very dark: upon the belly it has a bluish cast, intermixed with pretty large irregular yellow spots, which extend over the whole body, and even to the feet and eye-lid; some of these spots are besprinkled with small black specks; and those which are upon the back often touch without interruption, and form two long yellow bands. The color must, however, be various; and some salamanders are found in the marshy forests of Germany, which are quite black above, and yellow below. To this variety we must refer the black salamander, found by Mr. Laurenti in the Alps, which he considered as a distinct species. The salamander has no ribs; neither have frogs, to which it has a great ressmblance in the general form of the anterior part of its body. When touched, it suddenly covers itself with that kind of coat of which we have spoken, and it can also very rapidly change its skin from a state of humidity to a state of dryness. The milk which issues from the small holes in its surface is very acrid; when put upon the tongue, one feels as it were a kind of scar at the part which it touched. This milk, which is considered as an excellent substance for taking off hair, has some resemblance to that which distils from the esula and euphorbium. When the salamander is crushed, or when it is only pressed, it exhales a peculiarly bad smell. Salamanders are fond of cold damp places, thick shades, tufted woods, high mountains, and the banks of streams that run through meadows: they sometimes retire in great numbers to hollow trees, hedges, and below old rotten stumps; and

they pass the winter, in places of high latitude, in a kind of burrows, where they are found joined and twisted together. The salamander being destitute of claws, having only four toes on each of the fore feet, and no advantage of conformation making up its deficiencies, its manner of living must be very different from that of other lizards. It walks very slowly; far from being able to climb trees with rapidity, it often appears to drag itself with great difficulty along the surface of the earth. It seldom goes far from its place of shelter; it passes its life under the earth, often at the bottom of old walls during summer; it dreads the heat of the sun, which would dry it; and it is only when rain is about to fall that it comes forth from its asylum, to bathe itself, and to imbibe an element to which it is analogous. Perhaps it finds then with greatest facility those insects upon which it feeds. It lives upon flies, beetles, snails, and earth worms; when it reposes, it rolls up its body in several folds like serpents. It can remain some time in the water without danger, and it casts a very thin pellicle of a greenish gray color. Salamanders have even been kept six months in water without food; care only being taken to change the water often. Every time a salamander is plunged into the water, it attempts to raise its nostrils above the surface as if to seek for air, which is a new proof of the need that all oviparous quadrupeds have to breathe during the time they are not in a state of torpor. The salamander has apparently no ears, and in this it resembles serpents. It has even been said that it does not hear, and on this account it has got the name of sourd in some provinces of France. This is very probable, as it has never been heard to utter any cry, and silence in general is coupled with deafness. Having then perhaps one sense less than other animals, and being deprived of the faculty of communicating its sensations to those of the same species, even by imperfect sounds, it must be reduced to a much inferior degree of instinct; it is therefore very stupid; and not bold, as has been reported: it does not brave danger, but it does not perceive it. Whatever gestures one makes to frighten it, it always advances without turning aside; however, as no animal is deprived of that sensation necessary for its preservation, it suddenly compresses its skin when tormented, and spurts forth upon those who attack it that corrosive milk which is under it. If beaten, it begins to rattle its tail; afterwards it becomes motionless, as if stunned by a kind of paralytic stroke; for we must not, with some naturalists, ascribe to an animal so devoid of instinct, so much art and cunning as to counterfeit death. In short, it is difficult to kill it; but when dipped in vinegar, or surrounded with salt reduced to powder, it expires in convulsions, as is the case with several other lizards and worms. The ancients, and even Pliny have affirmed, that the poison of the salamander is the most dangerous of all, and that it might even cause the destruction of whole nations. The moderns also for a long time believed the salamander to be very poisonous; but they have at length had recourse o observation, by which they ought to have begun. The famous Bacon wished naturalists would endeavour to ascertain the truth respecting the poison of the salamander. Gesner proved by experiment, that it did not bite, whatever means were used to irritate it; and Wurfbainus showed that it might safely be touched, and that one might without danger drink the water of those wells which it inhabited. M. de Maupertuis studied also the nature of this lizard. In making researches to discover what might be its pretended poison, he demonstrated experimentally, that fire acts upon the salamander in the same manner as upon all other animals. He remarked, that it was scarcely upon the fire, when it appeared to be covered with the drops of its milk, which, rarefied by the heat, issued through all the pores of the skin, but in greater quantity from the head and dugs, and that it immediately became hard. It is needless to say, that this milk is not sufficiently abundant to extinguish even the smallest fire. M. de Maupertuis, in the course of his experiments, in vain irritated several salamanders; none of them ever opened their mouths; he was obliged to open them by force. As the teeth of this lizard are very small, it was very difficult to find an animal with a skin sufficiently fine to be penetrated by them: he tried without success to force them into the flesh of a chicken stripped of its feathers; he in vain pressed them against the skin: they were displaced, but they could not enter. He, however, made a salamander bite the thigh of a chicken, after he had taken off a small part of the skin. He made salamanders newly caught bite also the tongue and lips of a dog, as well as the tongue of a turkey; but none of these animals received the least injury. M. de Maupertuis afterwards made a dog and a turkey swallow salamanders whole, or cut into pieces; and yet neither of them appeared to be sensible of the least uneasiness.—Mr. Laurenti since made experiments with the same view: he forced gray lizards to swallow the milk proceeding from the salamander, and they died very suddenly. The milk, therefore, of the salamander, taken internally, may hurt, and even be fatal to certain animals, especially those which are small; but, it does not appear to be hurtful to large animals. It was long believed that the salamander was of one sex; and that each individual had the power of engendering its like, as several species of worms. This is not the most absurd fable which has been imagined with respect to the salamander; but, if the manner in which they come into the world is not so marvellous as has been written, it is remarkable in this, that it differs from that in which most other lizards are brought forth, as it is analogous to that in which the chalcide and the seps, as well as vipers and several kinds of serpents, are produced. On this account the salamander merits the attention of naturalists much more than on account of the false and brilliant reputation it has so long enjoyed. M. de Maupertuis, having opened some salamanders, found eggs in them, and at the same time some young perfectly formed; the eggs were divided into two long bunches like grapes, and the young were enclosed in two transparent bags; they were equally well formed as the old

ones, and much more active. The salamander, therefore, brings forth young from an egg hatched within its belly, as the viper; and her fecundity is very great; naturalists have long said that she has forty or fifty at once; and M. de Maupertuis found forty-two young ones in the body of a female salamander, and fifty-four in another The young salamanders are generally black, almost without spots; and this color they preserve sometimes during their whole lives in certain countries, where they have been taken for a distinct species. Mr. Thunberg has given, in the Memoirs of the Academy of Sweden, the description of a lizard, which he calls the Japanese lizard, and which appears not to differ from our salamander but in the arrangement of its colors. This animal is almost black, with several whitish and irregular spots, both on the upper part of the body and below the paws; on the back there is a stripe of dirty white, which becomes narrow to the point of the tail. This whitish stripe is interspersed with very small specks, which form the distinguishing characteristic of our land salamander. We, therefore, may consider this Japanese lizard as a variety of our land salamander, modified a little by the climate of Japan. It is found in Niphon, the largest island of that empire, inhabiting mountains and rocky places.

LACERTA, the lizard, in astronomy, a constellation of the northern hemisphere. See ASTRONOMY.

LACHES (from Fr. lascher, to slacken, or lasche, idle), in English law, signifies slackness or negligence, as it appears, in Littleton, where laches of entry is a neglect of the heir to enter. It seems to be an old English word for lack.

LACHESIS, in mythology (from λαχειν, to measure out by lot), one of the Fates. She presided over futurity, and was represented as spinning the thread of life; or, according to others, holding the spindle. She is painted covered with a garment variegated with stars, and holding spindles in her hand.

LACHISH, in ancient geography, a city south of the tribe of Judah. Eusebius and St. Jerome tell us that, in their time, there was a village called Lachish, seven miles south of Eleutheropolis. Sennacherib besieged Lachish, but did not take it. Thence he sent Rabshakeh against Jerusalem. Here king Amaziah was slain by his rebel subjects.

LACHNEA, in botany, a genus of the monogynia order and octandria class of plants; natural order thirty-first, veprecula: CAL. none: COR. quadrifid, with the limb unequal: SEED one, a little resembling a berry. Species five, all Cape plants.

LACH'RYMAL, *adj.*
LACH'RYMARY, *adj.*
LACHRYMA'TION, *n. s.*
LACH'RYMATORY.
Fr. *lachrymal;* Lat. *lachryma.* Producing or containing tears: the act of weeping. For lachrymatory, see below.

It is of such an exquisite sense, that, upon any touch, the tears might be squeezed from the *lachrymal* glands, to wash and clean it,

Cheyne's Philosophical Principles.

How many dresses are there for each particular deity! what a variety of shapes in the ancient urns, lamps, and *lachrymary* vessels! *Addison.*

LACHRYMATORIES, in antiquity, small glass or earthen phials, with a long neck, found in ancient sepulchres. Many antiquaries have supposed that these vessels served to collect the tears of the weeping friends, or of persons hired for that purpose. This belief was grounded on the appearance of the opening of those phials, which is generally furnished with a round concave part well adapted for embracing the convexity of the eye-ball. On some lachrymatories are even found impressions of an eye, and sometimes of a pair of eyes. But here, as in many other cases, the eye appears to be merely emblematical:—The opinion of tears being preserved in those vessels is indeed unsupported by any ancient custom with which we are acquainted, or by any well interpreted passage in ancient authors. It was first broached by Chiflet; it soon spread over Europe, and was, in spite of its improbability, adopted and supported by Kirchman, Kipping, and many other antiquaries. At last it was combated by Schoepflin and Paciaudi; at present it appears to be agreed that the lachrymatories never contained any thing but balms destined to moisten the funeral pile or the ashes of the dead. There is in the Capitol a bas relief which is much in favor of this idea: on this marble, which represents the funeral rites at the death of Meleager, a woman approaches the pile, holding in one hand a large-bellied vessel, and in the other a long slender phial with elongated neck and bottom, and in every respect similar to several earthen lachrymatories preserved in collections. This woman is in the act of pouring out of the large into the small vessel what may be supposed to be balms or odoriferous oil for the purpose of perfuming the funeral pile of Meleager. Many specimens of them are preserved in the cabinets of the curious, particularly in the British Museum.

LACHSA, or Hajar, a province of Arabia Felix, bounded on the north by Arabia Deserta, and extending along the whole south-west coast of the Persian Gulf. Its camels and asses are much valued, and some thousands annually sold into Syria. It has also a pearl-fishery and some foreign trade. The interior is fertile in rice, dates, and cotton, where it is capable of cultivation: but a large portion is sand.

The sheik, formerly subject to Turkey, is independent and very powerful. The piracies committed on this coast some years since induced the British government (in 1809) to fit out an expedition against them from Bombay. The principal port (Ras-el-khima) was taken on this occasion by assault, and seventy vessels burnt.

LACINIUM, in ancient geography, a promontory of Bruttii, in Italy, the southern boundary of the Sinus Tarentinus and the Adriatic; all to the south of it being deemed the Ionian Sea. It was famous for a rich temple to Juno Lacinia, with a pillar of solid gold standing in it; which Hannibal intending to carry off was, according to Cicero, dissuaded by a dream. It is now called Capo delle Colonne, from the columns of Juno's temple still standing on the north-east coast of Calabria Ultra.

LACK, *v. a.*, *v. n.* & *n. s.* Saxon lecan, to lessen; Goth. and Swed. *lacka*; Belg. *laecken*. To want; be in need: want; need; failure: lackbrain, and lacklinen, he who is in need of these useful articles: lacklustre, wanting brightness.
LACK'BRAIN, *n. s.*
LACK'LINEN, *adj.*
LACK'LUSTRE.

Peradventure there shall *lack* five of the fifty righteous; wilt thou destroy all the city for *lack* of five? *Genesis* viii. 28.

A land wherein thou shalt eat bread without scarceness; thou shalt not *lack* any thing in it. *Deut.* viii. 9.

There was nothing *lacking* to them: David recovered all. 1 *Sam.* xxx. 19.

That which was *lacking* on your part, they have supplied. 1 *Cor.* xvi. 17.

The lions do *lack* and suffer hunger. *Common Prayer.*

No saphire of Inde, no rube riche of price,
There *lacked* then, nor emeraude so greene
Balis Turkis, ne thing to my devise
That may the castel makin to shene. *Chaucer.*

Wherefore cease of such cruelty,
And take me wholly in your grace,
Which *lacketh* will to change his place. *Wyatt.*

Every good and holy desire, though it *lack* the form, hath notwithstanding in itself the substance, and with him the force of prayer who regardeth the very moanings, groans, and sighs of the heart. *Hooker.*

He was not able to keep that place three days, for *lack* of victuals. *Knolles.*

Many that are not mad
Have sure more *lack* of reason. *Shakspeare.*

What a *lackbrain* is this! Our plot is as good a plot as ever was laid. *Id. Henry IV.*

You poor, base, rascally, cheating, *lacklinen* mate; away, you mouldy rogue, away. *Id.*

And then he drew a dial from his poke,
And, looking on it with *lacklustre* eye,
Says very wisely, it is ten o'clock. *Shakspeare.*

Intreat they may; authority they *lack*. *Daniel.*

The trenchant blade, Toledo trusty,
For want of fighting was grown rusty,
And eat into itself for *lack*
Of somebody to hew and hack. *Hudibras.*

And once so near me he alit
I could have smote, but *lacked* the strength. *Byron.*

A LACK OF RUPEES is 100,000 rupees; which, supposing them siccas, or standard, at 2*s*. 6*d*. each, amount to £12,500 sterling. See RUPEE.

LACKER, or LAC'QUER, *n. s.* & *v. a.* From LAC, which see. A kind of varnish: to varnish or cover with lacquer.

What shook the stage, and made the people stare?
Cato's long wig, flowered gown, and *lackered* chair. *Pope.*

In forming a true judgment of yourself then, you must entirely set aside the consideration of your estate and family,—your wit, beauty, genius, health, &c., which are all but the appendages or trappings of a man: a smooth and shining varnish, which may *lacker* over the basest metal. *Mason.*

Where it is desired to have the *lacquer* warmer or redder than this composition, the proportion of annotto must be increased. *Imison's Elements.*

LACKERS, or LACQUERS, are varnishes applied upon tin, brass, and other metals, to preserve them from tarnishing, and to improve their color. The basis of lackers is a solution of the resinous substance called seed-lac in spirit of wine. See LAC. The spirit ought to be very much dephlegmated, to dissolve much of the lac. For this purpose some authors direct dry potash to be thrown into the spirit. This alkali attracts the water, with which it forms a liquid that subsides distinctly from the spirit at the bottom of the vessel. From this liquid the spirit may be separated by decantation. The spirit is thus greatly dephlegmated, but becomes impregnated with part of the alkali, which depraves its color, and communicates a property to the lacker of imbibing moisture from the air. These inconveniences may be prevented by distilling the spirit; or, if the artist has not an opportunity of performing that process, he may cleanse the spirit in a great measure from the alkali by adding to it some calcined alum; the acid of which, uniting with the alkali remaining in the spirit, forms with it a vitriolated tartar, which, not being soluble in spirit of wine, falls to the bottom, together with the earth of the decomposed alum. To a pint of the dephlegmated and purified spirit about three ounces of powdered shell-lac are to be added; and the mixture to be digested during the same day with a moderate heat. The liquor ought then to be poured off, strained, and cleared by settling. This clear liquor is now fit to receive the required color from certain resinous coloring substances, the principal of which are gamboge and annotto; the former of which gives a yellow, and the latter an orange color. To give a golden color, two parts of gamboge are added to one of annotto; but these coloring substances may be separately dissolved in the tincture of lac, and the color required may be adjusted by mixing the two solutions in different proportions. When silver leaf or tin is to be lackered, a larger quantity of the coloring materials is requisite than when the lacker is intended to be laid on brass.

LAC'KEY, *n. s.*, *v. a.* & *v. n.* Goth. *lacka*, to hire; Dan. and Swed. *lacher*; Fr. *laquais*. A servant; a footboy or man: to attend upon in service, or personally; to act as a lackey or footman.

Oft have I servants seen on horses ride,
The free and noble *lacquey* by their side. *Sandys.*

They would shame to make me
Wait else at door; a fellow counsellor,
'Mong boys and grooms, and *lackeys!* *Shakspeare. Henry VIII.*

This common body,
Like to a vagabond flag upon the stream,
Goes to, and back, *lacqueying* the varying tide,
To rot itself with motion. *Id. Antony and Cleopatra.*

So dear to heaven is saintly chastity,
That, when a soul is found sincerely so,
A thousand liveried angels *lackey* her,
Driving far off each thing of sin and guilt. *Milton*

Though his youthful blood be fired with wine,
He's cautious to avoid the coach and six,
And on the *lackeys* will no quarrel fix. *Dryden's Juvenal*

Our Italian translator of the Æneis is a foot poet; he *lackeys* by the side of Virgil, but never mounts behind him. *Dryden.*

Lacqueys were never so saucy and pragmatical as they are now-a-days. *Addison. Spectator.*

Words are but *lackeys* to sense, and will dance attendance without wages or compulsion. *Swift.*

LACOMBE (James), a French historian born in Paris, in 1724. He published several useful abridgments of histories; but his best work is Histoire de Christine Reine de Suede: 12mo. 1762.

LACOMBE DE PREZEL (Honorius), brother to James, was born in Paris in 1725. He published, 1. Dictionnaire du Citoyen, 2 vols. 8vo. 1761: 2. Dictionnaire de Jurisprudence, 3 vols. 8vo. 1763: 3. Les Pensees de Pope, avec sa vie, 12mo. 1766: 4. Dictionnaire de Portraits et d'Anecdotes des Hommes Celebres, 2 vols. 8vo.

LACONIA, or LACONICA, a country in the south of Peloponnesus, having Argos and Arcadia on the north, Messenia on the west, the Mediterranean on the south, and the bay of Argos on the east. Its extent from north to south was about fifty miles. It was watered by the Eurotas. The capital was called Sparta, or Lacedæmon. See LACEDÆMON and SPARTA. The brevity with which the Laconians always expressed themselves became proverbial.

LACON'IC, or LACON'ICK, *adj.* LAC'ONISM, *n. s.* LACON'ICALLY, *adv.* } Fr. *laconique;* Lat *laconicus;* Gr. λακωνισμος, a short pithy speech, after the manner of the Lacedæmonians. Short; brief; sententious: laconism, a short concise speech or style of speaking or writing.

Alexander Nequam, a man of great learning, and desirous to enter into religion there, writ to the abbot *laconically.* *Camden's Remains.*

As the language of the face is universal, so it is very comprehensive: no *laconism* can reach it. It is the short hand of the mind, and crowds a great deal in a little room. *Collier of the Aspect.*

I grow *laconick* even beyond laconicism; for sometimes I return only yes, or no, to questionary or petitionary epistles of half a yard long. *Pope to Swift.*

LACTANTIUS FIRMIANUS (Lucius Cœlius), a celebrated author in the beginning of the fourth century. According to Baronius, he was an African; but others say he was born at Fermo in Ancona, whence he was called Firmianus. He studied rhetoric under Arnobius; and was afterwards a professor of that science in Africa and Nicomedia, where he was so admired that the emperor Constantine appointed him preceptor to his son Crispus Cæsar. His works are written in elegant Latin. The principal are, 1. De irâ Divinâ. 2. De Operibus Dei, in which he treats of creation and providence. 3. Divine Institutions, in seven books. This is his principal work, in which he defends the truth of Christianity, refutes the objections that had been raised against it, and with great strength attacks the illusions of paganism. His style is pure, clear, and natural, and his expressions noble and elegant, on which account he has been called the Cicero of the Christians There is also attributed to him a treatise De Morte Persecutorum; but several critics doubt its being written by Lactantius. The best edition of his works is that of Paris in 1748, 2 vols. 4to.

LACTARY, *adj.* & *n. s.* LACTA'TION, LAC'TEAL, *adj.* & *n. s.* LAC'TEOUS, *adj.* LACTESCENCE, *n. s.* LAC'TESCENT, *adj.* LACTIF'EROUS, *adj.* } Latin *lactareus,* relating to milk; *lactarium,* a milk house or place. Milky; juicy: lactary, a milk house, or dairy: lacteal, a vessel containing or conveying chyle: lacteous, milky or conveying chyle: lactescence, tendency to milkiness, in appearance or reality: lactescent, producing milk or milky juice: lactiferous, producing or conveying milk.

From *lactary,* or milky plants, which have a white and *lacteous* juice dispersed through every part, there arise flowers blue and yellow. *Browne's Vulgar Errours.*

Though we leave out the *lacteous* circle, yet are there more by four than Philo mentions. *Id.*

This *lactescence* does commonly ensue, when wine, being impregnated with gums, or other vegetable concretions that abound with sulphureous corpuscles, fair water is suddenly poured upon the solution. *Boyle on Colours.*

As the food passes, the chyle, which is the nutritive part, is separated from the excrementitious by the *lacteal* veins; and from thence conveyed into the blood. *Locke.*

He makes the breasts to be nothing but glandules, made up of an infinite number of little knots, each whereof hath its excretory vessel, or *lactiferous* duct. *Ray on the Creation.*

The mouths of the *lacteals* may permit aliment, acrimonious or not sufficiently attenuated, to enter in people of lax constitutions, whereas their sphincters will shut against them in such as have strong fibres. *Arbuthnot.*

Amongst the pot-herbs are some *lactescent* plants, as lettuce and endive, which contain a wholesome juice. *Id.*

The lungs are suitable for respiration, and the *lacteous* vessels for the reception of the chyle. *Bentley.*

LACTEALS. See ANATOMY.

LACTIC ACID, in chemistry (acidum lacticum), from Lat. *lac,* milk. By evaporating sour whey to one-eighth, filtering, precipitating with lime-water, and separating the lime by oxalic acid, Scheele obtained an aqueous solution of what he supposed to be a peculiar acid, which has accordingly been termed the lactic. To procure it separate, he evaporated the solution to the consistence of honey, poured on it alcohol, filtered this solution, and evaporated the alcohol. The residuum was an acid of a yellow color, incapable of being crystallised, attracting the humidity of the air, and forming deliquescent salts with the earths and alkalies.

Bouillon Lagrange afterward examined it more narrowly; and from a series of experiments concluded, that it consisted of acetic acid, muriate of potassa, a small portion of iron probably dissolved in the acetic acid, and an animal matter. This judgment of Lagrange was afterwards supported by the opinions of Fourcroy and Vauquelin. But Berzelius has since investigated its nature very fully, and has obtained, by means of long and repeated series of different experiments, a complete conviction that the lactic acid is a peculiar

acid, very distinct from all others. It has, when purified, a brown-yellow color, and a sharp sour taste, which is much weakened by diluting it with water. It is without smell in the cold, but emits, when heated, a sharp sour smell, not unlike that of sublimed oxalic acid. It cannot be made to crystallise, and does not exhibit the slightest appearance of a saline substance, but dries into a thick and smooth varnish, which slowly attracts moisture from the air. It is very easily soluble in alcohol. Heated in a gold spoon, over the flame of a candle, it first boils, and then its pungent acid smell becomes very manifest, but extremely distinct from that of the acetic acid; afterwards it is charred, and has an empyreumatic, but by no means an animal smell. A porous charcoal is left behind, which does not readily burn to ashes. When distilled, it gives an empyreumatic oil, water, empyreumatic vinegar, carbonic acid, and inflammable gases. With alkalies, earths, and metallic oxides, it affords peculiar salts: and these are distinguished by being soluble in alcohol, and in general by not having the least disposition to crystallise, but drying into a mass-like gum, which slowly becomes moist in the air.

Lactiferous, and Lactescent, are appellations given to plants abounding with a milky juice, as the sow-thistle, &c. It is applied to all those plants which abound with a thick-colored juice, without regarding whether it is white or not. Most lactiferous plants are poisonous, except those with compound flowers, which are generally innocent. Of the poisonous lactescent plants, the most remarkable are sumach, agaric, maple, burning thorny plant, cassada, celandine, puccoon, prickly poppy, and the plants of the natural order contortæ, as swallow-wort, apocynum, cynanchum, and cerbera. Among the lactescent plants with compound flowers that are innocent, may be mentioned dandelion, picris, hyoseris, wild lettuce, gum-succory, hawk-weed, bastard hawk-weed, hypochæris, goat's beard, and most species of lettuce.

LACTUCA, in botany, a genus of the polygamia æqualis order, and syngenesia class of plants: natural order forty-ninth, compositæ: receptacle naked: cal. imbricated, cylindrical, with a membranaceous margin: the pappus simple, stipated, or stalked. There are several species, most of which are of no use, and never cultivated but in botanic gardens for variety. Those commonly cultivated in the kitchen-garden for use, are, 1. The common or garden lettuce. 2. Cabbage lettuce. 3. Silesia lettuce. 4. Dutch brown lettuce. 5. Aleppo lettuce. 6. Imperial lettuce. 7. Green capuchin lettuce. 8. Versailles or upright white cos lettuce. 9. Black cos. 10. Red cos. 11. Red capuchin lettuce. 12. Roman lettuce. 13. Prince lettuce. 14. Royal lettuce. 15. Egyptian cos lettuce. The first sort is very common in gardens, and is sown for cutting very young, to mix with other salads in spring. The second is the same, only improved by culture. It may be sown in all seasons, but in the hot months requires shady borders. To have it in continuation, the first crop should be sown in February in an open situation; the others at three weeks distance; the later ones under covert, but not under the drippings of trees. The Silesia, imperial, royal, black, white, and upright cos lettuces, may be first sown in the end of February or beginning of March, on a warm light soil, and in an open situation; when they come up they must be thinned to fifteen inches distance every way, they will then require no further care than to be kept clear of weeds. The black cos, as it grows large, should have its leaves tied together to whiten the inner part. Succeeding crops of these should be sown in April, May, and June; and toward the end of August, for a winter crop, should be preserved under glasses, or in a bed arched with hoops and covered with mats. The most valuable of all the English lettuces are the white cos, or the Versailles, the Silesia, and the black cos. The brown Dutch and the green capuchin are very hardy, and may be sown late under walls, where they will stand the winter, and be valuable when no others are to be had. The red capuchin, Roman, and prince lettuces, are very early, and are sown for variety; as are also the Aleppo ones for their beauty. The several sorts of garden lettuces are very wholesome, emollient, cooling salads, easy of digestion, and somewhat laxative. Most writers suppose that they have a narcotic quality; and, indeed in many cases they contribute to procure rest, by abating heat, and relaxing the fibres.

L. virosa, the strong-scented wild lettuce, which is indigenous in Britain, and grows in some places in considerable abundance, differs very essentially in its qualities from the garden lettuce. It smells strongly of opium, and resembles it in some of its effects; and its narcotic power, like that of the poppy, resides in its milky juice. An extract from the expressed juice is recommended in small doses in dropsy. In dropsies of long standing, proceeding from visceral obstructions, it has been given to the extent of half an ounce a-day. It is said to agree with the stomach, to quench thirst, to be gently laxative, powerfully diuretic, and somewhat diaphoretic.

LACYDAS, or Lacydes, a Greek philosopher, born at Cyrene, who was the disciple of Arcesilaus, and his successor in the academy. He taught in a garden given him by Attalus, king of Pergamus; but, on that prince sending for him to court, he replied, 'That the pictures of kings should be viewed at a distance.' He had a goose which followed him every where by night as well as by day; and when she died he made a magnificent funeral for her! He died A. A. C. 212.

LAD, Sax. leode; Goth. *laud;* Teut. *laed*. A boy; youth; stripling; an unmarried man. The Swed. *ledig* signifies single; unmarried; as the corresponding word lass, in our language, is from the Sax. lesan; Teut. *lassen*, to loose.

For grief whereof the *lad* would after joy,
But pined away in anguish, and self-willed annoy.
Spenser.

We were
Two *lads*, that thought there was no more behind,
But such a day to-morrow as to-day,
And to be boy eternal. *Shakspeare. Winter's Tale.*

The shepherd *lad*,
Whose offspring on the throne of Judah sat
So many ages. *Milton.*

The poor *lad* who wants knowledge must set his invention on the rack, to say something where he knows nothing. *Locke.*

Too far from the ancient forms of teaching several good grammarians have departed, to the great detriment of such *lads* as have been removed to other schools. *Watts.*

Enough, enough my little *lad!*
Such tears become thine eye;
If I thy guileless bosom had,
Mine own would not be dry. *Byron.*

LAD'DER, Sax. hlaꝺꞃe; Teut. *leiter*, à *leaden* or *leiten*, to lead up.—Minsheu. Goth. *leid, led*, away.—Thomson. A set of steps framed together for climbing; any instrument for climbing or ascending.

Whose compost is rotten, and carried in time,
And spread as it should be, thrift's *ladder* may climb. *Tusser.*

I must climb her window,
The *ladder* made of cords. *Shakspeare.*

Northumberland, thou *ladder*, by the which
My cousin Bolingbroke ascends my throne. *Id.*

Lowliness is young ambition's *ladder*,
Whereto the climber upward turns his face. *Id.*

Your hearts make *ladders* of your eyes,
In show to climb to heaven, when your devotion
Walks upon crutches. *Massinger.*

Then took she help to her of a servant near about her husband, whom she knew to be of a hasty ambition; and such a one, who, wanting true sufficiency to raise him, would make a *ladder* of any mischief. *Sidney.*

Now streets grow thronged, and busy as by day,
Some run for buckets to the hallowed quire;
Some cut the pipes, and some the engines play,
And some, more bold, mount *ladders* to the fire. *Dryden.*

The worst of it is, our modern fortune-hunters are those who turn their heads that way, because they are good for nothing else. If a young fellow finds he can make nothing of Coke and Littleton, he provides himself with a *ladder* of ropes, and by that means very often enters upon the premises. *Hughes.*

Easy in words thy stile, in sense sublime;
'Tis like the *ladder* in the patriarch's dream,
Its foot on earth, its height above the skies. *Prior.*

I saw a stage erected about a foot and a half from the ground, capable of holding four of the inhabitants, with two or three *ladders* to mount it. *Gulliver's Travels.*

Endowed with all these accomplishments, we leave him in the full career of success, mounting fast towards the top of the *ladder* ecclesiastical, which he hath a fair probability to reach. *Swift.*

Hearken to the armour's clank!
Look down o'er each frowning warrior,
How he glares upon the barrier:
Look on each step of each *ladder*,
As the stripes that streak an adder. *Byron.*

LADDERS, SCALING, in the military art, are used in scaling, when a place is to be taken by surprise. They are made several ways. In England generally of flat staves, so that they may move about their pins, and shut like a parallel ruler, for convenience of carriage. The French make them of several pieces, so as to be joined together, and to be made of any necessary length: sometimes they are made with single ropes, knotted at proper distances, with iron hooks at each end; one to fasten them upon the wall above, and the other in the ground; and sometimes they are made with two ropes, and staves between them, to keep the ropes at a proper distance. When they are used in scaling walls, they ought to be rather too long than too short, and to be given in charge only to the stoutest of the detachment. The soldiers should carry them with the left arm passed through the second step, taking care to hold them upright close to their sides, and very short below to prevent any accident in leaping into the ditch. The first rank of each division, provided with ladders, should set out with the rest at the signal, marching resolutely with their firelocks slung, to jump into the ditch; when they arrive, they should apply their ladders against the parapet, observing to place them towards the salient angles rather than the middle of the curtain, because the enemy have less force there. The ladders must be placed within a foot of each other, without too much or too little slope, that they may not be overturned or broken by the weight of the soldiers mounting upon them. The ladders being applied, those who have carried them, and those who follow, should mount up, and rush upon the enemy sword in hand: if he who goes first happens to be overturned, the next should take care not to be thrown down by his comrade; but immediately mount himself, so as not to give the enemy time to load. As the soldiers who mount first may be easily tumbled over, and their fall may cause the attack to fail, their breasts should be protected by the fore parts of cuirasses; for, if they can penetrate, the rest may easily follow. The success of an escalade is infallible, if they mount the four sides at once, and shower a number of grenades amongst the enemy, especially when supported by some grenadiers and picquets, who share the enemy's fire.

The late ingenious general Sir William Congreve, of the royal artillery, very much improved upon the construction of these ladders. As the heights of different works vary, and the ladders when too long afford purchase to the besieged, he contrived a set of ladders having an iron staple at the lower part of each stem, so that if one, two, or three, should be found insufficient to reach the top of the work, another may with facility be joined to the lowest, and that be pushed up until a sufficient length can be obtained.

LADE, *n. s.* & *v. a.*, LA'DING, *n. s.*, LA'DLE, LA'DLE-FUL. } Saxon laꝺe, hlaꝺan, hlaꝺle; Teut. *leyde*, laden. See LOAD. To throw out a fluid; hence to freight, load, burden: lading is a weight or burden: ladle, a spoon or instrument for throwing out or conducting liquid.

And they *laded* their asses with corn, and departed thence. *Gen.* xlii. 26.

Every tre well fro his fellow grew,
With braunchis brode *ladin* with levis new,
That sprongin out agen the sonne shene,
Some very rede, and some a glad light grene. *Chaucer.*

Some stirred the molten ore with *ladles* great. *Spenser.*

He chides the sea that sunders him from them,
Saying, he'll *lade* it dry to have his way. *Shakspeare.*

The experiment which showeth the weights of several bodies in comparison with water, is of use in *lading* of ships, and shewing what burthen they will bear. *Bacon.*

Some we made prize, while others, burnt and rent,
With their rich *lading* to the bottom went.
Waller.

When the materials of glass have been kept long in fusion, the mixture casts up the superfluous salt, which the workmen take off with *ladles*. *Boyle.*

They never let blood; but say, if the pot boils too fast, there is no need of *lading* out any of the water, but only of taking away the fire; and so they allay all heats of the blood by abstinence, and cooling herbs. *Temple.*

The vessels, heavy *laden*, put to sea
With prosperous winds; a woman leads the way.
Dryden.

It happened to be foul weather, so that the mariners cast their whole *lading* over-board, to save themselves. *L'Estrange.*

Though the peripatetick doctrine does not satisfy, yet it is as easy to account for the difficulties he charges on it, as for those his own hypothesis is *laden* with. *Locke.*

If there be springs in the slate marl, there must be help to *lade* or pump it out. *Mortimer.*

The storm grows higher and higher, and threatens the utter loss of the ship: there is but one way to save it, which is, by throwing its rich *lading* overboard. *South.*

A *ladle* for our silver dish
Is what I want, is what I wish. *Prior.*

Why should he sink where nothing seemed to press?
His *lading* little, and his ballast less. *Swift.*

If a footman be going up with a dish of soup, let the cook with a *ladle-ful* dribble his livery all the way up stairs. *Id.*

Lade is the mouth of a river, and is derived from the Saxon laðe, which signifies a purging or discharging; there being a discharge of the waters into the sea, or into some great river. *Gibson's Camden.*

Melt them in an iron *ladle*, and pour them, when melted, into water lukewarm. *Imison's Elements.*

LADENBURG, a town of Germany, in the palatinate of the Rhine, seated on the Neckar, on the east bank of the Rhine, six miles east of Manheim, and forty south-east of Mentz. It belongs to the elector palatine. Long. 8° 42′ E., lat. 49° 27′ N.

LADOGA, the largest lake in Europe, is situated opposite the gulf of Finland, and is surrounded by the Russian governments of Petersburgh, Viburg, and Olonetz. Its length is about 130 miles, its breadth seventy-five, and its whole extent equal to 6200 square miles, or to about one-eighth part of England. It abounds in fish, particularly salmon. Its shores are flat: and the numerous shoals it contains, and the frequent storms by which it is agitated, so impede its navigation, that a canal has been cut along its southern shore. Ladoga receives several rivers, but the river Neva is its only outlet.

The LADRONE, or MARIAN ISLANDS, are a cluster of islands in the North Pacific Ocean, in about 145° to 148° long. E., and between 13° and 21° lat. N. They were first discovered by Magellan, who gave them the name of Ladrone Islands, or the Islands of Thieves, from the dishonest disposition of the inhabitants. Towards the latter end of the seventeenth century they obtained the name of the Mariana Islands, from the queen of Spain, who sent missionaries hither to propagate the Christian faith. They are situated north of the Carolines, and are fifteen or sixteen in number, extending through a space of about 450 miles from north to south. The principal islands are: Guam or St. John, the largest, Zarpane or Rota, Aguignan or St. Ann, Tinian, Saypan or St. Joseph, Anatachan or St. Joachim, Sarigan or St. Charles, Guguam or St. Philip, Amalagan or Conception Isle, Pagon or St. Ignatius, Agrigan or St. Xavier, Assonsong or Assumption Island, and Urac, a desert isle. The coasts are composed of a dark-colored rock, and their general aspect was, by the early navigators, represented as highly beautiful and picturesque, the mountains being clad with forests, and the soil exhibiting the utmost fertility. Later voyagers, however, have not confirmed this account: but they agree in representing the climate as very temperate for the latitude.

When these islands were discovered, the natives, it is said, were totally unacquainted with any country besides their own; and, having no account of their own origin, supposed that the author of their race was formed of a piece of the rock of Funa, one of their smallest islands. They had no animals, it is added, but one species of birds, resembling turtle doves, which they never killed, but only tamed them, and taught them to imitate articulate sounds. They were much astonished on seeing a horse which a Spanish captain left among them in 1673. But what is most incredible is, that they were utterly unacquainted with fire till Magellan, provoked by their repeated thefts, burned one of their villages. When they saw their wooden houses blazing, they thought that the fire was a beast which fed upon the wood.

The largest of these islands is GUAM, which see. Here Anson landed in 1742, when his crew were debilitated by disease, and they became much refreshed. The author of his Voyages has contributed, therefore, in no small degree to impress the public with a favorable opinion of the island and its inhabitants. Cotton and indigo trees abound in all the islands; and most of the fruits of the tropics: wild hogs, remarkably fierce when attacked, are also met with in considerable herds, particularly in the island of Saypan. The fish of the coasts have been represented as remarkably unwholesome. Mosquitoes and other annoying insects are numerous.

The islanders of the group are olive-colored, but not of such a deep dye as those of the Philippines; their stature is good, and their limbs well proportioned. Though their food consists entirely of fish, fruits, and roots, yet they are so fat, that to strangers they appear swelled. They often live to 100 years or more, yet retain the health and vigor of men of fifty. The men go quite naked, but the females are partially covered. They admire black teeth and white hair. Hence one of their principal occupations is to keep their teeth black by the help of herbs, and to whiten their hair by sprinkling upon it a certain water. The women have their hair very long; but the men generally shave i

close, except a single lock on the crown of the head, after the Japanese manner. Their language is agreeable to the ear, having a soft and easy pronunciation.

LADRONES is also the name of a small cluster of isles in the gulf of Sa, at the southern extremity of China. They are about ten in number, and, together with the Lema Islands, form a semicircular chain before the gulf. The Great Ladrone, or Tyman-Shan, is distinguished, as its name denotes, by an elevated domed summit that is seen ten leagues. The Ass's Ears, or Keam-Cheum-Mee, another of them, has its name from two remarkable peaks rising from the same base almost perpendicularly from the sea, and surrounded by rocky islets.

The inhabitants are acute and lively in their disposition, and very audacious thieves. The groupe is a nursery of pirates, who are very able seamen. They have vessels which would sail twenty miles in an hour. Sometimes they mount ten to twelve carriage-guns. Depredations are chiefly on the Chinese trading junks, the European vessels frequenting these seas being generally too strong for them. A Chinese squadron of war junks often cruises here; but every precaution seems taken to avoid a rencounter; and for this purpose the war-junks are said on their part to beat their gongs night and day.

The Ladrone pirates have sometimes carried their depredations to the mouth of the Canton River. In 1805 they had conquered the whole of Hainan, and the southern part of the island of Formosa. They seem not to have any regular form of government: and hostilities are frequent between the inhabitants of different islands and districts. Their religion consists in the belief of an evil spirit whom they endeavour to appease by various ceremonies.

LADVOCAT (John Baptist), an ingenious French lexicographer, who was a professor and librarian in the Sorbonne. He published, 1. Dictionnaire Geographique portatif, 8vo., under the fictitious name of Volgien, and pretended it to be a translation from the English. 2. Dictionnaire Historique portatif, 2 vols. 8vo. 3. A Hebrew Grammar, 8vo, 1744. He died in 1766.

LA'DY, *n. s.*
LA'DY-BIRD,
LA'DY-DAY,
LA'DY-FLY,
LA'DYLIKE, *adj.*
LA'DY-MANTLE *n. s.*
LA'DYSHIP,
LA'DY'S-SLIPPER,
LA'DY'S-SMOCK,

Sax. hlæfdig, from leof, high, or eminent, and dia, a female. A woman of rank or respectability; a title of the wives of knights, and all degrees above them: lady-bird, and lady-fly, are names of an insect: lady-day is the day of the annunciation of the Blessed Virgin: lady-mantle, lady's-slipper, and lady's-smock, are plants: ladylike, elegant; delicate; becoming a lady: ladyship, the title of a lady.

Ah, *Ladie*, sayd he, shame were to revoke
The forward footing for an hideous shade
Vertue gives herself light through darknesse for to wade. *Spenser. Faerie Queene.*

O foolish fairy's son, what fury mad
Hath thee incensed to haste thy doleful fate?
Were it not better I that *lady* had,
Than that thou hadst repented it too late? *Spenser.*

A *lady*
So fair, and fastened to an empery,
Would make the greatest king double. *Shakspeare.*

I am much afraid, my *lady*, his mother played false with a smith. *Id.*

I would thy husband were dead; I would make thee my lady.—I your *lady*, Sir John! alas, I should be a pitiful *lady*. *Shakspeare. Merry Wives of Windsor.*

When dazies pied, and violets blue,
And *lady's-smocks* all silver-white,
Do paint the meadows much bedight. *Shakspeare.*

Say, good Cæsar,
That I some *lady* trifles have reserved,
Immoment toys, things of such dignity
As we greet modern friends withal. *Id. Antony and Cleopatra.*

Of all these bounds, even from this line to this,
With shadowy forests, and with champaigns riched,
With plenteous rivers, and wide-skirted meads,
We make thee *lady*. *Id. King Lear.*

Madam, he sends your *ladyship* this ring. *Shakspeare.*

Before Homer's time this great *lady* was scarce heard of. *Raleigh.*

If they be nothing but mere statesmen,
Your *ladyship* shall observe their gravity,
And their reservedness, their many cautions,
Fitting their persons. *Ben Jonson's Catiline.*

Plutarch says, Telesilla, a noble *lady*, being dangerously sick, was advised to apply her mind to poetry. *Peacham.*

I am sorry my relation to so deserving a *lady* should be any occasion of her danger and affliction. *King Charles.*

In vaine shee wishth long Alchmæna's night,
Cursing the hasty dawning of the light;
And, with her cruell *ladie*-starre uprose,
She seeks her third roust on her silent toes. *Bp. Hall's Satires.*

See here a boy gathering lilies and *lady-smocks*, and there a girl cropping culverkeys and cowslips, all to make garlands. *Walton's Angler.*

May every *lady* an Evadne prove,
That shall divert me from Aspasia's love. *Waller.*

I the wronged pen to please,
Make it my humble thanks express
Unto your *ladyship* in these. *Id.*

The *ladies* will make a numerous party against him, for being false to love in forsaking Dido. *Dryden.*

Should I shun the dangers of the war,
With scorn the Trojans would reward my pains,
And their proud *ladies* with their sweeping trains. *Id.*

Her tender constitution did declare,
Too *lady-like* a long fatigue to bear. *Id.*
'Tis Galla; let her *ladyship* but peep. *Id. Juvenal.*

I hope I may speak of women without offence to the *ladies*. *Guardian.*

Fly *lady-bird*, north, south, or east or west,
Fly where the man is found that I love best. *Gay.*
This *lady-fly* I take from off the grass,
Whose spotted back might scarlet red surpass. *Id.*

We find on medals the representations of *ladies*, that have given occasion to whole volumes on the account only of a face. *Addison on Ancient Medals.*

Her summoning handmaids bore
Their *lady* to her couch with gushing eyes. *Byron.*

LÆLIUS (Caius), surnamed Sapiens, a Roman consul and orator, who distinguished himself in Spain in the war against Viriathus. He is highly praised by Cicero, who gives an admirable description of the intimate friendship which subsisted between Lælius and Scipio Africanus the Younger. His eloquence, his modesty, and his abilities, acquired him a great reputation: and he is said to have assisted Terence in his comedies. He died about 126 B. C.

LÆNA, in antiquity, a gown worn by the Roman augurs, and peculiar to their office. With this gown they covered their heads when they made their observations on birds, &c. See AUGUR.

LAERTES, in fabulous history, king of Ithaca, the son of Arcesius and Chalcomedusa, and father of Ulysses. Apollodorus says he was one of the Argonauts.

LÆSTRYGONES, in fabulous history, the most ancient inhabitants of Sicily. Some suppose them to be the same as the people of Leontium, and to have been neighbours to the Cyclops. They fed on human flesh; and, when Ulysses came on their coasts, they sunk his ships, and devoured his companions. They were of a gigantic stature, according to Homer. A colony of them, as some suppose, passed over into Italy with Lamus at their head, where they built the town of Formiæ; whence the epithet of Læstrygonia is often used for that of Formiana.

LAET (John De), a writer in the seventeenth century, born at Antwerp. He was director of the West India Company, and acquired great skill in philology, history, and geography. He wrote, 1. A Description of the East Indies, in French; 2. Novus Orbis, Leyden, 1633, fol.; 3. De Hispaniæ Regibus et Opibus; 4. Respublica Belgarum; 5. Gallia; 6. Turcici imperii Status; 7. Persici imperii Status; and other works. He died in 1749.

LAETIA, in botany, a genus of the monogynia order, and polyandria class of plants: COR. pentapetalous, or none: CAL. pentaphyllous; the fruit unilocular and trigonal: SEEDS have a pulpy arillus or coat. There are four species, all natives of America. L. apetala, the gum wood, Dr. Wright informs us, is very common in the woodlands and copses of Jamaica, where it rises to a considerable height and thickness. The trunks are smooth and white; the leaves are three inches long, a little serrated, and somewhat hairy. The stamina are yellow, without petals: the fruit is as large as a plum; and, when ripe, opens and shows a number of small seeds in a reddish pulp. Pieces of the trunk or branches, suspended in the heat of the sun, discharge a clear turpentine or balsam, which concretes into a white resin, and which seems to be the same as gum sandarach.

LÆVINUS TORRENTINUS, called also Vander Bekin, or Torrentin, a native of Ghent, educated at the university of Louvain. He afterwards made the tour of Italy, where he obtained the friendship of the most illustrious personages of his age. On his return to the Low Countries he was made canon of Liege, and vicar-general to Ernest de Baviere, bishop of that see. Having executed a successful embassy to Philip II. of Spain, he was rewarded with the bishopric of Antwerp; whence he was translated to the metropolitan church of Mechlin, where he died in 1595. He founded a college of Jesuits at Louvain, to which he left his library, medals, and curiosities.

LÆVIUS, a Latin poet, who is supposed to have lived before the time of Cicero. He wrote a poem entitled Erotopagnia, i. e. love games. Aulus Gellius and Apuleius quote it. Lævius also composed a poem entitled The Centaurs, which Festus quotes under the title of Petrarum.

LA FERTE IMBAULT (M. Theresa Geoffrin, marchioness de) was the daughter of madame Geoffrin, and born at Paris in 1715. She married, in 1733, the marquis de la Ferte, great grandson of marshal Ferte. The marchioness de la Ferte drew up a series of extracts from the writings of the Pagan and Christian philosophers, for the instruction of the grandchildren of Louis XV.; and was grand mistress of the LANTREREBUS, which see. She distinguished herself by her able opposition to the philosophical French literati of the last century, with whom her mother had been connected. She died at Paris in 1791.

LAFITAU, a French Jesuit, who was a missionary in America. He wrote Mœurs des Sauvages Americains, comparées aux Mœurs des premiers Temps, Paris, 1723, 2 vols. 4to. He died about 1775.

LAFITE (Mary Elizabeth de), a French lady, born at Paris about 1750, and who died in London in 1794, published Reponses à Déméler, ou Essai d'une Manière d'exercer l'Attention, Lausanne, 1791, 12mo.; Entretiens, Drames, et Contes Moraux à l'Usage des Enfans, 2 vols. 12mo., dedicated to the queen, and several times reprinted. She also translated into French various works of Wieland, Gellert, and Lavater.

LAG, *v. n., adj.* & *n. s.* } M. Goth. *laggan;*
LAG'GER, *n. s.* } Sax. latigan. To stay behind; move tardily; loiter: as an adjective, coming behind; sluggish; slow; deficient; last: as a substantive, the fag end; the lowest class; he who comes last: lagger, an idler, a loiterer.

Behind her far away a dwarf did *lag*.
Faerie Queene.

I could be well content
To entertain the *lag* end of my life
With quiet hours. *Shakspeare. Henry IV.*

He, poor man, by your first order died,
And that a winged Mercury did bear;
Some tardy cripple had the countermand,
That came too *lag* to see him buried.
Id. Richard III.

The rest of your foes, O gods, the senators of Athens, together with the common *lag* of people, what is amiss in them, make suitable for destruction
Shakspeare.

The slowest footed who come *lag*, supply the show of a reward. *Carew's Survey.*

I shall not *lag* behind, nor err
The way, thou leading. *Milton.*

The knight himself did after ride,
Leading Crowdero by his side,
And towed him, if he *lagged* behind,
Like boat against the tide and wind. *Hudibras.*

We know your thoughts of us, that laymen are
Lag souls, and rubbish of remaining clay,
Which Heaven, grown weary of more perfect work,
Set upright with a little puff of breath,
And bid us pass for men. *Dryden's Don Sebastian.*

She passed, with fear and fury wild;
The nurse went *lagging* after with the child.
Dryden.

If he finds a fairy *lag* in light,
He drives the wretch before, and lashes into night.
Id.

The last, the *lag* of all the race. *Id. Virgil.*

What makes my ram the *lag* of all the flock? *Pope.*

The remnant of his days he safely past,
Nor found they *lagged* too slow, nor flowed too fast.
Prior.

She hourly pressed for something new;
Ideas came into her mind
So fast, his lessons *lagged* behind. *Swift.*

LAGAN, or LAGOM (from Sax. legan, to lie), in sea laws, shipwrecked goods, left on the sand, or ashore: or goods cast overboard by seamen in danger of shipwreck.

LAGEMAN (lagammannus), homo habens legem, or homo legalis seu legitimus, such as we call now good men of the jury. The word is often used in Domesday Book, and the Laws of Edward the Confessor, c. 38.

LAGEN, LAGENA, in antiquity, a measure of wine, containing six sextarii: whence some derive the word flagon. The lieutenant of the tower has the privilege to take unam lagenam vini ante malum et retro, of all wine ships that come upon the Thames; and Sir Peter Leicester, in his Antiquities of Cheshire, interprets lagena vini a bottle of wine.

LAGESTROEMIA, in botany, a genus of the monogynia order and polyandria class of plants: COR. hexapetalous, and curled: CAL. sexfid, and campanulated; there are many stamina, and of these the six exterior ones are thicker than the rest, and longer than the petals. Species five, natives of the East Indies.

LAGO MAGGIORA, a lake of Italy. See MAGGIORA.

LAGO NEGRO. See NEGRO.

LAGOON ISLAND, an island in the South Sea, of an oval form, with a lake in the middle, which occupies the greatest part of it. It abounds with trees. The natives are tall, copper-colored, and have long black hair. Their weapons are poles or spikes twice as long as themselves. Their habitations are under clumps of palm trees, which form very beautiful groves. This island was discovered by captain Cook in April 1769. Within a mile no bottom could be found with 130 fathoms of line, and no anchorage appeared to be near. Long. 139° 28′ W., lat. 18° 47′ S.

LAGOS, an ancient sea-port town of Portugal, in the province of Algarva, with a castle near the sea, and a harbour having good anchorage, but open to the south-east, and of difficult entrance. It contains about 4000 inhabitants, and the neighbourhood yields excellent wine: 134 miles south of Lisbon.

LAGOON, MIDDLE, NORTH, and SOUTH, three gulfs of the bay of Honduras, Yucatan, in about long 88° 59′ W., and lat. 17° 54′ to 18° 40′ N.

LA GRANGE (Joseph Louis), an eminent mathematician and philosopher, was born at Turin, November 25th 1736. He at first was more inclined to classical than to mathematical pursuits, but, having met with a memoir of Halley, he made such progress in the latter, at the age of sixteen, that he became professor at the Royal Artillery school. He selected from this period the most able of his pupils as his intimate friends, and thus originated the academy of Turin. In 1759 this institution published the first volume of its Transactions, wherein La Grange first applied the theory of recurring consequences, and the doctrine of chances, to the differential calculus. He soon after corrected Newton's calculations of the motions of fluids, and made such an impression in his favor on Euler, that he soon procured him to be chosen a member of the Berlin academy. He now visited Paris, where he published his famous Mecanique Analytique, and in 1766 was appointed director of the academy of Berlin in physical and mathematical science. On the death of Frederick II. he returned to Paris; and, though he at first lost his pension, when the new institutions were formed he was appointed professor of the Normal and then of the Polytechnic school. He now announced his Fonctions Analytiques; Leçons sur le calcul, and Traité de Relations numeriques des Equations; and undertook a new edition of his Mecanique Analytique. But he labored in these pursuits with an assiduity unsuitable to his health and age, and died in the midst of them on the 10th of April, 1813, in his seventy-seventh year. He condescended to be greatly distinguished by Napoleon, and was member of his Imperial Institute and Board of Longitude, senator, and count of the empire, grand officer of the Legion of Honor, and grand cross of the Imperial Order of Re-union.

LA GUERRE (Louis), a painter of history on ceilings, staircases, &c., being an imitator of the celebrated Verrio. His father being master of the menagerie, at Versailles, Louis XIV. was the godfather of our artist. He studied under Le Brun, and came to England at the age of twenty, when he was immediately employed by Verrio upon the work at St. Bartholomew's Hospital. He was subsequently engaged to paint The Labors of Hercules, at Hampton Court, and will long be known by the line of Pope,

Where sprawl the saints of Verrio and La Guerre.

He died of apoplexy in 1721.

LAGULLAS, CAPE, the most southerly point of Africa, east of the Cape of Good Hope. The name, says governor Phillips, in his voyage to Botany Bay, is corrupted from the original Portuguese Das Agulhas, i. e. Needle Cape, which is descriptive of its form.

LAGUNA, or San Christoval de Lagune, a considerable town in the island of Teneriffe, near a lake so named, on the declivity of a hill. It has several handsome buildings, and a fine square. Long. 16° 20′ W., lat. 28° 30′ N. See TENERIFFE.

LAGUNES OF VENICE are marshes or lakes in Italy, on which Venice is seated. They com-

municate with the sea, and are the security of the city. There are about sixty islands in them, which together make a bishop's see. Eurano is the most considerable, next to those on which Venice stands.

LAGUNAS, the name of four lakes of Peru; three in Venezuela; and three others in the province of Nicaragua.

LAGURUS, in botany, a genus of the digynia order and triandria class of plants; natural order fourth, gramina: CAL. bivalved, with a villous awn; exterior petal: COR. terminated by two awns, with a third on its back retorted. Species one only, L. ovatus, a native of Guernsey.

LAHDACK, a town and mountainous district on the northern frontier of Hindostan, situated between the thirty-fourth and thirty-seventh degrees of north latitude. It is bounded on the north and east by Thibet, and on the west by Cashmere, tributary to the lama of Thibet.

Lahdack, the capital, is a large trading town, having considerable commerce with Cashmere and China, the principal article of which is goats' hair. The inhabitants are of the religion of Boodh, but pay great respect to the lama of Thibet. Long. 78° 10' E., lat. 35° N.

LAHN, a large river of Germany, which flows through the duchy of Nassau, and Upper Hesse, passing Marburg, Giessen, Wetzlar, Nassau, &c. It joins the Rhine near Upper Lahnstein, and is navigable as far as Dietz.

LAHORE, a province of Hindostan, belonging to the Seiks, situated between the thirtieth and thirty-fourth degrees of north latitude, and about 320 miles in length, by 220 in breadth. This province is watered by numerous rivers, and under a good government would be very fertile; but owing to its various revolutions, and its being possessed by a number of petty chiefs, it is now one of the most barren and worst cultivated districts of India. It however produces all the eastern grains and fruits; sugar, tobacco, cotton, salt, &c.; and in its mountains are found the woods and fruits of Europe. It also produces fine cattle, and excellent horses. Its rivers are the Suttelege, the Beyah, Ravey, Chunab, Jhylum or Behut, and the Indus. As well as its Seik inhabitants, here are a great number of Mahommedans and Jauts, and other Hindoos. The north-west part belongs to the Afghauns, and Lahore and its neighbourhood to Rajah Runjeet Singh. The Seik government is a military aristocracy. They can bring an army of 100,000 cavalry, it is said, into the field. This province was the territory of Porus, who opposed Alexander. A. D. 977, it was governed by an independent rajah, named Jeipal. The chief towns are Lahore and Amretsir.

LAHORE, the capital of the province, is situated on the south-east bank of the Ravey, which is here at all times about 300 yards broad; but in the rainy season frequently overflows its banks. At an early period of Hindoo history this city was well known, and was taken by the Mahommedans early in the eleventh century. It formed their frontier garrison till about 1157, when we find sultan Khusero making it his residence. After being the capital of Hindostan, for about twenty-eight years, it was taken by Mohammed Ghory. This city was afterwards the residence of an Afghaun provincial government; but in 1520 was seized by the emperor Baber, and became the occasional residence of the Great Moguls. Akber founded the palace still existing, and the emperor Jehangire much improved the city. In 1609 it is described as 'a magnificent city, nearly ten miles in length, surrounded by a fortification having twelve gates. The walls and ceilings of the palace were covered with gold and silver; and the royal garden, called Shah al Imaret, was superior to any thing of the kind in Europe.' At present this city is daily falling into decay; the rich inhabitants emigrate to the modern Seik capital Amretsir. Still the city contains some handsome temples of the Mogul emperors, and manufactories for all kinds of warlike instruments, and a foundry of brass guns. Long. 73° 48' E., lat. 31° 50' N.

On the other side of the Ravey at Shah Durra, about two miles north of Lahore, is the celebrated mausoleum of Jehangire, occupying nearly 600 yards square. It is sixty-six paces in length on each side, and still in tolerably good condition. To the southward is to be seen the tomb of Noorjehan Begum, a building thirty-six paces square.

LAHOU, a considerable sea-port on the Ivory coast of Africa. It is of the greatest commercial importance of any town on this coast, and said to be a league in extent. Long. 5° 5 W., lat. 5° 20' N.

LAHR, a manufacturing town of Baden, next to Pforzheim, the most active town in that duchy. Its manufactures are of linens, woollens, cottons, tobacco, and leather, and have wholly arisen since the year 1780, when this was a mere village. It is eighteen miles S. S. E. of Strasburg, and twenty three north of Freyburg.

LA'IC, } Fr. *laique;* Lat. *laicus;*
LA'ICK, *n. s.* } Gr. λαος. The people, as
LA'ICAL, *adj.* } distinct from the clergy.
LA'ITY, *n. s.* }

In all ages the clerical will flatter as well as the *laical*. *Camden.*

To say that the *laity* should govern the church, when all ecclesiastical ministries are committed to the clergy, is to say, Scripture means not what it says. *Bishop Taylor.*

Some prophesied, some interpreted; and, therefore, it is an ignorant fancy to think that he must needs be a *laick*, whoever in the ages apostolical was not a preacher. *Id.*

The more usual cause of this deprivation is a mere *laity*, or want of holy orders. *Ayliffe's Parergon.*

An humble clergy is a very good one, and an humble *laity* too, since humility is a virtue that equally adorns every station of life. *Swift.*

LAINEZ (James), a Spaniard, companion of Ignatius Loyola, and the second general of the Jesuits. Having procured from the pope Paul IV. the perpetual generalship of the order, he induced the pontiff to ratify the following privileges:—1. The right of making all sorts of contracts (without the privity of the community) vested in the generals and their delegates. 2. That of giving authenticity to all comments and explanations of their constitutions. 3. The

power of making new, and altering the old constitutions; this opened the door to their bloody political tenets, which are not to be attributed to Loyola. 4. That of having prisons independent of the secular authority, in which they put to death refractory brethren. Lainez died in 1565, aged fifty-three.

LAING (Malcolm), a modern Scottish historian, was born at Stryorey in Orkney in 1762, and educated at Kirkwall. He was removed to the university of Edinburgh, with a view to the bar. On the death of Dr. Henry he completed the unfinished volume of his History of England. But his chief work is a History of Scotland, 4 vols. 8vo. He was brought into parliament by the Whigs in 1806. He edited also a new edition of Ossian of some repute, and died in 1819.

LAING (Alexander Gordon), was born at Edinburgh, in 1794, entered the army, served for several years in the West Indies, and, in 1820, was sent to Sierra Leone. In 1821—22, he was despatched on several missions from Sierra Leone, through the Timannee, Kooranko, and Soolima countries, with the view of forming commercial arrangements. In 1826, he undertook to penetrate to Timbuctoo, and started from Tripoli, crossing the desert by way of Ghadamir. On his journey he was attacked by a band of Tuaricks, who wounded him severely, and left him for dead. He, however, recovered, and reached Timbuctoo, August 18, where he remained upwards of a month. Being obliged to leave Timbuctoo by the sultan of Masina, into whose power the city had fallen, he hired a Moorish merchant to accompany and protect him on his route by Sego to the coast. Three days after leaving the city, he was murdered by the person who had undertaken to guard him.

LAIR, *n. s.* Fr. *lai*, a forest: Goth. *ligr*; Dan. *liger*. The habitation of a wild beast.

LAIRD, *n. s.* Sax. hlaford. The lord of a manor in Scotland.

LAIRESSE (Gerard), an eminent Flemish painter, born at Liege in 1640. He received his chief instructions from his father Reniere de Lairesse, though he was also a disciple of Bartolet He first settled at Utrecht, but, removing to Amsterdam, soon rose to affluence and reputation. His historical designs are distinguished by grandeur of composition: and the back grounds are rich in architecture. He had a singular method of working, playing on the violin, and dancing, alternately. He had three sons, two of whom were painters; and three brothers, Ernest, James, and John; Ernest and John painted animals, and James flowers. He also engraved in aquafortis; and wrote an excellent work on the art, which has been translated into English, and printed in London both in 4to. and 8vo. He died at Amsterdam, in 1711.

LAIS, a celebrated courtezan, daughter of Timandra, the mistress of Alcibiades, born at Hyccara in Sicily. She sold her favors first at Corinth for 10,000 drachms, and the vast number of her lovers of all ranks sufficiently prove her personal charms. The extravagant price of her embraces became proverbial:—

Non cuivis homini contingit adire Corinthum.

Demosthenes himself, the celebrated orator, is said to have visited Corinth for her sake; but, when he was informed of her terms, he departed, saying, he would not purchase repentance at so dear a price. She ridiculed the austerity of the philosophers who pretended to have gained a superiority over their passions, and yet were at her door as often as others. She was assassinated in Thessaly in the temple of Venus, about A. A. C. 350.

LAI-TCHEOU-FOU, a city of China of the first rank in the south coast of the gulf of Petche-lee in the province of Shatong. It is on a tongue of land terminating on one side in the gulf, and on the other in a lofty range of hills. Long. 114° 46′ E., lat. 37° 9′ N.

LAKE (Gerard), lord viscount Lake, a distinguished English general, was born in 1744, and at the age of fourteen obtained an ensigncy in the guards. During the seven years' war, he served in Germany, and in 1781 in America, under Cornwallis. After the taking of New York he returned home, and became aid-de-camp to the king. In Holland he commanded the first brigade of the guards, and was distinguished in several engagements in 1793 and 1794. In 1800 he became commander-in-chief of the British forces in India; and in September 1803 gained a victory over the Mahratta army and the French general Perron, which resulted in the capture of Delhi. He afterwards defeated Scindia and Holkar, and returned to England in September 1807, when he was created lord Lake, baron of Delhi and Laswarri. Soon after he was raised to the rank of viscount, and made governor of Plymouth. He died after a short illness, February 21st 1808.

LAKE, *n. s.* Sax. lac; Fr. *lac*; Lat. *lacus*; Ital. *lago*. A large inland piece of water. See below.

> Now nearer to the Stygian *lake* they draw,
> Whom from the shore the surly boatman saw,
> Observed their passage through the shady wood,
> And marked their near approaches to the flood.
> *Dryden.*
>
> He adds the running springs and standing *lakes*,
> And bounding banks for winding rivers makes. *Id.*
>
> A brow like a Midsummer *lake*,
> Transparent with the sun therein,
> When waves no murmur dare to make,
> And heaven beholds her face within.
> *Byron.*

A LAKE is a collection of waters contained in some cavity in an inland place, of a large extent, surrounded with land, and having no communication with the ocean. Lakes may be divided into four kinds. 1. Such as neither receive nor send forth rivers. 2. Such as emit rivers, without receiving any. 3. Such as receive rivers, without emitting any. And, 4, Such as both receive and send forth rivers. Of the first kind some are temporary and others perennial. Most of those that are temporary owe their origin to the rain, and the cavity of depression of the place in which they are lodged. There are also several of this kind formed by the inundations of the Nile and Niger; and in Russia, Finland, and Lapland, many lakes are

formed, partly by the rains, and partly by the melting of the ice and snow; but the perennial lakes, which neither receive nor emit rivers, are supposed to arise from subterraneous springs, by which they are constantly supplied. The second kind of lakes, which emit without receiving rivers, is very numerous. Many rivers flow from these as out of cisterns: where their springs being situated low within a hollow, first fill the cavity and make it a lake, which not being capacious enough to hold all the water, it overflows and forms a river. Of this kind are Lake Odium, at the head of the Tanais; lake Adac, whence a head water of the Tigris flows; Lake Ozero or White Lake, in Russia, the source of the Shaksna; and the great Lake Chaamay, whence flow four very large rivers, which water the countries of Siam, Pegu, &c., viz. the Menan, the Asa, the Caipoumo, and the Laquia, &c. The third species of lakes, which receive rivers but emit none, apparently owe their origin to those rivers, which, in their progress from their source, falling into some extensive cavity, are collected together, and form a lake of such dimensions as may lose as much by exhalation as it continually receives from these sources; of this kind is that great lake called the Caspian Sea; the lake Asphaltites, also called the Dead Sea; and several others. Of the fourth species, which both receive and emit rivers, are reckoned three kinds, as the quantity they emit is greater, equal, or less, than they receive. If it be greater, they must be supplied by springs at the bottom; if less, the surplus of the water is probably spent in exhalations; and if equal, their springs just supply as much water as runs off, and is evaporated by the sun. Lakes are also distinguished into fresh-water and salt-water lakes. Dr. Halley is of opinion that all great perennial lakes are saline, either in a greater or lesser degree; and that this saltness increases with time. Large lakes answer the most valuable purposes in the northern regions, the warm vapors that arise from them moderating the extreme cold; and in warmer climates, at a great distance from the sea, the exhalations raised from them by the sun cause the countries that border upon them to be refreshed with frequent showers, and consequently prevent their becoming barren deserts.

Lake of a Thousand Islands, is a lake of the St. Lawrence, formed after it leaves Lake Ontario, and so called from the number of islands with which it is interspersed. It is twenty-five miles in length, and about six broad.

Lake of the Hills a large lake of North-West America, in length about 200 miles, and from fifty to twenty-five miles broad.

Lake of the Woods, or Lake Du Bois, a lake of North America, seventy miles long, and forty wide. Its name is taken from the quantities of oak, fir, pine, &c., which grow on its banks; and it has a few small islands. Long. 95° 20′ W., lat. 54° 36′ N.

Lake, *n. s.* A color. See Lac.

I have been told that tungsten has been employed in France to precipitate the coloring matter from certain woods for the purpose of forming *lakes* for the limners' use. *Parkes's Chemical Catechism.*

Lake, a preparation of different substances into a kind of magistery for the use of painters: one of the finest and first invented of which was gum lacca, or laque, from which all the rest are called by the common name lakes. The principal lakes are carmine, Florence-lake, and lake from madder.

For the preparation of carmine, four ounces of finely pulverised cochineal are to be poured into four or five quarts of distilled water, that has been previously boiled in a pewter kettle, and boiled with it for the space of six minutes longer (some advise to add during the boiling two drachms of pulverised crystals of tartar) Eight scruples of Roman alum in powder are then to be added, and the whole kept upon the fire one minute longer. As soon as the gross powder has subsided to the bottom, and the decoction has become clear, the latter is to be carefully decanted into large cylindrical glasses, covered over, and kept undisturbed, till a fine powder is observed to have settled at the bottom. The superincumbent liquor is then to be poured off from this powder, and the powder gradually dried. From the decanted liquor, which is still much colored, the rest of the coloring matter may be separated by means of the solution of tin, when it yields a carmine but little inferior to the other.

For the preparation of Florentine lake, the sediment of cochineal, that remained in the kettle after the carmine has been taken, may be boiled with the requisite quantity of water, and the red liquor likewise, that remained after the preparation of the carmine, mixed with it, and the whole precipitated with the solution of tin. The red precipitate must be frequently edulcorated with water. Exclusively of this, two ounces of fresh cochineal, and one of crystals of tartar, are to be boiled with a sufficient quantity of water, poured off clear and precipitated with the solution of tin, and the precipitate washed. At the same time two pounds of alum are also to be dissolved in water, precipitated with a lixivium of potassa, and the white earth repeatedly washed with boiling water. Finally, both precipitates are to be mixed together in their liquid state, put upon a filter and dried. For the preparation of a cheaper sort, instead of cochineal, one pound of Brasil wood may be employed in the preceding manner.

For the following process for making a lake from madder, the Society of Arts voted Sir H. C. Englefield their gold medal. Enclose two ounces troy of the finest Dutch crop madder in a bag of fine and strong calico, large enough to hold three or four times as much. Put it into a large marble or porcelain mortar, and pour on it a pint of clear soft water, cold. Press the bag in every direction, and pound and rub it about with a pestle, as much as can be done without tearing it, and, when the water is loaded with color, pour it off. Repeat this process till the water comes off but slightly tinged, for which about five pints will be sufficient. Heat all the liquor in an earthen or silver vessel, till it is near boiling, and then pour it into a large basin, into which a troy ounce of alum dissolved in a pint of boiling soft water has been previously put. Stir the mixture together, and, while stir-

ring, pour in gently about an ounce and a half of a saturated solution of subcarbonate of potassa. Let it stand till cold to settle; pour off the clear yellow liquor; add to the precipitate a quart of boiling soft water, stirring it well; and, when cold, separate by filtration the lake, which should weigh half an ounce. If less alum be employed, the color will be somewhat deeper; with less than three-fourths of an ounce, the whole of the coloring matter will not unite with the alumina.

Almost all vegetable coloring matters may be precipitated into lakes, more or less beautiful, by means of alum or oxide of tin. For instance of turmeric a fine lake may be thus made:—Take a pound of turmeric root in fine powder, three pints of water, and an ounce of salt of tartar; put all into a glazed earthen vessel, and let them boil together over a clear gentle fire, till the water appears highly impregnated with the root, and will stain a paper to a beautiful yellow. Filter this liquor, and gradually add to it a strong solution of rock alum in water, till the yellow matter is all curdled together and precipitated; after this pour the whole into a filter of paper, and the water will run off and leave the yellow matter behind. It is to be washed many times with fresh water, till the water comes off insipid, and then is obtained the beautiful yellow called lake of turmeric, and used in painting. In this manner may a lake be made of any of the tinging substances that are of a strong texture, as madder, logwood, &c. A yellow lake for painting is made from broom flowers thus:—Make a lie of potassa and lime pretty strong; in this boil, at a gentle fire, fresh broom flowers till they are white, the lie having extracted all their color; then take out the flowers, and put the lie to boil in earthen vessels over the fire; add as much alum as the liquor will dissolve; then empty this lie into a vessel of clean water, and it will give a yellow color at the bottom. Let all settle, and decant off the clear liquor. Wash the powder found at the bottom with more water, till all the salts of the lie are washed off; then separate the yellow matter, and dry it in the shade. It proves a very valuable yellow. A beautiful lake may be prepared from Brasil wood, by boiling three pounds of it for an hour in a solution of three pounds of common salt in three gallons of water, and filtering the hot fluid through the paper; add to this a solution of five pounds of alum in three gallons of water. Dissolve three pounds of the best pearl ashes in a gallon and a half of water, and purify it by filtering; put this gradually to the other, till the whole of the color appear to be precipitated, and the fluid be left clear and colorless. But if any appearance of purple be seen, add a fresh quantity of the solution of alum by degrees, till a scarlet hue be produced. Then pursue the directions given in the first process with regard to the sediment. If half a pound of seed-lac be added to the solution of pearl-ashes, and dissolved in it before its purification by the filter, and two pounds of the wood, and a proportional quantity of the common salt and water be used in the colored solution, a lake will be produced that will stand well in oil or water, but is not so transparent in oil as without the seed-lac. The lake with Brasil wood may be also made by adding half an ounce of anotto to each pound of the wood; but the anotto must be dissolved in the solution of pearl-ashes. There is a kind of beautiful lake brought from China; but as it does not mix well with either water or oil, though it dissolves entirely in spirit of wine, it is of no use in our painting. This has been erroneously called safflower. Orange Lake is the tinging part of anotto precipitated together with the earth of alum. This pigment, which is of a bright orange color, and fit for varnish painting, and also for putting under crystal to imitate the vinegar garnet, may be prepared by boiling four ounces of the best anotto and one pound of pearl-ashes half an hour in a gallon of water, and straining the solution through paper. Mix gradually with this solution a pound and a half of alum in another gallon of water; desisting when ebullition ceases. Treat the sediment in the manner already directed for other kinds of lake, and dry it in square or round lozenges.

LAKTHO, or LACTHO, a province of the interior of India, beyond the Ganges, tributary to Cochin China. It is bounded on the south by Laos, on the north and east by Tungquin, and on the west by China. It has never been explored by any European.

Laktho is described by the Tungquinese as throughout mountainous, rocky, covered with jungle, and destitute of navigable rivers; the air, it is added, is pestilential to the constitutions of strangers, and the water extremely unwholesome. But the climate is cooler than Tungquin. Between Tungquin and Laktho travellers are obliged to traverse for three or four days a wild uninhabited tract, and in the interior of the latter country the population is dispersed in small and savage communities, whose dialects are unintelligible to each other. They are governed by hereditary chiefs, who are engaged in perpetual hostilities.

Salt fish, oil, and some silk stuffs for the chiefs, are imported from Tungquin; the exports are chiefly buffaloes and cotton. There is no coin current here except what is procured from Tungquin, the general traffic being carried on by barter, in which buffaloes are the medium of exchange. But in some parts shells, or cowries, are used in dealing for articles of little value. The Tungquinese speak of several extraordinary natural caverns, which are found here. One is said to be a mile across.

LALAND, or LAALAND, an island of Denmark, at the entrance of the Baltic, the third of the Danish islands in size, is eleven leagues long, and six to three broad, containing 240 square miles, and 40,000 inhabitants. It is so low, that considerable portions of its coasts are inundated during the elevations of the sea, and the climate is not considered healthy; it is, however, so fertile, that it is said to produce as much wheat, rye, barley, oats, peas, beans, lentils, hops, and flax, as all the other islands together. It has besides considerable forests of oaks, whose acorns feed vast herds of swine, and produces a great quantity of pearl herb. It is also much frequented by aquatic birds, whose feathers

afford a profitable export. It has five towns, viz. Naskow, the chief place, on the west, 1500 inhabitants; Saxekœbing on the north, Nysted on the south-east, Rodby on the south, and Mariabœ on a lake in the centre of the island.

LALANDE, a celebrated astronomer, born in France about the middle of the last century. Before the age of twenty-five he was admitted into almost all the learned academies of the world, and pensioned by the principal monarchs of the continent. He travelled through nearly all the states of Europe, and was every where received with demonstrations of the most enthusiastic respect, not only by the learned of every description, but by all who were most distinguished in rank or fortune. In Italy he was overwhelmed with attentions by Clement XIII., and pursued, from the remotest extremities of that country, by its most distinguished ornaments. He found his bust in most of the observatories of Germany. His reception in England was also of the most flattering kind. His works embrace more than sixty ponderous volumes, and correspond, by their learning and utility, to the high reputation which he enjoyed. Lalande, if not the most profound and original, was certainly one of the most learned astronomers France ever produced. But he was remarkable for egregious vanity, and for the broadest eccentricities of character. By a singular perversion of intellect, he became a professed atheist about the commencement of the revolution, pronounced in the year 1793, in the Pantheon, a discourse against the existence of a God, with the bonnet rouge upon his head, and displayed on this subject the most absolute insanity during the rest of his life. This monstrous infatuation betrayed him into the most whimsical acts of extravagance; and particularly into the publication of a Dictionary of Atheists, in which he enregistered not only many of 'the illustrious dead,' but a great number of his contemporaries, and among these some of the principal dignitaries of the empire. This circumstance led to the following occurrence in the Institute:—At an extraordinary sitting of all the classes convoked for the purpose, when Lalande was present, a letter from the emperor was announced, and read aloud, in which it declared that M. de Lalande had fallen into a state of dotage, and was forbidden to publish thereafter any thing under his own name. The old astronomer rose very solemnly, bowed low, and replied, that he would certainly obey the orders of his majesty. His atheistical absurdities deserved, no doubt, to be repressed, but, besides the singularity of this form of interdiction, there was an unnecessary degree of severity in it, as the end might have been attained without so public a humiliation. Lalande had the misfortune of living to see a maxim verified in his own regard, which has been exemplified in every age and country,—that some disciples may become superior to their masters. But he was, nevertheless, at all times among the luminaries of science, and to him astronomy was indebted for more substantial and unremitted services, than to any one of his contemporaries. He died, we believe, in Paris in 1810.

LALLY (Thomas Arthur, count), a native of Ireland, who attached himself to the house of Stuart, and entered into the French service. He distinguished himself at the battle of Fontenoy, and became appointed brigadier-general. In 1756 he was made governor of Pondicherry, which he was compelled to surrender to the English, when public clamor ran so high against him that he was beheaded by a most unjust sentence in 1766. His son, M. Lally de Tollendal, obtained the restoration of the estates of his father, and a reversal of the proceedings against him.

LALUZERNE (Cæsar William de), cardinal, was descended of an ancient Norman family, and born at Paris in 1738. He studied in the seminary of St. Magloire, and the house of Navarre, and obtained orders in 1762. In 1765 he was elected agent-general of the French clergy. In 1770 Louis XV. nominated him to the ducal episcopal see of Langres; and in 1773 he pronounced his majesty's funeral oration. In 1788 he became a deputy of the clergy to the states-general, and was one of the first who proposed the establishment in France of a representative system. He was president of the constituent assembly on the 31st of August 1789; but soon after emigrated to Switzerland, whence he removed to Italy. In 1802 he published a pastoral letter, announcing his submission to Napoleon's concordat; and, on the return of the Bourbons, was invited to re-assume his rank of duke, soon after which he was made a cardinal. He died at Paris in 1822. His works are numerous, and include Dissertation sur la liberté de l'homme. Sur l'Existence et les Attributs de Dieu. Instructions Pastorales sur le Schisme de France, 1808, 2 vols. 12mo. Dissertation sur les Eglises Catholiques-Protestantes, 1816, 2 vols. 12mo. Dissertation sur la Verité de la Religion, 2 vols. 12mo. Sur la Différence de la Constitution Française de la Constitution Anglaise, 1816, 8vo. Sur la Responsibilité des Ministres, 1816, 8vo.

LAMA, the sovereign pontiff, or rather god, of the Asiatic Tartary. The lama is not only adored by the inhabitants of the country, but also by the kings of Tartary, who send him rich presents, and go in pilgrimage to pay him adoration, calling him lama congiu, i. e. god, the everlasting father of heaven. He is never to be seen but in a secret place in his palace, amidst a great number of lamps, sitting cross-legged on a cushion, and adorned with gold and precious stones. They prostrate themselves before him at a distance, it not being lawful for any to kiss even his feet. He is called the great lama, or lama of lamas; that is, priest of priests. The orthodox opinion is, that when the grand lama seems to die, either of old age or infirmity, his soul in fact only quits a crazy habitation to look for another younger or better; and it is discovered again in the body of some child, by certain tokens known only to the lamas or priests, in which order he always appears. A particular account of the pompous ceremonies attending the inauguration of the infant lama in Thibet is given in the first volume of the Asiatic Researches.

LAMA, in zoology. See CAMELUS

LAMALMON, a mountain of Abyssinia, in the ridge called Samen, by some supposed to be the highest in that empire, situated on the road to Gondar. It stands on the north-west part of the mountains of Samen, and is higher than those of Tigre; but Mr. Bruce reckons it inferior to those on the south-east. The very highest part of the mountain, which from below appears to be sharp-pointed, is a large plain, full of springs, which are the sources of most of the rivers in this part of Abyssinia. The villages of this mountain are occupied by some of the most ancient Abyssinian tribes.

LAMARQUE, Maximilian, a French general, born in the year 1772, and entered the army as a private soldier, at an early age. His ability and spirit soon elevated him to the rank of captain of grenadiers, and when he reached the age of twenty years, he was adjutant-general. He was distinguished in the wars of the Republic. Austerlitz, Tyrol, Naples, Wigram, witnessed his brilliant actions, and Italy and Spain were also theatres of his celebrity. Upon the return of Napoleon from Elba, Lamarque was appointed to the command of Paris, and general-in-chief of the army of La Vendée. The Bourbons proscribed this brave officer, but the integrity of his character obtained for him a permission to return to his country in 1818, when he employed himself wholly in literary pursuits. He published an Essay on the Necessity of a Standing Army, wrote for some of the public journals, and was returned to the chamber of deputies in 1826. The death of this upright and brave man either excited the dormant embers of genuine republicanism in the Parisians, or was seized by the discontented as an advantageous moment to excite confusion, and in the tumultuous proceedings that occurred five hundred of the rioters are supposed to have been killed by the military. He died on the first day of June, 1832.

LAMARTILIERE, Count de, a French general of artillery, who lived through the Revolution, commenced his career as a sub-lieutenant in 1757. Having served with distinction in the seven years' war, he was employed in the island of Guadaloupe, and published several tracts on artillery, which procured him great reputation. He was made colonel in 1789, and contributed much to the success of various important operations in the revolutionary wars. In 1795 he was employed, with the rank of general of division, in the army of the Rhine and Moselle, and in January 1802 was called to the senate, and nominated a grand officer of the legion of honour. In 1814 Louis XVIII. made him a peer of France, and a member of the council for the improvement of the Polytechnic school. He died in 1819.

LAMB, *n. s.*
LAMB'KIN,
LAM'BATIVE, *adj.* & *n. s.*
LAMB'S'WOOL } Sax., Goth., and Swed. *lamb*; Dan. *lam*; Teut. and Belg. *lamm*. The young of a sheep: lambkin, is a little lamb: lambative, as an adjective, is taken by licking; as a substantive, a medicine of this sort: Shakspeare uses lamb's-wool for ale mixed with the pulp of roasted apples (Sax. lemp ol, soft ale).

Clean as young lambkins, or the goose's down,
And like the goldfinch in her Sunday gown. *Gay.*

The lamb thy riot dooms to bleed to-day,
Had he thy knowledge, would he skip and play? *Pope.*

In affections both of lungs and weazon, physicians make use of syrups, and lambative medicines. *Browne.*

I stitched up the wound, and let him blood in the arm, advising a lambative, to be taken as necessity should require. *Wiseman's Surgery.*

LAMB, in zoology. See OVIS. A male lamb of the first year is called a wedder hog, and the female a ewe hog; in the second year it is called a wedder, and the female a theave. The best season for weaning them is at sixteen or eighteen weeks old; and about Michaelmas the males should be separated from the females, and such males as are not designed for rams, gelded.

LAMB (Sir James Bland Burges, D. C. L.) bart., an ingenious English writer in general literature, was the son of George Burges, esq., an officer of the army, holding the situation of comptroller-general of the customs in Scotland. Our author was born at Gibraltar June 8th, 1752, and educated at Westminster school, and University College, Oxford. On quitting the University he made a tour of Europe; and on his return entered of Lincoln's Inn, by which society he was called to the bar in 1777. He had early in life contracted an acquaintance with Mr. Pitt, which induced him to embark in politics, and in 1787 he took his seat in the house of commons, as member for Helston in Cornwall. Two years after he was appointed to one of the under secretaryships in the foreign office, and in 1794 made joint commissioner of the privy seal. About this period he assisted in establishing the Sun newspaper. In 1795 he retired from office, and obtained a baronet's patent. In 1821 he obtained permission to assume the name of Lamb. His writings are, Considerations on the Law of Insolvency, 1783, 8vo., and a Letter to the earl of Effingham on the same subject; an Address to the Country Gentlemen of England on County Courts, 8vo., 1789; Letters on the Spanish Aggression at Nootka, published under the signature Verus, in 1790; the Birth and Triumph of Love, 4to., 1796: a poem written to illustrate a series of designs by the princess Elizabeth; an Epic Poem, in eighteen books, on the History and Achievements of Richard Cœur de Lion, 8vo. 2 vols. 1801; The Exodiad, a sacred epic, written in conjunction with Cumberland, 4to., 1807, 1808; Riches, a play, altered from Massinger's City Madam, 1810, reprinted afterwards with other dramatic works, in 2 vols. 8vo.; and The Dragon Knight, a romance. At the close of his life he turned his attention to the study of divinity, and published, in 1819, Reasons for a New Translation of the Bible, apparently suggested by that redoubtable critic Mr. John Bellamy. They largely quote his Literal Translation of the Old Testament; and are altogether unworthy Sir James Lamb's previous fame.

LAMBALLE (Maria Therese Louise de Savoie Carignan, princesse de), born at Turin, September 8th, 1749, was married to the duke

LAMBERT.

LAVATER.

St J. LEAKE.

LEO X.

J. LELAND.

LATIMER.

LAUD.

LEIBNITZ.

Sr P. LELY.

of Bouroon Penthievre, whom she soon lost by death, in the flower of her youth. She was superintendant of the household of Marie Antoinette, queen of France, with whom she became a great favorite; and mournfully remarkable for her attachment to that unhappy princess. On the flight of the royal family to Varennes, madame de Lamballe proceeded to Dieppe and reached England; but, hearing of the queen's imprisonment, she returned to France to share the prison of the Temple with her, where she continued till the commune of Paris ordered her removal to that of La Force. On the 3d of September, 1792, she was summoned to appear before her iniquitous judges; and, on being interrogated as to her connexion with the queen, answered, 'I have nothing to say. It is indifferent to me whether I die sooner or later: I am prepared for the worst.' Several voices demanded her life amidst faint expressions of pity, but violence prevailed, and, being stabbed on the spot with sabres, she was dragged through a heap of mangled bodies, and murdered with circumstances of disgusting cruelty. See ANTOINETTE.

LAMBAYEQUE, a town in the intendancy of Truxillo, Peru. It has an elegant stone church, and the river Lambayeque runs through it, and fertilises the environs. Some wine is made here, and coarse cottons. The road to Lima passes through Lambayeque. Population 8000, consisting of Spaniards, Mestizoes, and Indians. Ninety-five miles W. N. W. of Truxillo.

LAM'BENT, *adj.* Lat. *lambens.* Playing about; gliding over without harm.

LAMBETH, a parish of England, in the county of Surrey. It contains a population exceeding 80,000 souls, and was created a borough by the reform bill of 1832, with the privilege of sending two members to parliament. Here is the palace of the archbishop of Canterbury. See LONDON and SURREY.

LAMBERT, a Benedictine monk of Aschaffenburgh, in the eleventh century, who wrote several works, among which is a History of Germany from 1050 to 1077, which is esteemed.

LAMBERT (John), general of the parliamentary forces during the civil wars of the seventeenth century. He was of a good family, and for some time studied the law; but, upon the breaking out of the civil war, espoused the cause of the parliament, and soon rose to the rank of colonel. When Cromwell seemed inclined to assume the title of king, Lambert opposed it with great vigor, and even refused to take the oath required by the assembly and council, to be faithful to the government; on which the protector deprived him of his commission, but granted him a pension of £2000 a year. Lambert then retired to Wimbleton House, where he turned florist, but amidst these rural amusements he still nourished his ambition; for, when Richard Cromwell succeeded, he acted so effectually with Fleetwood, Desborough, Vane, Berry, &c., that the new protector was obliged to surrender his authority; and the members of the long parliament dismissed by Oliver, on the 20th of April, 1653, were restored to their seats. Lambert was now appointed one of the council of state, and colonel of a regiment of horse and foot. For this service the parliament presented him with £1000, but he distributed it among his officers. The parliament concluded that he intended to secure a party in the army: they therefore courteously invited him to London, resolving as soon as he should arrive to secure him. Apprehensive of this, Lambert delayed his return, refused to resign his commission when it was demanded of him, and, marching up to London with his army, dislodged the parliament by force in October 1659. He was then appointed, by a council of the officers, major-general of the army, and one of the new council for the management of public affairs; and sent to command the forces in the north. But general Monk marching from Scotland into England to support the parliament, against which Lambert had acted with violence; the latter, being deserted by his army, was obliged to submit, and was committed prisoner to the tower. Escaping thence, however, he soon appeared in arms, with four troops under his command, but was defeated and taken prisoner by colonel Ingoldsby. At the Restoration he was excepted out of the act of indemnity: being brought to his trial on the 4th of June, 1662, he behaved with great submission; was reprieved at the bar, and confined for life in the island of Guernsey.

LAMBERTI (Lewis), a learned modern Greek scholar, was born at Reggio in Lombardy in 1758, and studied jurisprudence at Modena He then became secretary to the papal nuncio at Bologna, went to Rome, and was introduced to the Borghese family, to whom he recommended himself by a work which he composed on the antiquities of the villa of the family. When the effects of the French revolution threatened Italy, Lamberti returned to Reggio and Milan; and in 1796 aided Buonaparte in establishing a national republic. He had afterwards a place in the executive directory of the Cisalpine republic. Lamberti was also a member of the Italian Institute, professor of the belles lettres at the college of Brera, and keeper of the public library. His most important work was an edition of Homer, in Greek, printed in folio by Bodoni at Parma. He went to Paris to present a copy of this production on vellum to Buonaparte, who made him a present of 12,000 francs. Among his original works are Italian poems, a volume of translations from the Greek poets, &c. He died in 1813.

LAMBTON (William), an English officer of distinguished science, was for more than twenty years a lieutenant-colonel in India, where he conducted a grand trigonometrical survey of that continent. He died January 20th, 1823, at Kingin Ghaut, fifty miles south of Nagpour, having enriched the Transactions of the Royal and Asiatic Societies with numerous and important papers.

LAMDOI'DAL, *n. s.* Gr. λαμδα and ειδος, form. Having the form of the letter lambda or Λ.

The course of the longitudinal sinus down through the middle of it, makes it advisable to trepan at the

lower port of the os parietale or at least upon the *lambdoidal* suture. *Sharp's Surgery.*

LAME, *adj.* & *v. a.* } Sax., Goth., Belg.,
LAME'LY, *adv.* } and Swed. lam Crip-
LAME'NESS, *n. s.* } pled; weak; hobbling; hence, imperfect; unsatisfactory; deficient: as a verb, to cripple; make lame or weak.

And Peter and Joon wenten up into the temple at the nynthe our of preying; and a man that was *lame* fro the wombe of moder was borun, and was leed ech dai at the ghate of the temple that is seid fair. *Wiclif. Acts* iii.

I never heard of such another encounter, which *lames* report to follow it, and undoes description to do it. *Shakspeare.*

Shrubs are formed into sundry shapes, by moulding them within, and cutting them without; but they are but *lame* things, being too small to keep figure. *Bacon.*

Who reproves the *lame*, must go upright. *Daniel.*

The son and heir
Affronted once a cock of noble kind,
And either *lamed* his legs, or struck him blind. *Dryden.*

Our authors write,
Whether in prose, or verse, 'tis all the same;
The prose is fustian, and the numbers *lame*. *Id.*

Let blindness, *lameness*, come; are legs and eyes
Of equal value to so great a prize? *Id. Juvenal.*

If the story move, or the actor help the *lameness* of it with his performance, either of these are sufficient to effect a present liking. *Id. Spanish Fryar.*

Look not ev'ry lineament to see;
Some will be cast in shades, and some will be
So *lamely* drawn, you scarcely know 'tis she. *Dryden.*

A greyhound, of a mouse colour, *lame* of one leg, belongs to a lady. *Arbuthnot and Pope.*

Those muscles become callous, and, having yielded to the extension, the patient makes shift to go upon 't, though *lamely*. *Wiseman's Surgery.*

Lameness kept me at home. *Digby to Pope.*

If you happen to let the child fall, and *lame* it, never confess. *Swift.*

Swift, who could neither fly nor hide,
Came sneaking to the chariot side;
And offered many a *lame* excuse,
He never meant the least abuse. *Id.*

Should a barbarous Indian, who had never seen a palace or a ship, view the separated and disjointed parts, he would be able to form but a very *lame* and dark idea of either of those excellent and useful inventions. *Watts.*

LAMECH, in scripture biography, the son of Methusael, of the race of Cain, the fifth in descent from him. He married two wives, Adah and Zillah, and is supposed to have introduced polygamy. To his wives he said, 'Hear my voice, ye wives of Lamech: for I have slain a man to my wounding, and a young man to my hurt: if Cain shall be avenged seven-fold, surely Lamech seventy and seven-fold.' Gen. iv. 24, 25. These words have perplexed biblical critics. Some interpretations have been given of this passage, which, as they are founded on mere fables, are not worthy of recital. Onkelos, who wrote the first Chaldee paraphrase on the Pentateuch, reads the words with an interrogation: 'Have I slain a man to my wounding, and a young man to my hurt?' and accordingly he paraphrases it thus: 'I have not killed a man, that I should bear the sin of it; nor have I destroyed a young man, that my offspring should be cut off for it.' Dr. Shuckford supposes that Lamech was endeavouring to reason his wives and family out of their fear of having the death of Abel revenged upon them, who were of the posterity of Cain. As if he had said, 'what have we done, that we should be afraid? We have not killed a man, nor offered any injury to our brethren of any other family; and if God would not allow Cain to be killed, who had murdered his brother, but threatened to take seven-fold vengeance on any that should kill him, doubtless they must expect much greater punishment, who should presume to kill any of us. Therefore we may surely look upon ourselves as safe under the protection of the law and of the providence of God.'

LAMEGO, a town of the province of Beira, Portugal, on the river Balsamao. It is a bishop's see, and celebrated as the place where the states-general of Portugal entered into a confederation in 1143, confirming the election of Alphonso I. Population 6600. Forty-six miles east of Oporto.

LAMELLA. Lat. A plate.

LAM'ELLATED, *adj.* Covered with films or plates.

The *lamellated* antennæ of some insects are surprisingly beautiful, when viewed through a microscope. *Derham.*

Talc has a plated texture, the *lamellæ* being easily separated from each other. *Parkes's Chemical Catechism.*

LAMENT', *v. n.*, *v. a.*, & [*n. s.* } Fr. *lamenter*;
LAM'ENTABLE, *adj.* } Ital. *lamentare*;
LAM'ENTABLY, *adv.* } Port. and Span.
LAMENTA'TION, *n. s.* } *lamentar*; Lat.
LAMEN'TER. } *lamentor*. To mourn; wail; grieve: to bemoan; to express sorrow or regret for: as a substantive, expressing sorrow; lamentation: lamentable, to be lamented; causing, or expressing sorrow; miserable: the other compounds follow these senses.

Jeremiah *lamented* for Josiah, and all the singing-men and women spake of Josiah in their lamentations. *2 Chron.*

Ye shall weep and *lament*, but the world shall rejoice. *John.*

His sons buried him, and all Israel made great *lamentation* for him. *1 Mac.* ii. 10.

The night has been unruly where we lay;
And chimneys were blown down: and, as they say,
Lamentings heard i' the' air, strange screams of death. *Shakspeare.*

As you are weary of this weight,
Rest you, while I *lament* king Henry's corse. *Id.*

To add to your *laments*,
Wherewith you now bedew king Henry's hearse,
I must inform you of a dismal fight. *Id.*

The *lamentable* change is from the best;
The worst returns to laughter. *Id.*

Our fortune on the sea is out of breath,
And sinks most *lamentably*. *Id. Antony and Cleopatra.*

Be't lawful that I invocate thy ghost,
To hear the *lamentations* of poor Anne. *Id. Richard III.*

Far less I now *lament* for one whole world
Of wicked sons destroyed, than I rejoice
For one man found so perfect and so just,
That God vouchsafes to raise another world
From him. *Milton.*

We, long ere our approaching, heard within
Noise, other than the sound of dance, or song!
Torment, and loud *lament*, and furious rage.
Milton.

Not until the earth was become no tolerable habitation but a theatre of *lamentable* tragedies, a seat of horrid iniquity, a sink of loathsome impurity! *Barrow.*

A *lamentable* tune is the sweetest musick to a woeful mind. *Sidney.*

The matter in itself *lamentable*, *lamentably* expressed by the old prince, greatly moved the two princes to compassion. *Id.*

This bishop, to make out the disparity between the heathens and them, flies to this *lamentable* refuge. *Stillingfleet.*

The loud *laments* arise
Of one distressed, and mastiff's mingled cries.
Dryden.

The pair of sages praise;
One pitied, one condemned the woful times,
One laughed at follies, one *lamented* crimes. *Id.*
The victors to their vessels bear the prize,
And hear behind loud groans, and *lamentable* cries.
Id.

Such a complaint good company must pity, whether they think the *lamenter* ill or not. *Spectator.*

It is a most *lamentable* thing, that there should be a dispute raised upon a man's saying another is what he plainly takes pains to be thought. *Steele.*

We gaze around;
We read their monuments, we sigh; and while
We sigh we sink; and are what we deplored:
Lamenting or *lamented* all our lot! *Young.*

But he, who through life's dreary way
Must pass when heaven is veiled in wrath,
Will long *lament* the vanished ray
That scattered gladness o'er his path.
Byron.

The good old gentleman was quite aghast,
And made a loud and pious *lamentation*;
Repented all his sins, and made a last
Irrevocable vow of reformation. *Id.*

Lamentations, a canonical book of the Old Testament, written by the prophet Jeremiah, on occasion of Josiah's death, according to archbishop Usher and some other learned men, who follow the opinion of Josephus and St. Jerome. But as this opinion does not agree with the subject of the book, the lamentation composed by Jeremiah on that occasion is probably lost. The first two chapters are employed in describing the calamities of the siege of Jerusalem: in the third the author deplores the persecutions he himself had suffered: the fourth treats of the desolation of the city and temple, and the misfortune of Zedekiah: the fifth is a prayer for the Jews in their dispersion and captivity: and at the close of all he speaks of the cruelty of the Edomites, who had insulted Jerusalem in her misery. All the chapters in this book, except the last, are in verse, and digested in the order of the alphabet; with this difference, that in the first, second, and fourth chapters, the first letter of every verse follows the order of the alphabet; but in the third the same initial letter is continued for three verses together. The style is lively, pathetic, and affecting. In this kind of writing the prophet Jeremiah was a great master, according to the character which Grotius gives of him, Mirus in affectibus concitandis.

LAMIA, in ancient geography, a town of Thessaly, in the district of Phthiotis, famous for the bellum Lamiacum, waged by the Greeks against the Macedonians after Alexander's death.

LAMIACUM Bellum, the Lamian war, happened after the death of Alexander, when the Greeks, particularly the Athenians, incited by their orators, resolved to free Greece from the Macedonian garrisons. Leosthenes was appointed commander of a numerous force, and marched against Antipater, who then presided over Macedonia. Antipater entered Thessaly at the head of 13,000 foot and 600 horse, and was beaten by the superior force of the confederates. Antipater after this blow fled to Lamia, where he resolved to maintain a siege with about 8000 or 9000 men that had escaped from the battle. Leosthenes, unable to take the city by storm, began to make a regular siege. His operations were disturbed by the frequent sallies of Antipater: and, being soon after killed by a stone, Antipater made his escape out of Lamia, and, with the assistance of Craterus's army from Asia, gave the Athenians battle near Cranon; who, though only 500 of their men were slain, became so dispirited, that they sued for peace. Antipater consented, provided they would raise taxes in the usual manner, receive a Macedonian garrison, defray the expenses of the war, and deliver into his hands Demosthenes and Hyperides, the orators whose eloquence had excited their countrymen against him. These disadvantageous terms were accepted by the Athenians, but Demosthenes escaped and poisoned himself. Hyperides was carried before Antipater, who ordered his tongue to be cut out, and afterwards had him put to death.

LAMIÆ, in pagan mythology, a sort of demons, who were supposed to devour children. Their form was human, resembling beautiful women. Horace mentions them in his Art of Poetry. They are also called Larvæ and Lemures.

LAM'INA, *n. s.* } Lat. Thin plate; one
Lam'inated, *adj.* } coat laid over another: plated: used of bodies whose contexture is in layers, or plates lying over one another.

From the apposition of different coloured gravel arises, for the most part, the *laminated* appearance of a stone. *Sharp.*

These rocks, however, instead of being disposed in *laminæ* or strata, form basaltic or angular columns, so closely attached to each other, that, though perfectly distinct from top to bottom, scarcely any thing can be introduced between them.
Parkes's Chemical Catechism.

LAMINITANUS Ager, in ancient geography, a territory of the Carpetani, in Hispania Citerior, now called Campo de Montiel.

LAMINIUM, a town of the Carpetani, in the above territory, seven miles from the head of the Anas, or Guadiana; now called Montiel, a citadel of New Castile.—Clusius.

LAMIUM, dead nettle, in botany; a genus of the gymnospermia order, and didynamia class of plants: natural order forty-second, verticillatæ: cor. upper lip entire, arched, the under lip bilobous; the throat with a bent or tooth on each side the margin. There are several species

L. album, white archangel, or dead-nettle, grows frequently under hedges, and in waste places. The flowers, which appear in April and May, have been particularly celebrated in uterine fluors and other female weaknesses; also in disorders of the lungs; but they appear to be of very weak virtue; and have now no place in our pharmacopœia.

2. L. purpureum, red archangel, is very common in corn fields and gardens. The young leaves of both species are boiled and eaten in some places like greens.

LAM'MAS. Sax. hlafmaſ. Of Goth. *lama*, contribution, says Mr. Thomson. But see the extract from Brand's Antiquities.

In 1578 was that famous *lammas* day, which buried the reputation of Don John of Austria.
Bacon.

Some suppose it is called *Lammass*-day, quasi Lamb-Masse, because on that day the tenants that held lands of the Cathedral Church in York, were bound by their tenure to bring a live lamb into the church at high mass on that day.
Brand's Antiquities.

LAMOIGNON (Christian Francis de), marquis of Baville, and president of the parliament of Paris, was born in 1644, and educated by his father. He studied rhetoric in the Jesuits' college, and afterwards made the tour of England and Holland. Literature, however, was only his amusement; the law was his profession, and the eloquence of the bar at Paris owes its reformation from bombast and affected erudition, to the plain and judicious pleadings of M. Lamoignon. He was appointed king's advocate-general in 1673; which he discharged until 1698, when the presidentship of the parliament was conferred on him. This post he held nine years, when he was allowed to resign in favor of his eldest son: he was chosen president of the royal academy of inscriptions in 1705. The only work he suffered to see the light was his Pleader, which is a monument of his learning and eloquence. He died in 1709.

LAMP, *n. s.*
LAMP'ASS,
LAMP'BLACK,
LAMP'ING. } Sax. leoma, flame; Fr. *lampe*; Lat. *lampas*; Gr. λαμπας. A light made of oil or spirits; the instrument of such artificial light: lampass, a fleshy excrescence in a horse's mouth, so called, according to Minsheu, because burned or seared away with a lamp: lamp-black, the soot of lamps: lamping, shining; brilliant.

Thy word is a *lamp* unto my feet, and a light unto my path.
Psalms.

Happy lines, on which with starry light
Those *lamping* eyes will deign sometimes to look.
Spenser.

Marry, sir, she's the kitchen wench, and all grease; and I know not what use to put her to, but to make a *lamp* of her, and run from her by her own light. I warrant her rags, and the tallow in them, will burn a Poland winter: if she lives till dooms-day, she'll burn a week longer than the whole world.
Shakspeare.

His horse possest with the glanders, troubled with the *lampass*, infected with the fashions.
Id.

O thievish night,
Why should'st thou, but for some felonious end,
In thy dark lanthorn thus close up the stars
That nature hung in heaven, and filled their *lamps*
With everlasting oil, to give due light
To the misled and lonely traveller?
Milton.

Thy gentle eyes send forth a quickening spirit,
And feed the dying *lamp* of life within me.
Rowe.

Cynthia, fair regent of the night,
O may thy silver *lamp* from heaven's high power,
Direct my footsteps in the midnight hour.
Gay.

In *lamp* furnaces I used spirit of wine instead of oil, and the same flame has melted foliated gold.
Boyle.

You with light gas the *lamps* nocturnal feed,
Which dance and glimmer o'er the marshy mead.
Darwin.

Lamp-black is the soot of oil, collected after it is formed by burning.
Imason's Elements.

To keep the *lamp* alive
With oil we fill the bowl;
'Tis water makes the willow thrive,
And grace that feeds the soul.
Cowper.

As, in far realms, where eastern kings are laid,
In pomp of death, beneath the cypress shade,
The perfumed *lamp* with unextinguished light
Flames through the vault, and cheers the gloom of night:—
So mighty Burke! in thy sepulchral urn,
To fancy's view, the *lamp* of truth shall burn;
Thither late times shall turn their reverent eyes,
Led by thy light, and by thy wisdom wise.
Canning.

LAMPS. The mode of producing artificial illumination by means of carbonated hydrogen gas, has already been pretty fully discussed under the head of GAS LIGHT; and we must in the present instance confine ourselves to the more simple arrangements employed in domestic economy, by which gas is generated and light produced by means of a portable apparatus.

In the common lamp there are three circumstances which particularly demand our attention, the oil, the wick, and the supply of air. It is required that the oil should be perfectly inflammable, without containing any fetid substance, mucilage, or other matter, to obstruct the channels of the wick. The office of the wick appears to be chiefly, if not solely, to convey the oil by capillary attraction to the place of combustion. As the oil is consumed and flies off, other oil succeeds, and in this way a continued current of oil and maintenance of the flame are effected. It is certain that the flame afforded by a wick of rush differs very considerably from that afforded by cotton; though perhaps this difference may, in a great measure, depend on the relative dimensions of each. And, if we may judge from the different odor that results from extinguishing a candle of each sort, there is some reason to suspect that the decomposition of the oil is not effected precisely in the same manner in each. We have also some obscure accounts of prepared wicks for lamps, which are stated to possess the property of facilitating the combustion of very impure oils, so that they shall burn for many hours without smoke or smell.

In lamps of the most common structure the wick should not be elevated too high above the surface of the oil, for, in that case, the capillary action by which the oil rises between the filaments of the cotton will not be able to raise it to so great a height. If the wick is too little elevated, above the surface of the oil, there will not be a sufficient quantity of the oil converted into

the gas, whose combustion constitutes the flame, and the flame will be too small.

The access of air is of the first importance in every process of combustion. When a lamp is fitted up with a very slender wick, the flame is small, and of a brilliant white color: if the wick be larger, the combustion is less perfect, and the flame is brown: a still larger wick not only exhibits a brown flame, but the lower internal part appears dark, and is occupied by a portion of volatilised matter, which does not become ignited until it has ascended towards the point. When the wick is either very large or very long, part of this matter escapes combustion, and shows itself in the form of coal or smoke. The different intensity of the ignition of flame, according to the greater or less supply of air, is remarkably seen by placing a lamp with a small wick beneath a shade of glass not perfectly closed below, and more or less covered above. While the current of air through the glass shade is perfectly free, the flame is white; but, in proportion as the aperture above is diminished, the flame becomes brown, long, wavering, and smoky; it instantly recovers its original whiteness, when the opening is again enlarged. The inconvenience of a thick wick has been long since observed, and attempts made to remove it; in some instances by substituting a number of small wicks instead of a larger; and in others by making the wick flat, instead of cylindrical. The most scientific improvement of this kind, though perhaps less simple than the ordinary purposes of life demand, is the well-known lamp of Argand. In this the wick forms a hollow cylinder or tube, which slides over another tube of metal, so as to afford an adjustment with regard to its length. When this wick is lighted, the flame itself has the figure of a thin tube, to the inner as well as the outer surface of which the air has access from below. And a cylindrical shade of glass serves to keep the flame steady, and in a certain degree to accelerate the current of air. In this very ingenious apparatus many experiments may be made with the greatest facility. The inconvenience of a long wick, which supplies more oil than the volume of flame is capable of burning, and which consequently emits smoke, is seen at once by raising the wick; and, on the other hand, the effect of a short wick, which affords a diminutive flame merely for want of a sufficient supply of combustible matter, is observable by the contrary process.

The best form of the Argand lamp is that contrived by Mr. Quarrill, under the name of the *sinumbra*, or shadowless lamp. It is represented at fig. 1, plate Lamps, from which it will be apparent that the oil reservoir is so shaped as to conform with the direction of right lines issuing from the brightest part of the flame, a portion of the light of which is thrown down by a small reflector upon the circular plate of ground glass which fills the lower part of the lamp, and which is surrounded by the oil vessel. The chimney of the lamp is constructed as usual, and the whole is surmounted by a ground-glass light-distributor, so formed as to do away all shadow from any portion of the lamp, and, at the same time, not to offend the eye by any want of elegance in shape or dimension.

Light-houses are now generally lighted with Argand lamps; which have hollow cylindrical wicks placed before reflecting mirrors. Several of these lamps are fixed on a frame, and protected from the weather by glass windows. The lamps of light-houses are fed with oil, and in some places with pit-coal gas, as in a light-house near Trieste.

In many of the light houses on the British coast the frame on which the lamps are fixed is made to revolve by means of clock-work, so that to a spectator, situated in the circle of which the light-house is the centre, the light appears at its brightest at the end of a stated period of time, which is generally one or two minutes. The revolving of the light enables seamen to distinguish the light-house from the light of lime-kilns or other fires upon the coast. This dictinction is of great importance, for shipwrecks have happened in consequence of mistaking the light of lime-kilns for the light of a light-house. The light is, in some light-houses, made of a red tinge, to distinguish it from some other light-house not far distant. The red color of the light is produced by placing windows of red glass before the lamps. Red is the only color that can be given to the light in this way. When stained glass of other colors is placed before the lamp, it is not found to produce a change in the color of light seen at a distance; the blue or green color of the glass becomes insensible when seen through a great body of air, which has itself a blue color.

The *flame* in a lamp never consumes the wick, till the wick is exposed to the air by the flame's falling downward; and from thence it may be inferred, that a way found out to keep the fuel, and consequently the flame, at the same height upon the wick, would make it last a long time. Many ways have been devised to arrive at this important desideratum, but it seems only possible to be done, in any degree of perfection, by reference to hydrostatic pressure. Thus, let a lamp be made two or three inches deep, with a pipe coming from the bottom almost as high as the top of the vessel; let it be filled so high with water, as to cover the whole of the pipe at the bottom, to the end that the oil may not get in at the pipe, and so be lost. Then let the oil be poured in, so as to fill the vessel almost to the surface, which must have a cover, pierced with as many holes as there are wicks designed. When the vessel is thus filled, and the wicks are lighted, if water falls in by drops at the pipes, it will always keep the oil at the same height, or very near; the weight of the water being to that of the oil as $20\frac{1}{4}$ to 19, which in two or three inches makes no great difference. If the water runs faster than the oil wastes, it will only run over at the top of the pipe, and what does not run over will come under the oil, and keep it at the same height.

In the lamp contrived by Mr. Kier, of Kentish Town, the oil is raised to the wick, and sustained by a column of a solution of salt in water. This liquid, being as we have already stated, of

a greater specific gravity, a column of it counterbalances a taller column of oil. The solution of salt is made of such a specific gravity, that it will support a column of oil four-thirds of its own height. This is nearly the specific gravity of the heaviest saline solution that is known to exist in any great body of natural water, namely, in the Dead Sea; the weight of the waters of this sea, of distilled water, and of oil, being in the relative proportions of 120, 100, 92. To convey an idea of this lamp, we may suppose a syphon with two upright branches, and the junction of the branches at the bottom. The shortest branch has a bulb at top. The longest branch has a bulb near its lower extremity. The shortest branch is filled with a solution of salt, whose upper surface is in the superior bulbs. The longer branch contains the oil, and in its upper extremity the wick is placed. In the lower bulb the surface of the oil rests upon the surface of the solution of salt.

The bulbs serve as reservoirs, prolonging the action of the machine; by means of the bulbs, and the greater specific gravity of the solution, it is effected, that the abstraction of a considerable quantity of oil by the combustion in the wick occasions but a small depression in the upper surface of the solution; the height of the sustaining column of solution will become shorter in proportion as the column of oil which it counterbalances is consumed; but this diminution of the height of the column of oil will be slow, and therefore the column of oil will for a considerable time be of sufficient length to reach the wick. Suppose an inverted syphon, of equal diameter throughout, the shorter leg of which contains a column of solution of salt, whose height is seventy-five, and this counterbalances a column of oil whose height is 100, in the longer leg; if now the column of oil in the longer leg be diminished in height by ten, the counterbalancing column of solution will diminish to 67·5, being 7·5 shorter than at first. But if the syphon, instead of being of equal diameter, has two dilatations or reservoirs, whose horizontal section is ten times the area of the tube of the syphon, one of the reservoirs being placed at the top of the short branch, so as to contain the upper surface of the solution of salt, and the other at the bottom of the long branch, so as to contain the surface where the oil rests upon the solution, then, if the same quantity of oil, as in the former example, is taken from the top of the longer leg of the syphon, the column of oil will only fall one-tenth of what it did in the undilated syphon of equal diameter, and the solution of salt will diminish one-tenth of what it did in the syphon of equal diameter.

The oil reservoir and the wick remain stationary, and do not descend as the oil is consumed. This descent takes place in two lamps now to be mentioned, because in these two lamps the oil reservoir swims in liquid that acts as a counterpoise.

In the lamp contrived by the Chevalier Edelcrantz, of Stockholm, the oil reservoir floats in mercury, and the column of oil is maintained at the requisite height by the counterpoise of a column of mercury; in proportion as the oil is consumed, the oil reservoir and the wick which is connected with it sink.

The general structure of this lamp may be understood by conceiving a flask, with a long narrow neck, and enlarged at the under part. The flask is heavy enough to swim, when it is placed in mercury, with part of its under part immersed. The bottom of the flask is open. The flask, being placed in mercury, is made to float with its neck perpendicular. Oil is poured in at the neck till the flask is full. Then the surface of the mercury at the bottom of the flask and within the flask will be depressed by the weight of the column of oil that rests upon it and the surface of the mercury on the outside of the bulb, or lower part of the flask, will stand higher than the surface of the mercury within the flask. The height which measures the difference of level of the two surfaces of mercury will be the height of a column of mercury of equal weight with the column of oil that is in the flask; and, as mercury is about $14\frac{5}{10}$ times the weight of oil, the difference of level of the two surfaces of mercury will be $\frac{10}{145}$ of the height of the oil in the flask. In proportion as oil is abstracted from the upper end of the tube, by the combustion in the wick, the height of the column of oil is thereby diminished, and the two surfaces of mercury will come nearer to each other, the flask sinking a little in the mercury. As the area of the horizontal section of the lower part of the flask is much greater than the area of the section of the neck, and as the specific gravities of mercury and oil are very different, it follows, that, to restore the equilibrium after the abstraction of a column of oil from the neck, the surface of the mercury within the lower part of the flask will rise by a much shorter column.

In the lamp invented by Mr. Barton, comptroller of his majesty's mint, a solution of salt in water is used as a counterpoise to the oil. The combination consists of a light flask, open at the bottom, floating in a solution of salt, so that, when oil is poured into the flask, the surface of the oil in the neck of the flask stands at a higher level than the surface of the saline solution in which the flask swims. The wick is at the upper end of the neck of the flask, and as the area of the horizontal section of the bulb or lower part of the flask is much greater, suppose twenty times greater, than the area of the section of the neck of the flask, it will happen, that, when a column of oil an inch high is abstracted from the neck of the flask, the height of the rise of the surface of the solution in the bulb or lower part of the flask will be only $\frac{1}{20}$ of an inch

At Paris, oil of rape-seed, and oil of poppy-seed, are clarified for the lamp by filtering through cotton, wool, and other processes. In the south of France and Italy the inferior kind of olive oil is used in lamps, and sometimes the oil of the plant called *arachis hypogæna*, or earth-nut. In Italy, lamp-oil has been pressed from the stones of the grape. In Piedmont, walnut-oil is used for lamps. On the eastern and southern coasts of the Mediterranean, and in China, the inferior kind of oil of sesamum. In tropical countries, cocoa-nut oil, which in the temperature of heat of Britain, is solid and white like

tallow. It is burnt in lamps made of the shell of the cocoa-nut, and of bamboo. Much of the oil used in China is obtained by expression from the seeds of the tree called by botanists *camellia oleifera*, which is extensively cultivated for that purpose, as is the shrub called *croton sebiferum*, for the solid oil or tallow that the Chinese press from its fruit. Essential oils, extracted from plants by distillation, are too volatile, and, in consequence of their volatility, are too easily inflamed.

The lamp commonly used in rooms at *Florence* consists of a round reservoir, with four beaks projecting from as many opposite points of its circumference; through the middle of the reservoir a vertical stalk passes, and on this stalk the lamp may be raised or slid down. The stalk is fixed in a foot that rests on the table. The whole is made of brass.

A lamp which affords a faint light is made of a waxed wick, an inch long, passed through the centre of a thin round piece of cork, and of a piece of card placed above the cork. Some oil is placed on the surface of water in a glass tumbler, and the cork, with its wick, is laid upon the surface of the oil. This lamp, called a *veilleuse*, is commonly used in Paris for burning in bedrooms during the night, as rush-lights are in London.

There is a very useful little lamp which is now much employed called the self-generating gas lamp. In this simple apparatus, a small cup is furnished with a tube capable of supplying as much oil as is required for combustion, and the capillary attraction, aided by a small addition of hydrostatic pressure, serves to raise the oil to the surface of the aperture. The best mode of lighting this lamp is to take a piece of small twine, and, having immersed one extremity in the oil, apply it when inflamed to the top of the tube. The moment that this is heated, sufficiently to decompose the oil, flame results. A section of the best form of this lamp is given at fig. 2.

The method of measuring the comparative intensities of light is one of the first requisites in an enquiry concerning the art of illumination. Two methods of considerable accuracy are described in the Traité d'Optique of Bouguer, of which an abridged account is given by Dr. Priestley in his Optics. The first of these two methods has been used by others since that time, and probably before, from its very obvious nature, but particularly count Rumford, who has given a description and drawings of an instrument called the photometer, in the Philosophical Transactions for 1794. The principle it is grounded upon is, that if two lights shine upon the same surface at equal obliquities, and an opaque body be interposed, the two shadows it will produce must differ in blackness or in intensity in the same degree. For the shadow formed by intercepting the greater light will be illuminated by the smaller light only, and reversely the other shadow will be illuminated by the greater light. That is to say, in short, the stronger light will be attended with the deeper shadow. But it is easy, by removing the greater light to a greater distance, to render the illumination it produces at the common surface, equal to that afforded by the less. Experiments of this kind may be conveniently made by fastening a sheet of white paper against the wall of a room. The two lights or candles, intended to be compared, must then be placed so that the ray of light from each shall fall with nearly the same angle of incidence upon the middle of the paper. In this situation, if a book or other object be held to intercept part of the light which would have fallen on the paper, the two shadows may be made to appear as in fig. 3, where A represents the surface illuminated by one of the lights only; B, the surface illuminated by the other light; C the perfect shadow from which both lights are excluded. It will easily be understood that the lights about D and E, near the angle F, will fall with equal incidences when the double shadow is made to occupy the middle of the paper: and, consequently, if one or both of the lights be removed directly towards or from the paper, as the appearances may require, until the two shadows at E and D have the same intensity, the quantities of light emitted by each will be as the squares of the distances from the paper.

By experiments of this kind many useful particulars may be shown. Thus, for example, the light of a candle, which is so exceedingly brilliant when first snuffed, is very speedily diminished to one-half, and is usually not more than one-fifth, or one-sixth before the uneasiness of the eye induces us to snuff it. Whence it follows, that, if candles could be made so as not to require snuffing, the average quantity of light afforded by the same quantity of combustible matter would be more than doubled. In the same way, likewise, since the cost and duration of candles, and the consumption of oil in lamps, are easily ascertainable, it may be shown, whether more or less of light is obtained at the same expense during a given time, by burning a number of small candles instead of one of greater thickness.

It is almost unnecessary to describe a thing so universally known as a candle. This article is formed of a consistent oil, which envelops a porous wick of fibrous vegetable matter. The cylindrical form and dimensions of the oil are given either by casting it in a mould, or by repeatedly dipping the wick into the fused ingredient. Upon comparing a candle with a lamp, two very remarkable particulars are immediately seen. In the first place, the tallow itself, which remains in the unfused state, affords a cup or cavity to hold that portion of melted tallow which is ready to flow into the lighted part of the wick. In the second place, the combustion, instead of being confined, as in the lamp, to a certain determinate portion of the fibrous matter, is carried, by a slow succession, through the whole length. Hence arises the greater necessity for frequent snuffing the candle; and hence also the station of the freezing point of the fat oil becomes of great consequence. For it has been shown that the brilliancy of the flame depends very much on the diameter of the wick being as small as possible; and this requisite will be most attainable in candles formed of a material that requires a higher degree of heat to fuse it. The wick of a tallow candle must be

made thicker in proportion to the greater fusibility of the material, which would otherwise melt the sides of the cup, and run over in streams. The flame will therefore be yellow, smoky, and obscure, except for a short time immediately after snuffing. Tallow melts at 92° of Fahrenheit's thermometer; spermaceti at 133°; the fatty matter formed of flesh after long immersion in water melts at 127°; the pela of the Chinese at 145°; bees' wax at 142°; and bleached wax at 155°. Two of these materials are well known in the fabrication of candles. Wax in particular does not afford so brilliant a flame as tallow; but, on account of its less fusibility, the wick can be made smaller; which not only affords the advantage of a clear perfect flame, but from its flexibility it is disposed to turn on one side, and come in contact with the external air, which completely burns the extremity of the wick to white ashes, and thus performs the office of snuffing. We see, therefore, that the important object to society of rendering tallow candles equal to those of wax, does not at all depend upon the combustibility of the respective materials, but upon a mechanical advantage in the cup, which is afforded by the inferior degree of fusibility in the wax; and that, to obtain this valuable object, one of the following effects must be produced: either the tallow must be burned in a lamp, to avoid the gradual progression of the flame along the wick; or some means must be devised to enable the candle to snuff itself, as the wax candle does; or, lastly, the tallow itself must be rendered less fusible by some chemical process.

A lamp for burning tallow has been contrived by Mr. Close. Its construction will be best understood by reference to fig. 4. A represents a cup made in the form of a cone; it contains the tallow, and is supported, with the point downwards, by the thumb-screw *i*, upon the piece of iron D, which is firmly fixed into the circular wood bottom E. The widest diameter of this cup is about two inches and a half, and the diameter of a small aperture in the point is rather less than one-eighth part of an inch. This cup must be made of iron, brass, or copper, and the joint on the side closed with hard solder. A circular plate of iron is made to fit the widest diameter, and firmly fixed therein by the sides of the cup being turned over it a little: near one side of this circular plate a circular hole less than one inch in diameter is made, and into it is fixed the ring *d*, which forms the mouth of the cup, and may be closed with a cork, &c.

a b represents a piece of wire which passes through a hole made in the circular piece, and through the aperture in the point of the cup. This wire is rather more than one-eighth part of an inch in diameter; it converges near the point, and exactly closes the same aperture when thrust down: it serves to regulate the descent of tallow into the cup B, according to the quantity consumed by the flame: and therefore, when it is required not quite to close the aperture, it is drawn up a little, and a small spring of brass, in the inside of the cup at C, presses against it, and holds it in the place. The spring passes through the circular plate, and is fixed on the outside by a small screw.

B represents a small cup, in which the tallow is burned: it is about one inch in diameter, and about half an inch in depth. Into the bottom of this cup is soldered the tube *f*, which is about two inches and a half long, and slides into the tube *g*, which is soldered into the bottom of the cup c.

e represents a piece of bent wire, which supports the wick of the lamp. The ends of this piece of wire are thrust into a piece of soft wood, fitted into the tube *f*. Another tube, represented by *h*, is soldered to one side of the cup B, above the brim: the use of this tube is to contain a quantity of clean wick, and to serve for a handle to lift the tube *f* out of the socket *g* when the lamp is to be lighted.

C represents a cup to receive any tallow that may chance to run over the sides of the cup B. It is rather more than one inch deep, and two inches in diameter.

Lastly, by the help of the thumb screws *i*, *i*, the height of the cups B, C, and A, and the distance between B and A, may be regulated at pleasure.

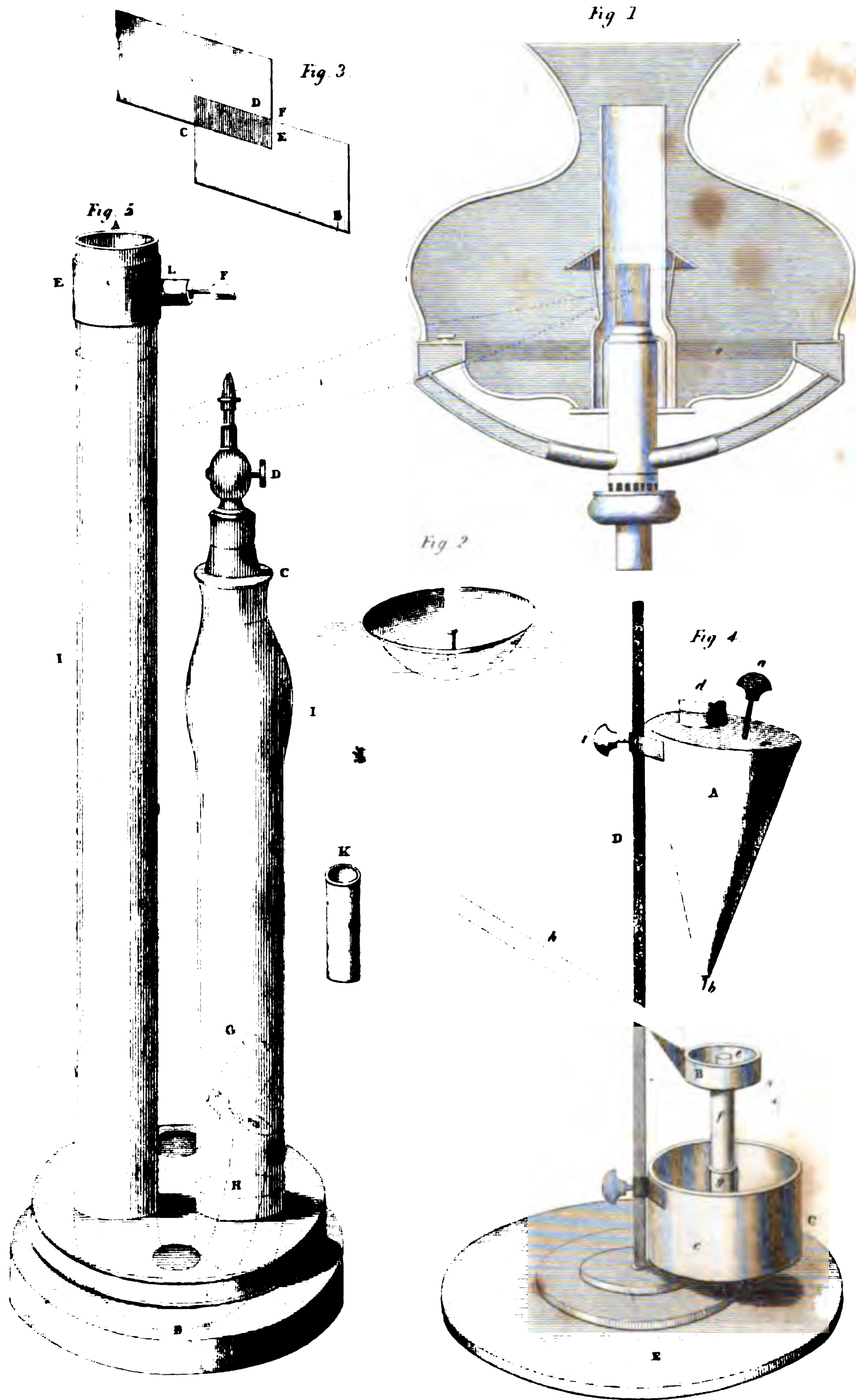
A wick of cotton being put into the tube *h*, and brought through the ring *e*; a quantity of tallow put into the conical cup; and the small cup filled with melted tallow; the lamp may be lighted: if the point of the cup A be raised two or three inches above the brim of the cup B, and the air in the room at rest, the tallow in the cup A will be fused in a few minutes, and if the wire *a b* be properly adjusted, a constant supply of tallow will drop to the flame.

Small particles of dust and other impurities in the tallow sometimes impede the drops, but the light continues undiminished, until all the tallow in the little cup is consumed, and the cup is then easily filled again by holding up the wire, after which the drops must be regulated again. To lessen this inconvenience as much as possible, nothing but clean tallow, or hog's lard, must be burned. Tallow and hog's lard will burn with a very clear bright flame, of the same intensity, for a long time.

The small cup, when detached from the rest of the apparatus, will supply the different uses of a candle: it may be carried about by the tube *h*, or occasionally placed with the tube *f* in a small wooden stand. The tallow is not very liable to be spilled.

Every time before the lamp is lighted, a new portion of wick must be drawn through the ring. This is not easily effected when the tallow is cold; therefore to avoid this trouble, it is the best method always to draw up the wick immediately before the flame is extinguished; for which purpose, a small forceps, made of one piece of bended iron, will be most convenient.

Lastly, it may be necessary to remark, that after the lamp is lighted, when the tallow in both cups is cold, the tallow in the small cup must be broken and stirred up, that a sufficient quantity may be fused immediately to supply the flame; and, the sooner to fuse the tallow in the conical cup, the flame should be raised near to its point,



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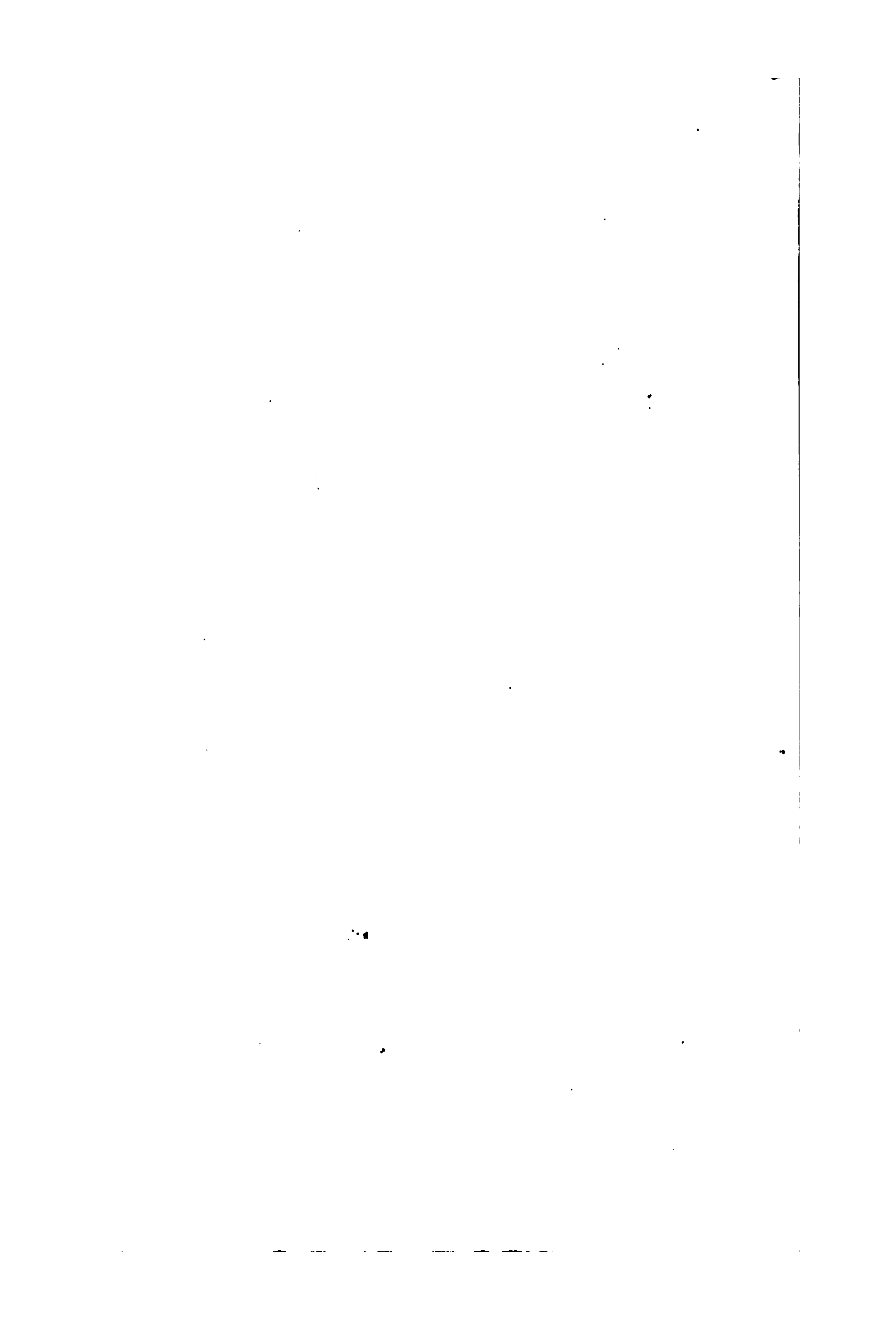

and when there is a strong current of air in the room, in that situation it ought to remain.

The *hydro-pneumatic* lamp must now be noticed. The discovery of professor Döbereiner, of the ignition of spongy platinum by hydrogen, naturally led to its application as a means of affording an instantaneous light-giving machine. Different instruments have accordingly been constructed for this purpose; the first of which was that some time ago recommended by Gay Lussac, for keeping a store of hydrogen, and improved by Mr. Garden of London. It is, however, expensive, and not easily managed by those not accustomed to the use of chemical apparatus.

Another has been invented by Mr. Adie, which, though much less complicated, may, by many, be considered also as too expensive. The one contrived by Dr. Fyfe, combines the advantages of simplicity, cheapness, and facility of management, while it answers the purpose equally well with those above mentioned.

It consists merely of a bent glass-tube A B C fig. 5, the internal diameter of which is nearly an inch. It is open at both ends; fixed into a wooden stand B. The short limb, C, is five, and the long one, A, eight inches in length. To the mouth C there is ground a glass-tube, to which is fixed a stop-cock D. At E there is a brass ring fitted closely to the tube, and from which there proceeds a piece of brass, to which the spongy platinum F is fixed by very fine wire.

As the platinum loses its power of ignition by exposure to air, or rather requires a large supply of hydrogen, Dr. Fyfe has it covered with a cap, represented by K, and which is ground accurately on the cylinder L. When the lamp is required for use, a piece of zinc is put into the short limb as at G, and which is prevented from coming nearer than about an inch from the bending, by a tube of glass as at H. Diluted sulphuric acid is then poured in, so as to fill, as far up as I, after which the stopper and stop-cock are introduced. By the action of the acid on the metal hydrogen is generated, which fills the short limb, and raises the fluid in the opposite one: and, the production of gas ceasing when the acid gets below the zinc, there is thus always a supply of gas subjected to the pressure of a column of fluid of from six to seven inches. When the stop-cock, therefore, is opened, the hydrogen is propelled against the platinum; the fluid falls into the short limb; and, as the zinc is thus again surrounded by acid, more gas is generated to serve for the next time. The distance of the platinum depends on the size of the bore of the stop-cock; but, as the ring E is moveable, it can be easily adjusted.

The apparatus described contains only about a cubic inch of gas; but Dr. Fyfe found it sufficient for affording a light; for, though it does not ignite the platinum long enough to kindle the gas, yet there is sufficient heat to set fire to a sulphuric match. The moment, then, that the platinum becomes red-hot, a small sulphuric match must be applied to it. The only circumstance to be attended to is to allow the match to remain ignited for a few seconds, with a view of driving off any sulphur that may be left adhering, and which prevents the ignition when the gas is again impelled on it.

The merit of that very ingenious and most useful contrivance the *safety lamp* is wholly due to Sir Humphry Davy. After having made many experiments for the purpose of forming a lamp to give light in coal mines affected with fire-damp, without occasioning explosions which frequently prove fatal to the miners, he found that wire-gauze of which the apertures occupy more space than the cooling or radiating surface of the wire, so as to be permeable to air and light, offered a perfect barrier against explosion; because, although the gas was inflamed within the enclosures formed by the wire gauze, yet, the heat being communicated to the numerous surfaces of the wire, the gas on the outside of the wire enclosure was not inflamed. Wire gauze is the best material for safety lamps, as it affords the greatest extent of radiating surface, and, by cooling, prevents all explosions that require a temperature higher than the temperature of the atmosphere. An example of the radiating and cooling action of wire is seen in the fire guards of wire, which are hung upon the ribs of fire places in rooms to prevent sparks from being thrown into the room. These fire-guards, although they are very near the fire, do not become hot. The apertures of the wire gauze must be smaller, and the wire which is the radiating and cooling surface, must be in greater quantity; in proportion as the gas in which the lamp is to be used is more inflammable. The fire-damp in coal-mines is in almost all cases carbureted hydrogen; and, for excluding explosion from a lamp in that gas, it is found that the wire gauze should contain 784 apertures in a square inch.

The wire gauze should be of iron or copper. Fine brass wire is improper, because it is too easily combustible by reason of the zinc it contains. The iron wire should not be tinned, tin being too easily combustible. The body of the lamp should be of copper riveted together, or of massy cast-brass or cast-iron. The screws should fit tight; no aperture, however small, should be suffered to exist in the body of the lamp; and the trimming wire should move through a long tight tube.

LAMPA, a district in the intendancy of Cuzco, Peru, commencing thirty leagues south from Cuzco, and stretching among the mountains between thirty and forty leagues. It is bounded by the chain of Vilcomoto, which separates it from Asangara, in the kingdom of Plata on the east. Its climate is cold, producing little else than pasturage.

LAMPADARY, an officer in the ancient church of Constantinople, so called from his employment, which was to take care of the lamps, and to carry a taper before the emperor or patriarch when they went to church or in procession.

LAMPEDOSA, a pleasant and fertile, but uninhabited island of the Mediterranean, between the coast of Tunis and Malta, about twenty miles in circumference. There is a church on it; but the place is said to have been abandoned on account of the spectres who haunted it. In the discussions respecting Malta

in 1803, which occasioned the late war, there was a question of this little island, and Buonaparte actually proposed that it should become a British settlement, on condition that Malta were surrendered to the king of Naples, to become eventually a French settlement. Lampedosa is seventy miles W. S.W. of Malta, and sixty-one from the Barbary coast. Long. 12° 20' E., lat. 35° 40' N. Lampedosa is well watered, level, and fertile. On the north coast it is inaccessible, and has no anchorage on the south; a bank runs off to a considerable distance, and on this side is a noble bay, sheltered from all but south and south-west winds. Depth sixteen to eighteen fathoms, and the bottom fine sand. At its head is a creek, whose entrance is ninety fathoms broad, and running half a mile into the island. It is capable at a little expense of making an excellent harbour. The depth in the entrance is fifteen fathoms, decreasing gradually to the head, where is one fathom close to the shore. On the west side of the creek, about half way up, a projecting point forms a little cove, in which small vessels may anchor perfectly sheltered from the S. S.W. wind, which blows right up the creek, and makes a considerable swell. On the same side below this point is another cove entirely land-locked, but with only three to five feet water, the bottom soft sand. This cove might easily be deepened and considerably enlarged, the land surrounding it being low, and composed of sand and clay. The bay is occasionally visited by the Maltese vessels, as well as the Barbary cruisers. Ships from Turkey, having the plague on board, also run for this island, and remain until the malady has ceased, when they return to the port of Turkey they sailed from, to receive a fresh clearance and bill of health; by this means they save both ship and cargo, which would be burnt were they to go into any European port. The island has the ruins of a castle and town: a league from the W. S.W. point is a rock with a safe channel between them, and four leagues from the same point is the island of Lampion, a high round uninhabited rock.

LAMPIC ACID, acidum lampsicum, from Gr. λαμπω, to shine. Sir H. Davy, during his admirable researches on the nature and properties of flame, announced the singular fact, that combustible bodies might be made to combine rapidly with oxygen, at temperatures below what were necessary to their visible inflammation. Among the phenomena resulting from these new combinations, he remarked the production of a peculiar acid and pungent vapor from the slow combustion of ether; and from its obvious qualities he was led to suspect, that it might be a product yet new to the chemical catalogue. Faraday, in the third volume of the Journal of Science and the Arts, has given some account of the properties of this new acid; but, from the very small quantities in which he was able to collect it, was prevented from performing any decisive experiments upon it.

In the sixth volume of the same Journal we have a pretty copious investigation of the properties and compounds of this new acid, by Daniell. From the slow combustion of ether during six weeks, by means of a coil of platina wire sitting on the cotton wick of the lamp, he condensed with the head of an alembic, whose beak was inserted in a receiver, a pint and a half of the lampic acid liquor.

When first collected it is a colorless fluid of an intensely sour taste, and pungent odor. Its vapor, when heated, is extremely irritating and disagreeable; and, when received into the lungs, produces an oppression at the chest very much resembling the effect of chlorine. Its specific gravity varies according to the care with which it has been prepared, from less than 1·000 to 1·008. It may be purified by careful evaporation; and it is worthy of remark, that the vapor which rises from it is that of alcohol, with which it is slightly contaminated, and not of ether. Thus rectified, its specific gravity is 1·015. It reddens vegetable blues, and decomposes all the earthy and alkaline carbonates.

LAMPONG, a district of the southern extremity of the island of Sumatra, beginning on the west coast, at the river of Padanguchi, and extending across as far as Palembang, on the north-east side. On the south and east sides it is washed by the sea, having several ports in the straits of Sunda, particularly Keysers and Lampong bays; and the great river Tulangbawang runs through the heart of it, rising from a considerable lake between the ranges of mountains. The land in the neighbourhood of the rivers is overflowed during the rainy season, and the villages appear like islands. Here is a wide and deep bay, affording good anchorage. See SUMATRA.

LAMPOON', *n. s.* & *v. a.* } Fr. *lampen;*
LAMPOONER. } Lat. *lambo,* the tongue. Slander; personal satire.

They say my talent is satire; if so it is a fruitful age; they have sown the dragon's teeth themselves, and it is but just they should reap each other in *lampoons.* *Dryden.*

We are naturally displeased with an unknown critick, as the ladies are with a *lampooner,* because we are bitten in the dark. *Id.*

The squibs are those who are called libellers, *lampooners,* and pamphleteers. *Tatler.*

The world is so full of ill nature, that I have *lampoons* sent me by people who cannot spell, and satires composed by those who scarce know how to write. *Spectator.*

Lampoons and satires, that are written with wit and spirit, are like poisoned darts, which not only inflict a wound, but make it incurable. *Addison.*

Make satire a *lampoon.* *Pope.*

Satires and *lampoons* on particular people circulate more by giving copies in confidence to the friends of the parties, than by printing them. *Sheridan.*

LAM'PREY, *n. s.* } Fr. *lamproye;* Belg.
LAM'PRON. } and Dut. *lampreye,* both of Lat. *lampetra* (à lambendis petris, from its sucking stones). A kind of fish.

Many fish much like the eel frequent both the sea and fresh rivers; as the lamprel, *lamprey,* and lamperne. *Walton.*

These rocks are frequented by *lamprons,* and greater fishes, that devour the bodies of the drowned.
Broome on the Odyssey.

LAMPREY. See PETROMYZON.

LAMPRIDIUS (Ælius), a Latin historian, who lived under Dioclesian and Constantine the Great. His lives of four emperors, Antoninus, Commodus, Diadumenus, and Heliogabalus, are extant. Some attribute the life of Alexand r Severus to him; but the MS. in the Palatine library ascribes it to Spartian.

Lampridius (Benedict), of Cremona, a celebrated Latin poet of the sixteenth century. He taught Greek and Latin at Rome and Padua, until he was invited to Mantua, by Frederic Gonzaga, to undertake the tuition of his son. His epigrams and lyric verses, in Greek and Latin, were printed separately, as well as among the Deliciæ of the Italian poets.

LAMPSACUM, or Lampsacus, in ancient geography, a considerable city of Mysia; called Pilyea by Homer, because abounding in pine-trees, a circumstance confirmed by Pliny; situated at the north end or entrance of the Hellespont into the Propontis, with a commodious harbour, opposite to Callipolis in the Thracian Chersonesus. It was assigned by Artaxerxes to Themistocles, for furnishing his table with wine, in which the country abounded. It was saved, by the address of Anaximenes the historian, from the ruin threatened by Alexander, because in the interest of Persia. See Anaximenes. It is now called Lampsaki.

LAMPYRIS, the fire fly, a genus of insects belonging to the coleoptera order; the characters of which are:—The antennæ are filiform; the elytra are flexible; the thorax is flat, of a semiorbicular form, surrounding and concealing the head. The segments of the abdomen terminate in papillæ, which are turned up towards the elytra, and partly fold one over the other. The females in general are apterous. There are several species; of which the most remarkable is the L. noctiluca. The male of this insect is less than the female: its head is shaped exactly in the same manner, and covered likewise by the plate of the thorax, only it appears rather longer than that of the female. Both the head and antennæ are black. The thorax of the male, which is smaller and shorter than that of the female, has the folds and papillæ on its sides much less remarkable: but the greatest difference between the two sexes is, that the male is covered with brown elytra, shagreened, and marked with two lines longitudinally. The elytra are longer than the abdomen, and under them lie the wings. The two last rings of the abdomen are not so bright as those of the female, only there appear four luminous points, two upon each of the two last rings. The glow-worm, which is frequently met with towards evening, in June, in woods and meadows, is the female of this species. By the shining light which it emits, it attracts the male. As a proof that the light depends on a phosphorous matter, the animal, though dead and bruised, leaves a luminous substance on the hand, that only loses its lustre when dried. The perfect insect flies about during the evening in autumn, and frequents the grassy plantations of juniper trees.

LAMY, or Lami (Bernard), a learned French protestant and Cartesian philosopher, born at Mans in 1640. He studied there under the fathers of the oratory; and, in 1658, went to Paris, and entered into the institution. He became priest in 1667, and taught philosophy at Saumur and Angiers; which last he was obliged to quit by an order from court, having adopted the new philosophy instead of that of Aristotle. In 1676 he went to Grenoble, where cardinal Camus was bishop; who conceived such an esteem for him that he retained him, and derived considerable services from him in the government of his diocese. He went at last to reside at Rouen, where he died, in 1715. He wrote a Dissertation on the Sciences; The Art of Speaking; and several other scientific works, besides others in divinity.

LANA (Francis de), an Italian mathematician, and the first who suggested the inflation of balloons, was born at Brescia in 1637. He became a Jesuit, and was celebrated as a teacher of mathematics. He published in 1670 a work, under the title of Prodromo all' arte Maestra; of which another edition appeared in 1684, under the title of Magisterium Naturæ et Artis, 3 vols. folio. In this production he first gave the hint of the principle of exploring the air by the aid of machines inflated with gas; and, in 1784, his treatment of this subject was printed separately at Naples. He died about 1700.

LANARK, or Lanarkshire, a county of Scotland, called also Clydesdale, from the Clyde, by which it is watered; though this name belongs properly only to the southern district of Lanarkshire. See Clydesdale. It is bounded on the north by Dumbartonshire and Stirling; east by Edinburgh, Linglithlow, and Peebles; on the south by Dumfries; and on the west by Ayr and Renfrew shires. Its extent from north to south is about forty-eight miles, and from east to west thirty-two. It is said to contain 870 square miles, or 556,800 English acres. The Clyde, descending from the south part of this county, divides it naturally into two almost equal parts; and after a course of about fifty miles meets the tide a little below Glasgow. See Glasgow. It is also divided into three wards; the Upper in which Lanark is situated, and which contains two-thirds of the county; the Middle, containing the town of Hamilton; and the Lower in which Glasgow is situated. It is as a whole mountainous, and one-half of the area it contains is incapable of productive cultivation. The parishes are forty-seven in number, eleven of which belong to the presbytery of Lanark, fourteen to that of Hamilton, and thirteen to that of Glasgow, all in the Synod of Glasgow and Ayr; and nine to the Presbytery of Biggar, in the Synod of Lothian and Tweeddale.

Proceeding up the river, from Glasgow, the country is rich and well cultivated. Bothwell Castle here stands on an eminence, which overlooks the Clyde. Some of its walls measure fifteen feet in thickness and sixty feet in height. Between it and the priory of Blantyre on the opposite side of the Clyde, there is said to have been in ancient times a subterraneous passage under the river. A little above stands Bothwell Bridge, celebrated for the defeat of the Covenanters, in June 1769. East from Bothwell Castle, in an elevated situation, and amid a wild and barren country, is the Kirk of Shots.

This dreary waste is covered with heath; and, though a high situation, is flat, and very marshy. It is chiefly employed as sheep-walks; and, notwithstanding the vicinity of coal and lime, seems scarcely capable of cultivation. This want is, however, compensated by the abundance of iron-stone and coal. Nor is this advantage confined to the barren tract in the north-east corner of the shire. The whole county abounds with these valuable minerals. One of the most considerable iron-works in the county is that of Cleugh, a few miles south-east from the Kirk of Shots. The Clyde near this place runs for several miles between high rocks covered with wood; and in its course exhibits many beautiful cataracts. See Clyde.

From Lanark, passing Carstairs a few miles to the east, we meet the town of Carnwath. In this neighbourhood, and along the Clyde to the south-east, there is much cultivation and rich pasture. To the south of Carnwath is Biggar; where is seen the ruin of a collegiate church, founded in 1545. The lands about Coulter and Lumington are fertile; but farther up the Clyde we principally meet with sheep-walks and pasture grounds. In the south part of the shire, called Clydesdale, the country is not less wild. Among the mountains here, or rather in a hollow near their summit, we meet with the village of Leadhills; and the famous lead mines of the earl of Hopetown. Gold it is said was discovered in this region in the reign of James III. North from this mountainous region lies Crawfordmuir.

About nine miles north of Leadhills, on the east side of the Douglas, which falls into the Clyde a few miles below, stands Douglas Castle, for many ages the residence of the second family in Scotland; and near it is the town of Douglas. A few miles to the north-east is Tinto, a remarkable conic mountain, round the base of which the Clyde makes a noble sweep. Westward, beyond Douglas, the Netham descends into the Clyde through the parish of Lismahago. Hamilton House, the seat of the duke of Hamilton, stands in a plain between the Clyde and Avon. It is a magnificent structure, surrounded by venerable oaks. In the vicinity is the town of Hamilton, and at a little distance an elegant appendage to it, called Chatelherault, from the ancient lordship held here by the family in France. On the west of Hamilton is the town of Kilbride; and to the south that of Strathaven, surrounded by the fertile tract from which it derives its name. The mountains of Lanarkshire sometimes reach an elevation of 3000 feet, as in the upper ward on the borders of Dumfries: and Leadhills is 1564 feet above the level of the sea: the only large plains are along the banks of the Clyde. The rock formations are sandstone, and limestone, and on the high grounds argillaceous schistus, prevails. In the Cathkin hills a number of basaltic columns are found, more than forty feet high, inclined at an angle of about 70.°

The most important mineral production of this county is coal, which is calculated to stretch through between 60,000 and 70,000 acres at an average thickness of five feet. The cannel or candle coal, so called from the abundance of gas or inflammable matter it contains, is much used by the lower classes for its light.

Western and south-western winds blow here through the greater part of the year, and the atmosphere is generally humid; so that the harvests are late: but the county is not thought unhealthy, and neither snow nor frosts are of long duration.

The farms are not large, and the dairy is a chief object of agriculture. In the Middle and Lower wards a great number of cows are kept, the milk of which is wholly applied to the making of butter, new milk, and skim milk, cheese. This county has also long been noted for its draught horses.

The fruit trees are apples, pears, and plums: 300 acres were supposed to be laid out in orchards twenty years ago; and their extent is rather increased of late than diminished. Many new plantations of timber trees are forming. 'A kind of Jewish abhorrence of swine', we are told in the Agricultural Surveys, 'seems to have taken place, about the rigid times of the Reformation, in the western counties of Scotland. They were unclean beasts; it was sinful to eat their flesh, and neither creditable nor profitable to keep them. And, though these prejudices are now pretty much worn out, pork is not yet, in general, a favorite food, and, of course, the number of hogs kept and fed is not considerable.

The roads, once intolerably bad, are much improved of late years: and the river Clyde is connected with some of the finest specimens of our Inland Navigation: see our article of that name, for a description of the Forth and Clyde Canal. The county contains also the Monkland Canal, from the coal works in that parish, to the Forth and Clyde at Port Dundas; and the Ardrossan Canal, which from Port Eglinton, near Glasgow, to Ardrossan, on the coast of Ayrshire, will measure thirty-three miles. The county has a corresponding agricultural society of considerable repute.

The greater part of the inhabitants are engaged in the cotton manufactures, the iron or the coal works: each considerable establishment having its adjacent village occupied by the workmen. At New Lanark is the well known cotton spinning manufactory, lately conducted by Mr. Owen. The county returns one member to the imperial parliament. Glasgow, by the regulation of the reform bill, has the privilege of sending two; and Lanark shares in the franchise with Linlithgow, Falkirk, Aindrie, and Hamilton. The county formerly sent two representatives; and Glasgow contributes with Rutherglen and other places.

LANCASHIRE. Mr. Whitaker conjectures that the aboriginal inhabitants of this district were the Setanii mentioned by Ptolemy. This appellation he conjectures to signify the 'country of water,' or 'the interior and southerly country of water.' The Romans found this part of the country occupied by the people whom they afterwards called Brigantes, who possessed a tract of country extending from the south shore

of the Humber to that of the Tyne on the eastern coast; and from the estuary of the Mersey to the Eden on the western coast. On their conquest of the island, Lancashire was made part of the division named Maxima Cæsariensis. After the establishment of the Saxons, this county was incorporated with the kingdom of Northumberland; and so it remained till the time of Egbert and his union of all the Saxon states.

Lancashire is a maritime county, bounded on the south by Cheshire; on the east by Yorkshire; on the north by Westmoreland; and on the west by the Irish Sea. Its form resembles that of England and Scotland collectively; the populous town of Manchester standing in the same relative situation as that of London in the maps of this island, while Liverpool may be well imagined to approach the Land's End in Cornwall, lying nearly in the same comparative situation as the south-eastern borders of Devonshire. The county town, Lancaster, lies nearly in the same situation, with respect to the north-eastern coast of the Irish Sea, as does the county itself in the general map with respect to the same sea; or rather it may be supposed that Lancaster occupies the place of Carlisle in Cumberland. According to Mr. Yates's survey, the greatest length of this county is seventy-four miles, and the greatest breadth forty-four miles and a half. Passing over the river Ribble, at Nesketh bank, its circumference is about 342 miles, containing 1765 square miles, and 1,129,600 acres. Here are six hundreds, twenty-seven market-towns, sixty-two extensive parishes, and 894 villages. This county is in the diocese of Chester and the province of York, and is included in the northern circuit. In point of importance, in almost every light in which it can be viewed, there is not another county equal to it, Middlesex alone excepted; and even that, exclusive of London and Westminster, bears but a very trifling comparison with the county of Lancaster. With the exception of London and Yorkshire, the population will be found to average the amount of four counties.

The climate of this county is distinguished for its humidity, owing, no doubt, to its local situation, between the Irish Sea, and the range of hills which form its eastern border. According to a Liverpool register, the least quantity of rain yearly, from 1784 to 1792, was twenty-four inches and one-eighth in 1788, and the greatest fifty-four and a quarter in 1792. At Lancaster, in the latter year, the quantity of rain was sixty-six inches. Four inches nave been known to fall in the course of a night. The mean heat at Lancaster, from 1784 to 1790, was 51° 8'. In 1819-20, when the thermometer in gardens near London fell 10° below Zero, in the botanic garden of Liverpool it never touched that point. The eastern side is more subject to rains than the side bordering on the coast; for, as the clouds are wafted over the Irish Sea from the Atlantic Ocean, they are first checked and broken by the mountainous ridge, which has a direction north and south; and thence the rains are almost continually on the western side of those intercepting eminences. It is, however, said that this ridge of mountains, which bounds this county on the eastern side next Yorkshire, and which runs through not only Yorkshire, but Cheshire, Derbyshire, and Staffordshire, and is called the back bone of the kingdom, being the most elevated ground in the island, screens Lancashire more particularly from the severe eastern blasts, the frosts, blights, and insects, which infest the counties bordering on the German Ocean; and, though the high mountains may cause a greater quantity of rain to fall in this district than in the interior parts of the kingdom, yet this county, fanned by the western breezes, has a salubrity of air to which may be attributed the vigor and activity of the inhabitants, who are, if temperate, generally long lived. The prevailing winds are from the south, south-west, and north-east.

Mr. Britton, on the authority of Mr. Holt's Agricultural Survey, remarks, that the soil and surface of this county are various; and that its features in some parts, towards the north, and all along its eastern border, are strongly marked. Here the hills are bold and lofty, and the valleys narrow and irriguous. Near the sea-coast, and nearly the whole of the southern side of the county, following the course of the river Mersey, the land is low and flat. In various fields, at Formby, near the shore, there is soil above two feet below the sand, which lies between the present green-sward; and there are the strongest reasons for believing, that this soil (which is about four inches thick), originally formed the surface of the ground, and was gradually buried by sand from the neighbouring hills. Few counties produce greater variety; and yet this does not change so rapidly as in some others. The greatest proportion of that district which lies between the river Ribble and the river Mersey, has for its superficies a sandy loam, well adapted to the production of almost every vegetable that has yet been brought under cultivation, and that to a degree which renders it impossible to estimate the advantage which might be obtained by improved and superior management. The substratum of this soil is generally the red-rock, or clay-marle, an admirable sandy loam, perhaps one of the most desirable soils that can be found. The quantity of moss-lands has been very great in this county, but they are rapidly declining. Chat-Moss, Trafford-Moss, Risely-Moss, and Pilling-Moss, are all extensive tracts; but some of these have now become, for a large portion, fine meadow land, owing in a great degree to the laudable and patriotic exertions of his grace the duke of Bridgewater, and Mr. Roscoe, of Liverpool.

Its principal minerals are copper, lead, iron, and coal. The last is in the greatest abundance. The great tract commences below Prescot on the south, and, crossing the county in a north-east direction, passes into Yorkshire; but coal abounds to the south-east of this district near Manchester, and to the north beyond Lancaster. It is chiefly of a bituminous description. Cannel coal is found at Wigan, and often in contact with black coal. Copper appears towards the northern extremity of the high Furness, or Fell

district, at Coniston, Muckle Gill, and Hartriggs. Towards the north and north-east parts, lead is met with in small quantities. Iron is wrought in the liberty of Furness to the north of Lancaster sands, and though found in other quarters the working of it has not been profitable. In the northern parts of the liberty, blue slate quarries have been opened. Sandstone and limestone are also wrought here, and on the Lancaster side.

This county is amply supplied with water. The principal rivers are the Irwell, the Mersey, the Douglas, the Ribble, the Calders, the Wyer, and the Lune, besides numerous smaller streams. Few counties are so materially benefited by the conveniences of inland navigation. The Sankey Canal, the oldest canal in England, originated with a company of merchants and gentlemen in 1755, who obtained an act of Parliament, authorising them to make Sankey Brook navigable from the river Mersey, which it joins about two miles west of Warrington, to near St. Helen's. It has proved one of the most profitable concerns of the kind in the kingdom. The Ashton-under-Line Canal communicates between Manchester and the town of Ashton. It commences on the east side of Manchester; and, passing the pleasing little Moravian settlement at Fairfield, enters a long tunnel at Ashton, in front of Duckenfield lodge, near which it is joined by the Peak Forest Canal, a branch having previously broken off at Fairfield, leading to New Mills, near Oldham. The whole length of the canal is eleven miles, with a rise of 152 feet. The duke of Bridgewater's canal, though belonging more particularly to the county of Cheshire, has a branch which exclusively belongs to this county. This commences at Castle Field, Manchester, and terminates at Pennington, near the ancient town of Leigh, in Atherton parish. At Manchester there is a communication with the Mersey and Irwell navigation, and Manchester, Bolton, and Bury Canal, by means of Medlock Brook. Under the town of Manchester are arched tunnels for a portion of this canal, of considerable length, from one of which coals are hoisted up by a coal-gin, through a shaft, out of the barges below into a large coal-yard or store-house, in the main street; at which place the duke and his successors are by the first act bound to supply the inhabitants of Manchester at all times with coals at only 4*d*. per hundred weight of 140 lbs. At Worsley is the entrance into the famous underground works or tunnels, where, by an archway, partly bricked, and partly formed by the solid rock, wide enough to admit long flat-bottomed boats of ten to twelve tons burden, towed by means of rings and hand-rails on each side, the canal penetrates about three quarters of a mile before it reaches the first coal-works, where it divides into two branches, to the right and left. There are at certain distances shafts or funnels perpendicular to the surface, for the circulation of air, &c. To Mr. James Brindley the inhabitants of Manchester are principally indebted for the original successful execution of this navigation. But see our article INLAND NAVIGATION

Lancashire does not rank high as an agricultural county. Arable land is less prevalent than grass; but great attention has been paid to the culture of potatoes, both by farmers and cottagers; the former generally cultivate them in drills, and horse hoed; the latter in beds or dibbled in rows and hand hoed. In this county potatoes first appeared in England. Onions are cultivated extensively near Warrington, and rhubarb and madder have been tried, and grown to very great perfection, but are not so easily dried and prepared for sale, as to induce a continuance of the practice.

The grass lands are chiefly coarse upland pastures, but there are some good meadows and productive marsh lands. There are excellent market gardens of course near the large towns. 'About eight miles north-east from Liverpool is a certain farm in Kirkby, the soil of a small part of which is a black loamy sand, and which produces great quantities of early and strong asparagus, and another farm, a part of which is of the same nature, at a place called Orrel, about four miles north-west of Liverpool: both which produce this plant with less attention and less dung than are requisite in the rich vale of Kirkdale, about two miles from Liverpool, where the greatest quantity of land in any place of this neighbourhood is appropriated solely to horticulture.' There is an orchard of sixty-four acres on the banks of the Irwell, near Manchester, and some others in sheltered places near the principal towns; but the prevailing west wind are much against their increase. The long-horned or Lancashire breed of cattle is distinguished by the length of their horns, the thickness and firm texture of the hides, the length and closeness of the hair, the large size of the hoofs, and their coarse, leathery, thick necks: they are likewise deeper in their fore-quarters, and lighter in their hind quarters than most other breeds; narrower in their shape, less in point of weight than the short horns, though better weighers in proportion to their size; and, though they give considerably less milk, it is said to afford more cream in proportion to its quantity. They are more varied in their color than any of the other breeds; but, whatever the color be, they have in general a white streak along their back, which the breeders term finched, and mostly a white spot on the inside of the hough.

Lancashire is a county palatine, of which the king is duke. It returns twenty-four members to parliament; four for the county, two for each of the places following, viz.: Lancaster, Preston, Wigan, Liverpool, Manchester, Bolton, Blackburn, Oldham: one each for the following places, namely, Clitheroe, Ashton-under-Lyne, Bury, Rochdale, Salford, and Warrington. It has given birth to Robert Ainsworth, lexicographer, born at Clifton in the parish of Eccles 1660, died 1745.—Wm. Allan, Alen, or Aleyn, Cardinal Rossal, born 1532, died 1594.—Thomas Barnes, D. D., Protestant dissenting minister, born at Warrington, 1747, died 1810.—Richard Arkwright, spinner, born at Preston, 1732, died 1792.—J. Bradshaw, the regicide judge, born near Bolton—The pious and ingenious poet and stenographer John Byrom,

born at Kersal in the year 1691, died 1763.—Rev. Dr. Edward Harwood, an excellent classical scholar, born 1729, died January 14th 1794.—Jeremiah Horrox, a memorable astronomer, born 1619, died 1641, who first observed the transit of Venus over the sun's disk.—Dr. John Leland, author of A View of Deistical Writers, &c., born at Wigan, 1691, died January 21st, 1766.—Dr. Thomas Perceval, an eminent physician and medical and miscellaneous writer, born at Warrington 1740, and died at Manchester, August 30th 1804.—George Romney, a celebrated painter, born at Dalton in Furness, December 15th, 1734, died at Kendal, November 15th, 1802.—Edwin Sandys, archbishop of York, born 1519, died 1588.—Dr. John Taylor, author of the Hebrew and English Concordance, and Key to the Apostolic Writings prefixed to a Paraphrase on the Romans, &c., a dissenting minister, born at Lancaster, 1694, died 1761.—Rev. John Whitaker, the celebrated historian of Manchester, &c., born at Manchester about 1735, died 1808.

Manchester is the great centre of the cotton trade. Its market on Tuesday exhibits a scene but little inferior to the bustle of the Royal Exchange at London. Here merchants from all parts of the country flock for the purpose of buying and selling cotton goods of every description, cotton, twist, weft, yarn, and wool. Bolton is the ancient and great mart for these goods, particularly for cambric and fancy muslins. Spinning is also carried on here to an almost incredible extent. The whole commercial world has rung with the praises of the late Sir Richard Arkwright, whose invention of the water machine, &c., has certainly given an impulse to manufactures, to which they were before entirely strangers; and which has since been universally aided by the application of steam. But for that fine and compact article called mule yarn, of which are manufactured all those beautiful cotton goods called jacconetts, bucks, gauzes, and other fine Scotch fabrics and cambrics; also all fine cottons, laces, and threads, the commercial world is wholly indebted to the persevering ingenuity of Mr. Samuel Crompton, who first invented the machines called Hall-i'-th'-Wood-Wheels, or Mules. Parliament, above thirty years after the discovery, granted to Mr. Crompton the sum of £5000, clear of all fees, though, in the opinion of most persons, an annual pension to that amount would hardly have been a compensation adequate to the merits of Mr. Crompton's services. The neighbourhood of Bolton abounds with extensive factories, bleaching grounds, &c. Chowbent, five miles west of Bolton, is a thriving village, where formerly large quantities of nails were manufactured for the navy, and for domestic uses. The trade is still carried on, but the cotton trade has taken the lead. Wigan has long been celebrated for its brass and copper manufactures; but here also the cotton and linen weaving has gained a considerable ascendancy. At Preston the cotton business is very extensive, as also at Blackburn, Chorley, Ashton, Newton, &c. The woollen and cotton businesses are carried on at Bury, a handsome town of considerable extent; and at Prescot the finest tools are made for the use of watchmakers: the manufacturers there seem to inherit a peculiar method of cutting files. Liverpool, as a commercial sea-port, is second only to London; the abolition of the Slave Trade had a partial effect on the trade of this town; but, as Mr. Roscoe has well said, 'A crime was never necessary in the course of human affairs.'

LANCASTER, a market and sea-port town, the capital of the county of Lancashire, is situated on the banks of the Layne or Lune, and appears to have been originally a Roman station. Camden says its Roman name was Longovicum, and Mr. Whitaker thinks it the Ad-Alaunum of Richard of Cirencester. For an account of various Roman remains that have been discovered here, the reader may consult Mr. Leigh's Dissertation in the Archælogia, vol. v.

After the Romans had retired from this neighbourhood the place appears to have been desolated by the incursions of the Picts and Scots; but was rebuilt by the Saxons, made the metropolis of the county, and constituted one of their chief places of defence northward. In Domesday-book, Lancaster, and Cherca-Longcastre, appear as two vills, or Berwic, among the twenty-two which then composed the manor of Halton: the name of Cherca-Longcastre beiug affixed to one of them, renders it probable that it had a church, which had been destroyed by the Danes. Lancaster was granted either by the Conqueror or William Rufus to Roger de Poitou, who erected a castle upon its hill, and founded the church of St. Mary; as a cell to the abbey of Sees, in Normandy. To this monastery it continued annexed until the reign of Henry V., when, on the alien priories being abolished, it was given to the Carthusian abbey of Sion, in Middlesex, and remained thus attached till the dissolution of the monasteries at the Reformation. The towers of the castle remaining are excellent specimens of the massive architecture adopted in that age. In 1109 this castle was besieged by Hubert, archbishop of Canterbury, it being held by the brother of king John in trust for that monarch. In the seventh year of John's reign it was in possession of Ranulph Blundevil, earl of Chester: in the early part of the reign of Henry III. it was held by William de Ferrars, earl of Derby; but it owes its chief importance in history to Edward III. This monarch created his son, the celebrated John of Gaunt, duke of Lancaster, and granted a charter which constituted the dukedom a kind of independent state: within the county, indeed, almost all the regal privileges were enjoyed by the duke. It suffered greatly in the wars of the houses of York and Lancaster, so that in the time of Camden it was nearly depopulated: but Charles II. having renewed its charter, and granted it additional privileges, it has ever since flourished. At present the area included within the castle walls is about 380 feet square. The round towers seem to have been about twenty-six paces distant from each other, and joined by a wall and open gallery; two towers on the western side remain entire, and the remains of five others may be traced. One of these towers is called Adrian's. On the top is a large square tower, called John of Gaunt's Chair, whence is

a most extensive prospect. In this castle are now found the shire-hall, county courts, in which the assizes are held, and the county gaol. Here also was formerly an hospital for lepers, and a house for Dominican friars.

On an eminence near is the parish church, a spacious building, with a lofty tower, which serves as a land-mark for vessels ascending the river. It has eight good bells. At the east end of the church is an elegantly carved wooden screen; and among the monuments one by Roubiliac, for William Stratford, L. L. D. In the church-yard is the shaft of a stone cross, with a Runic inscription. Lancaster contains also two commodious chapels of ease, one of which has an elegant steeple, recently rebuilt; places of worship for Presbyterians, Quakers, Methodists, Independents, and Roman Catholics. The town-hall and exchange, in the centre of the town, is a fine building, and has a noble portico. Here is also a neat theatre, a free-school, and a public library. The custom-house is a small building, with a portico, supported by four Ionic pillars, each fifteen feet and a half high, consisting of a single stone. The shambles in the market are built in the form of a street, every butcher having a shop with his name painted over the door. The town is incorporated under a mayor, aldermen, recorder, bailiffs, &c., and sends two members to parliament: the returning officers are the mayor and two bailiffs; the right of election being vested in the freemen, to the amount of 3000. The markets are on Wednesday and Saturday.

The Lancaster canal communicates with the Mersey, Dee, Ribble, Ouse, Trent, Derwent, Severn, Humber, Thames, Avon, &c. An elegant aqueduct bridge carries it over the Lune: it consists of five arches, erected at an expense of £45,000. The principal commerce of the town is in hardware, woollen goods, and cabinet-ware. The new bridge over the Lune is a handsome building, of five equal arches, is 549 feet long, and cost £12,000.

Five miles to the north-east of the town is a cave in the middle of a common, called Dunald Mill Hole. A brook nearly as large as the New River at London, and which turns a corn-mill just at the entrance of the cave, runs in at its mouth by several beautiful cascades, whence, continuing its course for two miles under a large mountain, it makes its appearance again at Carnford.

Lancaster, a county of Pennsylvania, North America; east of the Susquehanna; bounded north by Dauphine county; north-east by Berks; south-east by Chester; south by Maryland; and south-west by the Susquehanna, which divides it from York county. It is well cultivated, and the northern hills are abundant in minerals, especially iron.

Lancaster, a city and capital of Lancaster county, is one mile and a half west of Conestoga Creek, which falls into the Susquehanna, nine miles S. S. W. of the city; thirty-six E. S. E. of Harrisburg, and sixty-two west of Philadelphia. It is a pleasant, healthy, and flourishing place, situated in a delightful, fertile, and highly cultivated country, and contains a court house, a jail, a market house, a poor house, a hospital, a register's office, a college, two banks, and nine houses of public worship, one for German Lutherans, one for German Calvinists, one for English Presbyterians, one for Episcopalians, one for Roman Catholics, one for Moravians, one for Friends, one for Methodists, and one for Africans. The court-house, the Lutheran church, and many of the private houses are spacious and elegant. The houses are chiefly of brick and stone. This city has an extensive trade with the surrounding country, and considerable manufactures in hats, rifles, hand-screws, nails, &c. About a mile from the city there is a very large cotton manufactory. The inhabitants, mostly of German descent, speak very commonly the German language, but the English predominates, and most parents are in the practice of giving their children an English education. There are six newspapers published here, three in English, and three in German. Franklin College was founded here in 1787. It has a large brick building and some funds. But the seminary is not at present in operation, and the building is appropriated to schools.

Lancaster, a county of the east part of Virginia, bounded north-east by Northumberland county; east by Chesapeake Bay; south and south-west by the Rappahannock, and west by Richmond county. Distant from Washington 168 miles. Chief town, Kilmarnock. This is the name of several post towns in the United States.

Lancaster (James), an English navigator, whose name is connected with the oft attempted north-east passage. He made a voyage to America in 1591; and afterwards sailed round the Cape of Good Hope, and visited Ceylon and Pulo Penang. He engaged in 1524 in a predatory expedition to South America, and captured several prizes. In 1600 he went to the East Indies, and formed a commercial treaty with the king of Achen and the state of Bantam, in Java. He returned to his country in 1603, having procured some information relative to a north-west passage to the East Indies, which occasioned the expeditions of Hudson and others. Baffin in honor of him gave the name of Lancaster's Sound to an inlet which he discovered in 74° of N. lat. He is said to have received the honor of knighthood: he died in 1620.

Lancaster (Joseph), the promulgator of the system of mutual instruction, may be regarded as one of the most useful men of his age. He was born in 1771, was bred a quaker, and still maintains the habits and manners of that persuasion. It has been made a subject of dispute whether Dr. Bell or Mr. Lancaster is the inventor of the system of mutual or monitorial instruction. The facts in the case seem to be these: the Rev. Dr. Bell, an English chaplain in the East Indies, practised a system of mutual instruction in Madras, which he found, at least in part, already in existence among the natives. On his return to England, in 1797, he published a pamphlet (Education pursued in the Madras Asylum), giving some account of the method and his experience. A few years after, Lancaster began to apply the method, and intro-

duced some improvements, enabling him to manage and teach a greater number of children than had previously been attempted. It is evident that neither of these gentlemen can be strictly called the inventor of the system, although both are entitled to great praise for the improvements which they introduced. It has, in fact, been long in use among the Oriental nations. Dr. Bell, as we have mentioned, borrowed it from the natives in Hindostan, and Shaler speaks of it as employed in Algiers. To Lancaster, however, is due the nobler praise of having disinterestedly devoted himself to the task of diffusing a knowledge of this plan of instruction in two worlds. He began his labors in England, in 1803. The object was at first to procure a cheap means of instruction for the poorer classes, who, it is well known, were then unprovided for in most countries of Europe. Lancaster received great encouragement from many persons of the highest rank in England, which enabled him to travel over the kingdom, delivering lectures, giving instruction, and forming schools. Flattered by splendid patronage, and by promises of support which were never realized, he was induced to embark in an extensive school establishment at Tooting, to which his own resources proving unequal, he abandoned his establishment, and threw himself on his own talents, and on the liberality of the public at large; but, being disappointed in his expectations, and unwilling to submit to prescribed terms, which he considered as implying some fault on his part, when no fault really existed, he left England in disgust, and, about 1820, visited America.. He had previously published Improvement in Education; a Letter on the best Means of Educating and Employing the Poor in Ireland; Outlines of a Plan for the Education of Children; Account of the Progress of J. Lancaster's Plan for the Education of Children; and Report on the Progress of his Plan from the Year 1793. He died in indigent circumstances, in 1834.

LANCE, *n. s.* & *v. a.*
LANCE'LY, *adj.*
LANCE'PESADE, *n. s.*
LAN'CET,
LANCH, *v. a.*

Fr. and Arm. *lance*, *lancer*; Ital. *lancia*; Lat. *lancia*. A long spear, or javelin: as a verb, to thrust, pierce, or cut; to open chirurgically: lancepesade, an old military non-commissioned officer (Fr. *lance spezzade*), under the corporal: lancet, the surgeon's instrument for blood-letting, &c.: to lanch, to let fly, dart, or cast, as a lance.

They shall hold the bow and the *lance*.
Jeremiah l. 42.

Plate sin with gold,
And the strong *lance* of justice hurtless breaks;
Arm it in rags, a pigmy's straw doth pierce it.
Shakspeare.

With his prepared sword he charges home
My unprovided body, *lanced* my arm. *Id.*

The' infernal minister advanced
Seized the due victim, and with fury *lanced*
Her back, and piercing through her inmost heart,
Drew backward. *Dryden.*

LANCELLOTTI (Gianpaolo), an eminent jurist, was born at Perugia about the year 1510. He was first noticed as a teacher of the law at his native place, and was engaged by pope Paul IV. to draw up an institute of canon law, in imitation of Justinian's Institutes of civil law. This was published in 1653, and went very quickly through several editions. It was annexed to the body of canon law, and still retains its place in the modern editions of that compilation. He was the author of other treatises on legal subjects, and of a life of Bartolus. He died at Perugia in 1591.

LANCELOT (Claude), a learned French writer, born in 1616. He was a Benedictine of St. Cyran, whence he was exiled to Lower Brittany, where he died in 1695. He wrote, 1. Nouvelle Methode pour apprendre la Langue Latine, 8vo. 2. Nouvelle Methode pour apprendre le Grec, 8vo. Both have been translated into English, under the title of Port Royal Grammars.

LANCEROTA, one of the group of the Canary Islands, remarkably subject to volcanoes. One took place in 1730, on so great a scale as to destroy nine villages, and spread desolation over a highly fertile and cultivated region. The whole western side is still black, parched, and stripped of vegetable mould. But the eastern part contains plains of considerable fertility, and the camel thrives here. M. Humboldt estimates the height of the volcanic mountain at not more than 1800 feet, though from the sea it has a much loftier appearance. The ancient inhabitants are said to have been more polished than those of the other Canaries, and had the singular custom of one woman having several husbands. Lancerota at present contains about 10,000 inhabitants; and it produces a little cotton, sugar, honey, and wool. They export corn, and a large quantity of dried goats' flesh. The island is about thirty miles in length, and eight in breadth. On the south-east side are two good ports within reefs, called Puerto de Naos and Puerto Cavallos. The former, which is the northern, is well sheltered from the north-east; and, the reefs breaking off the swell, the water is perfectly smooth, and here vessels in want of refitting usually put in. It has two entrances between the reefs; the north one has only fourteen feet at high water, and the south seventeen feet; the depth within is twenty-seven to ten feet, rise of tide ten feet. Puerto Cavallos is one mile south of Puerto Naos; it is formed on the north-east by a small island joined to the main by a bridge; on the island are the ruins of a castle: on the south-west it is bounded by a rocky ledge running off from the shore in the middle of the channel, which has but twelve feet; within the depth is seventeen feet.

The LANCET is sharp-pointed and two-edged, chiefly used for opening veins in the operation of bleeding; also for laying open abscesses, tumors, &c.

LANCETI, a name given by the ancient laws of England to a kind of vassals, who were obliged to work for the lord one day in a week, from Michaelmas to autumn, either with fork, spade, or flail, at the option of the lord.

LANCIANO, a large town of Naples, in Abruzzo Citra, about four miles from the coast

of the Adriatic, stands on a river of the same name. It has two great annual fairs, and a considerable trade. Population 9000. Eighty-five miles E. N. E. of Rome, and eighty-four north of Naples.

LANCISI (John Marc), an eminent Italian physician, born at Rome in 1654. From his earliest years he attended to natural history; and studied botany, chemistry, anatomy, and medicine. In 1688 pope Innocent XI. appointed him his physician and private chamberlain, notwithstanding his youth; and cardinal Altieri Camerlinga made him his vicar for the installation of doctors in physic, which pope Clement XI. continued to him, with the other appointments conferred on him by his predecessor. He died in 1710, after giving his fine library of more than 20,000 volumes to the hospital of the Holy Ghost, for the use of the public. It was opened in 1716, in the presence of the pope and most of the cardinals. He wrote many works which are esteemed. They were collected and printed at Geneva, in 1718, in 2 vols. 4to.

LANCRINCK (Prosper Henry), a painter of considerable note, born in 1628, and educated in the school at Antwerp. He studied principally after Titian and Salvator; and met with encouragement in England suitable to his merit. His landscapes show a good invention, good coloring, and harmony; they are chiefly of rough rude country, with broken ground and striking scenery. He died in 1692.

LAND, *n. s.*, *v. a.*, & *v. n.*
LAND'BRED, *adj.*
LAND'ED, *adj.*
LAND'CARRIAGE, *n. s.*
LAND'FLOOD, *n. s.*
LAND'FORCES,
LAND'HOLDER,
LAND'ING,
LANDING-PLACE,
LAND'-JOBBER,
LAND'LADY,
LAND'LESS, *adj.*
LAND'LOCKED,
LAND'LOPER, *n. s.*
LAND'LORD,
LAND'MARK,
LAND'SCAPE,
LANDS'MAN,
LAND'-TAX,
LAND'-WAITER,
LAND'WARD, *adv.*

Saxon, lanð; Goth. *land*, and so in all the northern dialects. A country, or region, &c.; hence, a people, its inhabitants; earth; ground; a real estate; also (obsolete, Saxon hlond), urine: to land is to set or come on shore: landed having an estate in land: landloper (Belg. *landlooper*) a landsman, one who is used to run about on shore. See ELOPE. Landscape (Belg. *landschape*) the shape or appearance of the land: land-waiter, a custom-house-officer, who waits or attends on the landing of goods. We believe the other compounds will explain themselves.

Netheless I sey to you that to the *lond* of Sodom it schal be lesse peyne in the dai of dome than to thee.
Wiclif. Matt. xi.

Abraham sojourned in the *land* of promise as in a strange country, dwelling in tabernacles. *Heb.* xi. 9.

And in a *launde*, upon a hill of floures,
Was set this queene, this noble goddesse Nature;
O braunchis were her hallis and her boures
I wrought after her craft and her mesure. *Chaucer.*

They are invincible by reason of the overpouring mountains that back the one, and slender fortification of the other to *landward*. *Sandys' Journey.*

The nations of Scythia, like a mountain flood, did overflow all Spain, and quite washed away whatsoever reliques there were left of the *landbred* people.
Spenser's State of Ireland.

This regard shall be had, that in no place, under any *landlord*, there shall be many of them placed together, but dispersed. *Id.*

He kept himself within the bounds of loyalty, and enjoyed certain *lands* and towns in the borders of Polonia. *Knolles*

The legions, now in Gallia, sooner *landed*
In Britain. *Shakspeare. Cymbeline.*
Let him *land*,
And solemnly see him set on to London.
Shakspeare.

A *landless* knight makes thee a *landed* squire. *Id.*
Thy ambition,
Thou scarlet sin, robbed this bewailing *land*
Of noble Buckingham. *Id. Henry VIII.*

To forfeit all your goods, *lands*, and tenements,
Castles and goods whatsoever, and to be
Out of the king's protection. *Id.*

Land ye not, none of you, and provide to be gone from this coast within sixteen days.
Bacon's New Atlantis,

Men, whose living lieth together in one shire, are commonly counted greater *landed* than those whose livings are dispersed. *Bacon.*

Let the stairs to the upper rooms be upon a fair, open newel, and a fair *landing-place* at the top. *Id.*

With eleven thousand *land* soldiers, and twenty-six ships of war, we within two months have won one town. *Id.*

This man is freed of servile bands,
Of hope to rise, or fear to fall:
Lord of himself, though not of *lands*,
And having nothing, yet hath all. *Wotton.*

By *land* they found that huge and mighty country.
Abbot.

Probably *land-damn* was a coarse expression in the cant strain, formerly in common use, but since laid aside and forgotten, which meant the taking away a man's life. For *land* or *lant* is an old word for urine, and to stop the common passages and functions of nature is to kill. *Hanmer.*

Apprehensions of the affections of Kent, and all other places, looked like a *landflood*, that might rol. they knew not how far. *Clarendon.*

The *land-marks*, by which places in the church had been known, were removed. *Id.*

I' the' midst, an altar, as the *land-mark*, stood,
Rustick, of grassy sod. *Milton*
The sun, scarce uprisen,
Shot parallel to the' earth his dewy ray,
Discovering in wide *landscape* all the east
Of Paradise, and Eden's happy plains. *Id.*

Necessity makes men ingenious and hardy; and, if they have but *land*-room or sea-room, they find supplies for their hunger.
Hale's Origin of Mankind.

The princes delighting their conceits with confirming their knowledge, seeing wherein the sea-discipline differed from the *land*-service, they had pleasing entertainment. *Sidney.*

Cromwell's officers, who were for levelling lands while they had none, when they grew *landed*, fell to crying up magna charta. *Temple.*

We behold in France the greatest *land-forces* that have ever been known under any Christian prince.
Temple.

Fate and the gods, by their supreme command,
Have doomed our ships to seek the Latian *land*.
Dryden's Æneid.

He who rules the raging wind,
To thee, O sacred ship, be kind,

Thy committed pledge restore,
And *land* him safely on the shore.
Id. Horace.

I *land* with luckless omens: then adore
Their gods. *Id. Æneid.*

They turn their heads to sea, their sterns to *land*,
And greet with greedy joy the' Italian strand.
Dryden.

I writ not always in the proper terms of navigation, or *land-service*. *Id. Æneid.*

These answers, in the silent night received,
The king himself divulged, the *land* believed.
Dryden.

Though they are not self-evident principles, yet, if they have been made out from them by a wary and unquestionable deduction, they may serve as *land-marks*, to shew what lies in the direct way of truth, or is quite besides it. *Locke.*

Money, as necessary to trade, may be considered as in his hands that pays the labourer and *land-holder*; and, if this man want money, the manufacture is not made, and so the trade is lost. *Id.*

If mortgages were registered, *land-taxes* might reach the lender to pay his proportion. *Id.*

Once in three years feed your mowing *lands*, if you cannot get manure constantly to keep them in heart.
Mortimer.

The *landing-place* is the uppermost step of a pair of stairs, the floor of the room you ascend upon.
Moxon.

A house of commons must consist for the most part of *landed* men. *Addison's Freeholder.*

There is a staircase that strangers are generally carried to see, where the easiness of the ascent, the disposition of the lights, and the convenient *landing*, are admirably well contrived. *Id. on Italy.*

There are few natural parts better *landlocked*, and closed on all sides, than this seems to have been.
Id.

Upon our arrival at the inn, my companion fetched out the jolly *landlord*, who knew him by his whistle.
Addison.

We are like men entertained with a view of a spacious *landscape*, where the eye passes over one pleasing prospect into another. *Id.*

What the Romans called vestibulum was no part of the house, but the court and *landing-place* between it and the street. *Arbuthnot on Coins.*

The species brought by *land-carriage* were much better than those which came to Egypt by sea.
Arbuthnot.

Beneath his steely casque he felt the blow,
And rolled, with limbs relaxed, along the *land*.
Pope.

Oft in her glass the musing shepherd spies
The watery *landscape* of the pendant woods,
And absent trees, that tremble in the floods.
Id.

LANDA, a territory of the island of Borneo, on a northern arm of the river Pontiana. The rajah's residence is on the projecting corner of a mountain, to which there is an ascent by 118 steps, and two rivers flow right and left of the base. It has a strong capital of this name, well provided with artillery, and in the territory are gold mines of some importance.

LANDAFF. See LLANDAFF.

LANDAU, a small but ancient and celebrated town of Germany, in Lower Alsace, annexed to France before the revolution, but now included in the Bavarian circle of the Rhine. It was formerly imperial, and in 1291 was endowed with the same privileges as Haguenau. In 1680 it was confirmed to Louis XIV. and strongly fortified by Vauban; yet, in 1702, it was taken by the Austrians. In 1703, 1704, and 1713, it was alternately retaken by the French and Austrians. In 1714 it was ceded to France by the treaty of Baden. In 1793 the Austrians and Prussians attacked it but without success. It contained about 4000 citizens in 1789. It is seated on the Quiech, six miles east of Strasburg, and 347 east of Paris; and has a collegiate church, common to the Lutherans and Catholics, a lyceum lately founded by the Bavarian government, two monasteries, and 4250 inhabitants. The French retained it in the treaty of Paris of 1814, but the following year it was assigned to Bavaria.

LANDEN (John), F.R.S., an eminent mathematician, born at Peakirk, near Peterborough, in Northamptonshire, in January 1719. He became very early a proficient in the mathematics; for we find him contributing, in the Philosophical Transactions for 1754, An Investigation of some Theorems which suggest several very remarkable properties of the circle. In 1755 he published a volume of about 160 pages, entitled Mathematical Lucubrations. In 1762 he was appointed agent to earl Fitzwilliam, an employment which he retained till within two years of his death. About the end of 1759 he published proposals for printing by subscription The Residual Analysis, a new branch of the Algebraic Art; and in 1758 published a small tract in 4to. entitled A Discourse on the Residual Analysis, in which he resolved a variety of problems by a mode entirely new. In the fifty-first volume of the Philosophical Transactions for 1763 he gave A new method of computing the sums of a great number of infinite series. He published in 1764 the first book of The Residual Analysis, in a 4to. vol. of 218 pages, with several copper-plates. In this treatise, besides explaining the principles on which this new analysis was founded, he applied it to drawing tangents and finding the properties of curve lines, &c. On the 16th of January, 1766, he was elected F.R.S. In the fifty-eighth volume of the Philosophical Transactions for 1768 he gave a Specimen of a new method of comparing curvilineal areas. In the sixtieth volume, Some new theorems for computing the whole areas of curve lines, where the ordinates are expressed by fractions of a certain form, in a morce concise and elegant manner than had been done by Cotes, De Moivre, and others, who had considered the subject before him. In the sixty-first he investigated several new and useful theorems for computing certain fluents, which are assignable by arcs of the conic sections. In 1771 he also published, Animadversions on Dr. Stewart's computation of the Sun's distance from the Earth. He continued in this manner contributing, to the Philosophical Transactions, various papers on mathematical subjects for the greater part of his life. He in 1780 published a volume of Memoirs; with a valuable and extensive appendix containing Theorems for the Calculations of Fluents. The tables which contain these theorems are more complete than any to be found elsewhere. The second volume of his Memoirs was written and revised during the intervals of dreadful fits of the stone. This volume, besides a

solution of the general problem concerning rotatory motion, contains the resolution of the problem concerning the motion of a top; an investigation of the motion of the equinoxes, in which Mr. Landen was the first who pointed out the cause of Sir Isaac Newton's mistake in his solution of this celebrated problem: and some other papers of considerable importance. He just lived to see this work finished, and received a copy of it the day before his death, which happened on the 15th of January 1790, at Milton, near Peterborough.

LANDEN, a small town of the Netherlands, in the ci-devant province of Austrian Brabant. Two bloody battles have been fought near it a century distant in point of chronology. The first was on the 22th of July 1693, between the allied forces under king William III. and the French under the duke of Luxemburg, wherein the latter were twice repulsed, and, though at last victorious, had about 15,000 men killed, and about 10,000 wounded. The French army amounted to 80,000 men, and that of the allies to little more than 40,000. The second battle was fought on the 18th of March 1793, between the French republicans and the Austrians; when the former were so completely defeated, that they were compelled for a time to evacuate the whole Austrian Netherlands. Landen is seated on the Beck, nineteen miles south-east of Louvain.

LANDER, (Richard), the African Traveller, was the attendant of Captain Clapperton on his second expedition into the interior of Africa. He started with his master from the Bight of Benin, and after the death of that gentleman, at Soccatoo, in April 1827, Lander returned to the coast. In 1830, he set out again, ccompanied by his brother John, upon another exploring journey, and landed at Badagry, on the 25th of March. They reached the river at Boussa, from thence ascended to Youri, and the Cubbie, which comes from Soccatoo. They next descended the river which flows nearly south from Bussa, and which, after receiving the Shary, expands into a large lake, and thence empties itself, by several mouths, into the Bight of Benin. The mouth by which the Landers reached the sea is called the Nun; and the point where Park began his descent upon the same river is 2000 miles, by the river's course, from the mouths discovered by the Landers. To establish fully the truth of this last discovery, Lander again undertook the cause of geographic science, and having purchased an Island in the river Nun, about 300 miles from its mouth, established a factory upon it. Here he sent an iron steam-boat, prepared for a voyage up the Niger, and in the very act of following the steamer to commence the great object of his life, was killed by a party of natives, who first fired upon him and his party from the beach, and then followed in their war-canoes to complete the cruel work begun in so dastardly a manner. Lander's death occurred in the spring of 1834.

LANDES, or LANDES DE BORDEAUX, France, a country formerly comprehended in the province of Gascony. It extends about ninety miles from the Adour to Bourdeaux, and now forms the greater part of the departments of Landes and the Gironde. It has received its name from the circumstance of the soil being poor, sandy, and covered with furze; and has indeed the appearance of a desert, with here and there a patch of pasture, and richly cultivated land. On the sea-coast is a range of sandy downs of from six to nine miles broad, part of which is covered with fine plantations of firs, the planting of which is much encouraged by the government, and will perhaps finally tend to the covering and fertilising this long range of hills.

LANDES, DEPARTMENT DES, France, is formed of part of the former province of Gascony, and derives its name as above. The principal place of this prefecture is Mont de Marsan; it has three arrondissements; Mont de Marsan, containing 82,364 inhabitants; Dax, 90,362; and St. Sever, 83,585; making a total population of 256,311 souls, twenty-eight cantons, and 352 communes. It extends over an area of 4212 square miles, yielding a revenue of 7,537,000 francs, is included in the eleventh military division, has a royal court at Pau, and is in the diocese of Bayonne. It is divided into two electoral arrondissements, and sends three members to the chamber of deputies.

This department is bounded on the north by that of the Gironde, on the east by those of Lot et Garonne and the Gers, on the south by that of the lower Pyrenees, and on the west by the sea. The territory presents two natural divisions, formed by the course of the Adour: the first, which lies to the south of this river, bears the name of Chalosse, presenting to the eye plains covered with wheat and maize, and delightful hills adorned with vines: the second, which is the far larger portion, is almost entirely covered with heath, woods, marshes, ponds, and vast plains of sand. An immense forest of pines spreads between these lands and the sea, with a small population thinly scattered over it. Sandy and naked downs, from three to nine miles broad, and sixty miles long, spread over the coast, opposing an insuperable barrier to the violence of its waves, and rendering the shore inaccessible to navigators; these are intersected with plots of excellent pasturage, feeding a great number of horned cattle and sheep, as well as horses of a small size, but excellent for service. The climate is temperate, but rather hot than cold.

The inhabitants of so wild a country must necessarily be almost savages; yet in these lands there are some well-built houses, provided with good furniture; some of the peasants are even rich, but the greater part may be considered as shepherds; their isolated and ill-built cottages have no allurements to attach them to the soil, and they can very easily remove them. The chief person in the cottage takes the direction of the tillage and rustic labors, and seldom goes out to any distance; but the young people go out into the forests to cut wood, to the distance of twenty-four or thirty miles, and make charcoal of a part of it: others go to an equal distance to feed their flocks. In these excursions each person carries with him a few cheeses, a bundle of pilchards, and a little saucepan to cook his maize and bacon. Having arrived at the place of destination, they construct their huts of the branches of trees, and

proceed to feed their flocks or prepare their charcoal. They are also furnished with fowling-pieces to hunt during their leisure moments; they are skilful marksmen, and generally supply Bourdeaux, Dax, Bazas, and other places round, with game. As it is unpleasant to walk on the sands, in this country, the inhabitants make use of sticks four or five feet long, to which they attach a piece of an ox's bone to rest their feet on. On these stilts, which they call changuees, they walk so easily and quickly that a horse can with difficulty keep pace with them.

The soil, being mostly so sandy and covered with heath, requires horses to cultivate it; and its harvests are very inadequate to the wants of the people. There are in this department 127,412 hectars of forests, and 19,500 of vineyards, and the mean produce of the tilled land is six francs twenty-five centimes. Its productions comprise a small quantity of wheat, rye, buck-wheat, maize, millet, vegetables, panic or Hungarian corn, potatoes, flax, hemp, excellent fruits, highly esteemed wines, wood, fine natural and artificial meadows, saffron, woad, madder, pine-apples, cork; large and small game, such as red and gray partridges, ortolans, &c.; fish of all kinds, particularly turtles, leeches, &c.: horses, mules, oxen, numerous flocks of sheep, a great number of goats, pigs that run wild in the woods, the flesh of which is preferred for hams; poultry, especially geese and ducks; and bees. There are also mines of iron, coal, and bitumen; quarries of marble, brown freestone, plaster, mill-stones, stones for lithographic purposes, basalt, pozzollona, peat, porcelain clay and clay for crucibles. Mineral and warm springs are found at Dax, Tercis, Canjac, Macey, Meylis, Saubaise, Pouillon, Ponson, and Préhac.

The manufactures consist of cloth for veils, table-linen, liqueurs, wine vinegar, resin, pitch, tar, sail-canvas, and lamp-black. Their tanneries are celebrated, as also are their potteries, china factories, glass-houses, forges, and blast-furnaces. They also work, in various ways, the firs with which the country is covered, and prepare delicately flavored hams, known by the name of Bayonne hams. Their commerce consists in grain, wines, brandies, vegetables, linseed oil, hams, wood for masts and building, firs, resinous materials, &c. This country is the mart of the trade between France and Spain.

The principal rivers which water this department are the Adour and the Gave de Paw navigable, the Luys, the Leyre, the Gabas, the Louts, the Midou, and the Douze. The great roads from Bourdeaux, Bayonne, and Pau, cross it.

LANDGRAVE (from land, German, earth, and graff and grave, a judge or count) was a title given to those who executed justice in behalf of the emperors, with regard to the internal policy of the country. It does not seem to have been used before the eleventh century. Those judges were first appointed within a certain district of Germany; in time the title became hereditary, and the judges assumed the sovereignty of the several districts over which they presided. Landgrave is now applied, by way of eminence, to those sovereign princes of the empire, who possess by inheritance certain estates called landgravates, and of which they receive the investiture from the emperor. There are also other landgraves, who are not princes, but counts of the empire.

LAND-LOCKED is when land lies all round the ship, so that no point of the compass is open to the sea. If she is at anchor in such a place, she is said to ride land-locked, and is therefore concluded to ride safe from the violence of the winds and tides.

LANDSBERG, a well-built town of Brandenburg, Prussia, which has a good bridge over the Wartha, and carries on a brisk trade in wool, woollens, cottons, and corn, with Silesia and Poland. In 1758 it was besieged by the Russians; and in 1768 suffered severely from fire. Population 6000. Twenty-four miles E. N. E. of Custrin, and seventy-four east of Berlin.

LAND'SCAPE, or LAND'SKIP, *n. s.* 1. A region; the prospect of a country. 2. A picture representing an extent of space, with the various objects in it.

LANDSCAPE GARDENING is a branch of the picturesque that was scarcely at all attended to in this country prior to the close of the last century The interminable alleys, and closely clipped yew tree hedges, then began to give place to picturesque arrangements more in accordance with those of nature; and, as art began to attain a higher degree of eminence, its presence became less and less perceptible. As the great object with the landscape gardener is to produce a series of picturesque views from the mansion, or principal edifice, we must commence with this part of the subject.

The residence should be approached by a line of gravel road winding up a commanding slope, so that the ornamental offices would be seen between and above the plantations as they are passed. The house itself would then be occasionally viewed through the intervening masses of trees, and the grounds should gradually open to an increased display, towards which its elevated terrace in front would contribute, besides affording an ample platform on which the building would stand. The terrace becomes a means of uniting the building with the grounds, removing the field-like approximation of the lawn on the spot where the objection commonly existing to its introduction would be the most apparent, and from this platform the scenery will combine a park-like effect with home views. From the southern side, the expanse must be varied by a series of undulations, and enriched by groups, masses, and single trees, in the foreground. Mr. Papworth, who has written an interesting book on this subject, recommends the introduction of a long corridor, and series of covered ways, with an aviary and pheasantry. 'This corridor, being entered from the vestibule, would lead the spectator forward to a considerable length, and until he would arrive at the rosiary. Along this extensive line of covered way, statues, vases, plants, and other embellishments of art and nature might be placed to advantage, and receive the protection of ample shelter.'

The rosiary at the extremity of the avenue is circular, and contains in the centre a fountain and receptacles for gold and silver fish. As this portion of the garden is usually placed upon the projecting point of the hill on which the house is situate, it commands views of the surrounding country, and that of the house grounds, in which water should be a leading feature. It is in these select spots, in the neighbourhood of the house, that evergreen shrubs are chiefly placed, and about which walks are planned, for the purpose of being benefited by verdure in all seasons of the year. By these means, buildings and works of art are connected with both natural as well as landscape scenery; and, being mixed with trees of the deciduous kind, they may be made gradually to yield their compact and deep-toned effects, and insensibly unite with the park arrangements.

The kitchen garden should form a part of the arrangements for walks, and be so connected with the pleasure grounds that it may be entered from a variety of points. This circumstance, to many, is not of value; but, although the kitchen garden is not arranged for pleasure, its utility and perpetually changing culture give it importance as a feature in landscape gardening.

Land Surveyor, *Agriculture*, the common name of one whose business is the planning and surveying of lands or estates.

It is remarked by Mr. Marshall that land surveyors are not only useful merely to measure, and map the whole or parts of estates, but to assist in matters of arbitration and the amicable adjustment or settlement of disputes, as well as being highly useful in the management of landed property. See Surveying and Mapping.

Landed Property. All the particulars essential to a right understanding of the legal value of this species of property will be found amply discussed in the articles Law, Lease, Copyhold, &c., and we propose in the present case to confine ourselves to the best mode of valuing. The particular circumstances that require to be considered, as giving value to land, are chiefly these:—1. The quantity of the land, which is the ground-work of the calculation; though it has little weight in the scale of valuation. The fee-simple value of an acre of land may be less than 20*s*., or it may be more than £100. Nevertheless, it is on the quantity the rental value is calculated; and it is usual for the person who parts with it to exhibit a 'Particular' of the estate or property on its disposal, showing, or which ought to show, not only the aggregate quantity, but the number of acres that each piece or parcel contains, as well as other matters; and ought, most particularly, to specify the distinct quantities of the lands of different qualities, in order that their several rental values may be ascertained with greater ease and accuracy.

2. The intrinsic quality of the land, which is essential in forming the estimate. But even this, in a general view of the value of lands throughout the kingdom, is often, it is said, of secondary consideration; for in many cases their values are given by situation, rather than by soil and substrata. In some cases, as has been seen, the value of the situation may be a great many times more than that of the intrinsic value of land. But this excessive influence of situation is, however, limited in its effects, and is chiefly confined to the environs of large towns, and other extraordinary markets for produce of the farm kind. A great majority of the lands of this country owe their values less to situation than to intrinsic quality; and to come at this with sufficient accuracy is the most requisite, and at the same time the most difficult part of valuation, as it depends almost wholly on extemporary judgment, exercised on the frequently few data which rise to the eye in passing over the field of estimation. It is therefore almost needless to state that to acquire the degree of judgment which is necessary to the execution of this difficult critical task, it is required to know and be perfectly acquainted with the nature and productiveness of lands of different appearances—a sort of knowledge which scarcely any thing but mature practice in the cultivation and use of lands of different qualities can sufficiently teach; though long habit may do much in ordinary cases towards hitting off the value of lands, without an extensive knowledge of the practice of agriculture.

There are cases however, it is said, in which both of these qualifications are found insufficient to give any accuracy of judgment, even among provincial valuers of land; and a person who ventures to step forward as a universal valuist should have either an extraordinary talent for the purpose, or should, after a suitable initiation, have had great experience in rural concerns in different parts of the kingdom.

3. The situation, which, although it has been already stated that the value of the lands of this country, aggregately considered, depends less on situation than on intrinsic quality, yet in every part it has great influence. Thus an acre of land, the intrinsic quality of which renders it, in an ordinary situation, in what regards locality, merely worth 20*s*. the acre, would not, it is observed, in some districts or places, be worth more than 15*s*., while in others it would bear to be estimated at 25*s*., or even a higher price of rent, to a farmer on a large scale, and away from the immediate environs of a town, or any populous district of manufacture, for reasons that will be seen in examining the different particulars of situation. In the temperature of situation, too, whether it be given by elevation, aspect, or exposure, a powerful influence is formed, which is capable of altering exceedingly the value of lands. The same sort of soil and subsoil, it is said, which is not unfrequently seen on exposed mountains, and hanging to the north, and which in that situation is not worth more than 5*s*. an acre, would, if situated in a sheltered vale tract, and lying well to the sun, be worth 20*s*. or a greater rent. Even on climature, something considerable in the business, it is thought, depends. In the southern part of the country, the harvest is in general a month earlier than in those of the north, though it is not regulated exactly

by the climate or the latitude of the places. This is consequently a circumstance that requires to be attended to by those who estimate the value of estates or lands; for an early harvest is not only advantageous in itself, but gives time to till the ground, or to take an autumnal crop, which are advantages that a late harvest will not admit of being had. And another kind of temperature of situation has still, it is supposed, more influence on the value of lands, which is that of the moistness of the atmosphere. A moist situation not only gives an uncertain and often late harvest, but renders it difficult and hazardous; as is too frequently experienced on the western coast sides of this island. Even in the turn of the surface, exercise is found, it is said, for the judgment. Lands lying from too steep or too flat surfaces, particularly when of the arable kind, and retentive, are of less value than those which are greatly shelving, so as to give a sufficient discharge to surface-water, without their being difficult of cultivation. Steep-lying lands are not only troublesome and expensive under the operations of tillage, but in taking out manures, and getting off the produce. Lands lying with an easy descent, or on a gently billowy surface, may be worth more by many pounds an acre, in the money they will bring, than others of the same intrinsic quality, hanging on a steep. Another consideration of the same weight in valuing an estate, or other landed property, is a supply of water for domestic purposes, for the uses of live stock, and for the purposes of irrigation. There are situations, it is said, in which a copious stream of calcareous water would enhance the fee-simple value of a large estate some thousands of pounds. Likewise a sufficient supply of manure, whether dung, lime, marle, or other melioration, being at a moderate price, and within a moderate distance of land-carriage, materially adds to the intrinsic value of lands: and the established practice of management of the district or county in which an estate or land lies is capable of enhancing or depressing the value of it exceedingly. Even the single practical point of ploughing light and loamy lands with two oxen, or two active horses, instead of four heavy ones, is capable of making a difference on good land which is kept alternately in herbage and corn crops of from 5*s*. to 10s. a year, on the acre; or £10 an acre in the money value which it is worth.

The price of labor is also stated as another regulation of the marketable value of land in a given district. It is always right, however, to compare this with the habits of exertion and industry which prevail among farm workmen, before the nett amount of labor can be safely set down. The price of living too, or expense of house-keeping, prevalent among farmers, has its share of influence on the value of lands. In the more recluse parts of the north of this country, the farmers, especially of the lower and the more inferior classes, and their servants, are fed, clothed, and accommodated, at nearly half the expense of those of a similar degree in many parts of the more central and southern districts. In a county where frugality prevails, too, lands of a given quality will even, it is said, bear a higher rent than they will where a more profuse manner of living has gained a footing. Hence, likewise, the spirit of improvement, or the prejudice against it, which prevails in a district, is a circumstance of some value, it is supposed, in this intention; for if the former be in a progressive state, especially if it be still in the more early stages of its advancement, a rapid increase of rent may with a degree of certainty be expected; whereas, under the leaden influence of the latter, half a century may, it is thought, pass away, before the golden chariot of improvement can be profitably put in motion. And, lastly, may be noticed, it is said, the attractive centre to which the labors of the husbandman will ever tend—markets, in which, more than in any other circumstance, we are to look for the existing value of lands.

LANDSCRONA, a sea-port town of Sweden, four leagues south of Helsingborg, is a staple town, and has a small well-sheltered port, with twenty feet water. It is defended by a fort on a little sandy island, and by a citadel on the main. Between Helsingborg and Landscrona is the village of Rosa; and between Landscrona and Malmœ, those of Bairebeck, Hut, Berby, and Allart. Inhabitants 4000. It has manufactures of gloves, and a brisk annual fair.

LAND'S END, a promontory of Cornwall, the most westerly point of Great Britain. It was called by Ptolemy Bolerium, and Αντιυεϛαιον or Antivestæum, and by Diodorus Belerium, as Cambden conjectures, from the British word Pell, signifying remote. The ancient British bards called it Penrighnaed, or the Promontory of Blood; and their historians Penwith, or the promontory to the left. The Saxons called it Penwithsteort, and the inhabitants Pen-von-las, or the land's end. A tradition obtains that this head ran further out into the sea, and that the ground now covered was denominated Lioness. On the outermost rocks are to be seen veins of lead and copper at low water. Long. 5° 45′ W., lat. 50° 6′ N.

LANDSHUT, a well-built town of Bavaria, capital of a district. It has two electoral palaces, a college, and two churches. The steeple of one of them is the highest in Germany, being 456 feet in elevation. The university of Ingolstadt was removed to Landshut in the year 1800; and having been re-organised, and richly endowed by that monarch, received the name of the University of Louis Maximilian. There are thirty-four ordinary and four extraordinary professors; the number of students varies from 500 to 600. The principal building is the once spacious Dominican convent. Its revenue is derived, in a great measure, from the funds of the suppressed monasteries; and it is said to average about £9000 sterling a-year. There is besides an academy and a divinity school at Landshut. Brewing and distilling are carried on to a great extent, and there are also manufactures of leather, cloth, and watches. The position of the town always exposes it to suffer severely in war: as appeared in 1742 and 1743; and also in the invasions of the French in 1796, 1800, 1805, and 1809. It is seated on the Iser, thirty-two

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miles north-east of Munich, and thirty-six south-east of Ingolstadt.

There is also a manufacturing town of Prussia in Silesia of this name. Population about 3000. Twenty miles W. S. W. of Schweidnitz.

LANE, *n. s.* Sax. lana; Swed. *lana;* Belg. *laan.* A narrow pass or road in the fields; an alley; any confined passage.

All flying
Through a strait *lane*, the enemy, full-hearted,
Struck down some mortally. *Shakspeare. Cymbeline.*

The earl's servants stood ranged on both sides, and made the king a *lane.* *Bacon's Henry VII.*

I know each *lane*, and every alley green,
Dingle or bushy dell, of this wild wood,
And every bosky bourn. *Milton.*

Through a close *lane* as I pursued my journey. *Otway.*

A pack-horse is driven constantly in a narrow *lane* and dirty road. *Locke.*

There is no street, nor many *lanes*, where there does not live one that has relation to the church. *Sprat's Sermons.*

LANFRANC, an Italian, born at Pavia, who became archbishop of Canterbury in 1070. He disputed against Berengarius in the council held at Rome in 1059, and wrote against him concerning the real presence in the eucharist. He courageously resisted the authority of pope Gregory VII. and died in 1089.

Lanfranc (John), an eminent Italian history painter, born at Parma in 1581. He was the disciple of Augustin Caracci; and, after his death, of Hannibal, whose taste in design and coloring he so happily attained, that he was entrusted to execute some of his designs in the Farnesian palace at Rome. These he finished in so masterly a manner, that the difference is imperceptible to this day between his work and that of his master. He had a peculiar facility in designing and in painting large compositions, either in fresco or in oil: he did indeed aspire to the grace of Correggio, but could never arrive at his excellence; his greatest power being manifested in composition and foreshortening. He was deficient in correctness and expression; and his coloring, though sometimes admirable, was frequently too dark. By order of pope Urban VIII. he painted, in St. Peter's church at Rome, the representation of St. Peter walking on the water, which afforded the pope so much satisfaction that he knighted him. He died in 1647.

LANGBAINE (Gerard), D. D., a learned English writer, was born in 1608. He was educated at Queen's College, Oxford; and became keeper of the archives of that university, provost of his college, and D. D. He was highly esteemed by archbishop Usher, Selden, and several other learned men; and died in 1657-8. He published, 1. Longinus, in Greek and Latin with notes. 2. A Review of the Covenant; and other works.

LANGE (Charles Nicholas), an ingenious Swedish naturalist, who published, 1. Historia Lapidum figuratorum Helvetiæ. 2. Origo eorundorum, et methodus Testaceæ Marinæ distribuendi.

Lange (Joseph), professor of Greek at Friburg, in the end of the sixteenth century. He published, 1. Polyanthea, in 2 vols. folio. 2. A Florilegium, and, 3, Elements of Mathematics.

LANGELAND (Robert), an English poet of the fourteenth century, born in Shropshire, and one of the first disciples of Wickliffe the reformer. He wrote The Visions of Pierce Plowman; a piece which abounds with imagination and humor, though dressed in very uncouth versification and obsolete language. It is written without rhyme, an ornament which the poet has endeavoured to supply by making every verse begin with the same letter. Dr. Hickes observes, that this kind of alliterative versification was adopted by Langeland from the practice of the Saxon poets, and that these visions abound with Saxonisms: he styles him celeberrimus ille satirographus, morum vindex acerrimus, &c. Chaucer and Spenser have attempted imitations of his visions, and the learned Selden mentions him with honor.

LANGENSALZA, a town of Prussian Saxony, the capital of Thuringia, situated upon the Salza, near its confluence with the Unstrut. It has two parish churches, a castle, a theatre, a high-school in great repute; and has manufactures of silk, woollen, cotton, gunpowder and starch. Population 5400. Fourteen miles west of Erfurt.

LANGER-OOG, a narrow sandy island, subject to Hanover, on the north-west coast of Germany. It is thirteen miles in circuit, and does not contain more than 100 inhabitants. Long. 7° 35′ E., lat. 53° 44′ N.

LANGHORNE (John), D. D., son of the Rev. Joseph Langhorne of Winston, was born at Kirkby-Stephen, in Westmoreland. His father died when he was young. After entering into orders, he became tutor to the sons of Mr. Cracroft, a Lincolnshire gentleman, whose daughter he married. Dr. Langhorne held the living of Blagden in Somersetshire at the time of his death, which happened April 1st 1779. He was the author of, 1. Poems in 2 vols. 1766. 2. Sermons in 2 vols. 1773. 3. Effusions of Fancy, 2 vols. 4. Theodosius and Constantia, 2 vols. 5. Solyman and Almena. 6. Frederick and Pharamond, or the Consolations of Human Life, 1769. 7. A Dissertation on the Eloquence of the Pulpit; and, 8, another on Religious Retirement. He also published the Works of St. Evremond; the Poems of Collins; and some other articles.

LANGIUS (John), M. D., a physician of Silesia, born in 1485. He graduated at Pisa, and became physician to four electors Palatine. He published at Basil, in 4to. 1553, Medical Epistles, which are curious. He died in 1565.

LANGLAND, or Long Island, an island of Denmark, between Funen and Laaland, is ten leagues long and only one broad, containing seventy square miles, and 12,000 inhabitants. It produces some corn, potatoes, and flax; and exports salted meat, hides, honey, and wax. Rudkœbing, the only town, on the west, contains 700 inhabitants.

LANGOE, an island of the North Sea, about ninety-three miles in circumference. It is forty-six miles from the coast of the bishopric of Aggerhuus, Norway.

LANGPORT, a well frequented market-town of Somersetshire, 128 miles from London, on the Parrot, between Bridgewater and Crewkern. It is divided into two parts, called Langport-Eastover, and Langport-Westover. It has a church, with a handsome tower, and a little to the east is a small ancient building, called the Hanging chapel, in which is a free-school, founded by Thomas Gillet, in the seventeenth century. Its lighters constantly fetch coals, &c., from Bridgewater; and it is a stage for the Taunton waggon, which drops the goods here from London to be carried farther by water. It has a market on Saturday, and four fairs.

LANGREL SHOT, used at sea, consists of two bars of iron joined by a chain or shackle, and having half a ball of iron fixed on each end; by means of which great execution is done among the enemy's rigging. See CHAIN-SHOT.

LANGRES, a town of France, in the department of the Upper Marne, and late province of Champagne. In Cæsar's time it was the capital of the Lingones. It was burnt by Attila, and in A. D. 407 by the Vandals. Its chief trade is in cutlery, serges, cotton cloth, and sulphuric acid. The last is a considerable manufacture here. It affords a grand prospect, being seated on a mountain near the source of the Marne; but the cathedral is the only building worth notice: among the public institutions is an Ecole Chretienne, where 300 poor children are educated. Thirty-five miles north-east of Dijon, and 100 north by east of Rheims. Long. 5° 24′ E., lat 47° 52′ N.

LANGTON (Stephen), one of the most erudite men of his age, was born in England, but educated in Paris, and greatly esteemed for his learning by the king and nobility of France. He was chancellor of Paris, a cardinal of Rome, and in the reign of king John was made archbishop of Canterbury by pope Innocent III. in opposition both to the monks of Canterbury, and to the king. Langton continued archbishop twenty-two years, and died in 1228. A catalogue of his works is given by Bale and Tanner.

LANGUAGE.

LAN'GUAGE, *n. s.*
LAN'GUAGED, *adj.*
LAN'GUAGE-MASTER, *n. s.*
} Fr. *langage*; Lat. *lingua*. Speech; the vernacular tongue of a people: languaged, having various languages.

> Thus lovers, with their moral documents,
> And eloquent *langage*, can exemplifye
> The Craft of Love what it doth signifie.
> *Chaucer.*

> O! good my Lord, no Latin,
> I am not such a tyrant since my coming,
> As not to know the *language* I have lived in.
> *Shakspeare.*

We may define *language*, if we consider it more materially, to be letters, forming and producing words and sentences; but if we consider it according to the design thereof, then *language* is apt signs for communication of thoughts. *Holder.*

> He not from Rome alone, but Greece,
> Like Jason, brought the golden fleece;
> To him that *language*, though to none
> Of the' others, as his own was known.
> *Denham.*

Methinks the highest expressions that *language*, assisted with all its helps of metaphor and resemblance, can afford, are very languid and faint in comparison of what they strain to represent when the goodness of God towards them who love him comes to be expressed! *Barrow.*

> Though his *language* should not be refined,
> It must not be obscure and impudent.
> *Roscommon.*

> Some know no joy like what a word can raise,
> Hauled through a *language's* perplexing maze;
> Till on a mate that seems t' agree they light,
> Like man and wife that still are opposite.
> *Stillingfleet.*

Latin is a more succinct *language* than the Italian, Spanish, French, or even than the English, which, by reason of its monosyllables, is far the most compendious of them. *Dryden.*

They were divided into little independent societies, speaking different *languages*. *Locke.*

The third is a sort of *language-master*, who is to instruct them in the style proper for a minister. *Spectator.*

I have known men, grossly injured in their affairs, depart pleased, at least silent, only because they were injured in good *language*, ruined in caresses, and kissed while they were struck under the fifth rib. *South.*

> Others for *language* all their care express,
> And value books, as women men, for dress;
> Their praise is still—the stile is excellent;
> The sense, they humbly take upon content.
> *Pope.*

> He wandering long a wider circle made,
> And many *languaged* nations has surveyed. *Id.*

The common fluency of speech in many men, and most women, is owing to a scarcity of matter, and a scarcity of words; for whoever is a master of *language*, and has a mind full of ideas, will be apt in speaking to hesitate upon the choice of both; whereas common speakers have only one set of ideas, and one set of words to clothe them in; and these are always ready at the mouth: so people come faster out of a church when it is almost empty, than when a crowd is at the door. *Swift.*

He now busied his mind with literary projects, and formed the plan of a society for refining our *language* and fixing its standard. *Johnson.*

> With eyes that were a *language* and a spell,
> A form like Aphrodite's in a shell! *Byron.*

SECT. I.—OF THE ORIGIN OF LANGUAGE.

As it is evident that there is no instinctive articulated language, it has become an enquiry of some importance, how mankind were first induced to fabricate articulate sounds, and to employ them for the purpose of communicating their thoughts. Children learn to speak by insensible imitation; and, when advanced some years in life, they study foreign languages under proper instructors: but the first men had no speakers to imitate, and no formed language to study; by what means then did they learn to speak? On this question only two opinions can be formed. Language must either have been originally revealed from heaven, or the fruit of human invention. The greater part of Jews and

Christians, and even some of the wisest pagans, have embraced the former opinion; which seems so far to be supported by the authority of Moses, that he represents the Supreme Being as teaching our first parents the names of animals. The latter opinion is held by Diodorus Siculus, Lucretius, Horace, and many other Greek and Roman writers, who consider language as one of the arts invented by man. The first men they represent as uttering for some time only confused and indistinct noises; till, associating for mutual assistance, they came by degrees to use articulate sounds mutually agreed upon. This opinion sprung from the atomic cosmogony framed by Mochus the Phœnician, and afterwards improved by Democritus and Epicurus; and though it is part of a system, in which the first men are represented as having grown out of the earth, like trees and other vegetables, it has been adopted by several modern writers of high rank in the republic of letters; particularly Father Simon, Voltaire, the abbé Condillac, Dr. Adam Smith, the late lord Monboddo; and last, not least, professor Adelung. We shall return to an examination of his elaborate work on this subject.

Drs. Warburton, Delaney, Johnson, Beattie, Blair, and Stanhope Smith of New Jersey, who think that language was originally revealed from heaven, consider all accounts of its human invention as a series of mere suppositions, hanging loosely together, and the whole depending on no fixed principle. The opinions of Diodorus, Vitruvius, Horace, Lucretius, and Cicero, frequently quoted in its support, are in their estimation of no greater authority than the opinions of other men; for, as language was formed and brought to a great degree of perfection long before the era of any historian with whom we are acquainted, the antiquity of the Greek and Roman writers, who are comparatively of yesterday, gives them no advantage in this enquiry over the philosophers of France and England. Aristotle has defined man to be ζωον μιμητικον: and the definition is certainly so far just, that man is much more remarkable for imitation than invention; and therefore, say the reasoners on this side of the question, had the human race been originally mutum et turpe pecus, they would have continued so to the end of time, unless they had been taught to speak by some superior intelligence

The oldest book extant contains the only rational cosmogony known to the ancient nations; and that book represents the first human inhabitants of this earth, not only as reasoning and speaking animals, but also as in a state of high perfection and happiness, of which they were deprived for disobedience to their Creator. Moses, setting aside his claim to inspiration, deserves, from the consistency of his narrative, at least as much credit as Mochus, or Democritus, or Epicurus; and from his prior antiquity, if antiquity could on this subject have any weight, he would deserve more, as having lived nearer to the period of which they all write. But the question respecting the origin of language may be decided without resting on authority of any kind, merely by considering the nature of speech, and the mental and corporeal powers of man. Those who maintain it to be of human invention suppose men at first to have been solitary animals; afterwards to have herded together without government or subordination; then to have formed political societies, and by their own exertions to have advanced from the grossest ignorance to the refinements of science. But, say the reasoners whose cause we are now pleading, this is a supposition contrary to all history and all experience. There is not upon record a single instance, well authenticated, of a people emerging by their own efforts from barbarism to civilisation. There have indeed been many nations raised from the state of savages; but it is known that they were polished, not by their own repeated exertions, but by the influence of individuals, or colonies from nations more enlightened than themselves. The original savages of Greece were tamed by the Pelasgi, a foreign tribe; and were afterwards further polished by Orpheus, Cecrops, Cadmus, &c., who derived their knowledge from Egypt and the East. The ancient Romans, a ferocious and motley crew, received the blessings of law and religion from a succession of foreign kings; and the conquests of Rome, at a later period, contributed to civilise the rest of Europe. In America the only two nations which, at the invasion of the Spaniards, could be said to have advanced a single step from barbarism, were indebted for their superiority over the other tribes, not to the gradual and unassisted progress of the human mind, but to the wise institutions of foreign legislators.

Experience teaches us, continue these writers, that in every art it is much easier to improve than to invent. The human mind, when put into the proper track, is indeed capable of making great advances in arts and sciences; but it has not, in a people sunk in ignorance and barbarity, sufficient vigor to discover that track, or to conceive a state different from the present. If the rudest inhabitants of America and other countries have continued (as there is every reason to believe they have), for ages in the same unvaried state of barbarism; how is it imaginable that people so much ruder than they, as to be ignorant of all language, should think of inventing an art so difficult as that of speech, or even to form a conception of it? In building, fishing, hunting, navigating, &c., they might imitate the instinctive arts of other animals; but there is no other animal that expresses its sensations and affections by arbitrary articulate sounds. It is said that, before language could be invented, mankind must have existed for ages in large political societies, and have carried on in concert some common work; but if inarticulate cries, and the natural visible signs of the passions and affections, were modes of communication sufficiently accurate to keep a large society together for ages, and to direct its members in the execution of some common work, what could be their inducement to the invention of an art so useless and difficult as that of language?

In a word, daily experience informs us, that men who have not learned to articulate in their childhood, never afterwards acquire the faculty of speech, but by such helps as savages cannot obtain; and therefore, if speech was invented at

all, it must have been either by children who seem incapable of invention, or by men who were incapable of speech. A thousand, nay a million, of children could not think of inventing a language. While the organs are pliable, there is not understanding enough to frame the conception of language; and, by the time that there is understanding, the organs are too stiff for the task. And, therefore, say the advocates for the divine origin of language, reason, as well as history intimates, that mankind in all ages must have been speaking animals; the young having constantly acquired this art by imitating those who were elder; and we may warrantably conclude, that our first parents received it by immediate inspiration.

To this account of the origin of language, one objection readily occurs: if the first language was communicated by inspiration, it must have been perfect, and held in reverence by those who spake it, i. e. by all mankind. But a vast variety of languages have prevailed in the world; and some of those which remain are known to be very imperfect, whilst there is reason to believe that many others are lost. If different languages were originally invented by different nations, all this would naturally follow from the mixture of these nations; but what could induce men possessed of one perfect language, of divine original, to forsake it for barbarous jargons of their own invention, and in every respect inferior to that with which their forefathers or themselves had been inspired?

To this it is replied, that nothing was given by inspiration but the faculty of speech and the elements of language; for, when once men had language, it is easy to conceive how they might have modified it by their natural powers, as thousands could improve what they could not invent. The first language, if given by inspiration, must, in its principles, have had all the perfection of which language is susceptible; but, from the nature of things, it could not be very copious. The words of language are either proper names, or the signs of ideas and relations; but it cannot be supposed that the All-wise Instructor would load the memories of men with words to denote things then unknown, or with the signs of ideas which they had not then acquired. It was sufficient that a foundation was laid, of such a nature as would support the largest superstructure which they might ever after have occasion to raise upon it, and that they were taught the method of building by composition and derivation. This would long preserve the language radically the same, though it could not prevent the introduction of different dialects in the different countries over which men spread themselves.

Adelung, in his Mithridates, treats professedly of the history of languages: and it is the most extensive and profound work on that subject that has ever yet issued from the European press. Materials for such an undertaking have been accumulating from all the parts of the world during the last fifty years. Since the voyages of Cook, every navigator and traveller in distant regions has considered it a part of his duty to collect specimens of the dialects of their inhabitants. The ancient idioms of Persia, Hindostan, and Siam, which were either wholly unknown to Europeans, or enveloped in a cloud of mystery, have been thoroughly investigated: and the languages of the African and American hordes have been studied. Yet, though our knowledge had increased so much in particulars, scarcely any attempt had been made to compare the data which were collected, and to obtain any general results. The author of Mithridates had already obtained celebrity as a lexicographer, with the reputation of extensive learning, and he brought to this undertaking all the qualifications which were necessary to ensure success. It is much to be regretted that he died before the completion of his work, but it is at the same time fortunate for the world that his manuscripts fell into the hands of so enlightened a successor as professor Vater. That much remains in this department for future writers to perform, will not be questioned; but what Mr. Adelung has accomplished claims for him, in our opinion, the decided approbation of the public.

Its full title is, Mithridates oder allgemeine Sprachenkunde. Mithridates; or, a General History of Languages, with the Lord's Prayer as a Specimen, in nearly five hundred Languages and Dialects. By Johann Christoph Adelung, Aulic Counsellor and Librarian at Dresden. Berlin, 8vo. Vol. I., 1806. Vol. II., 1809. Vol. III, 1812. Part II., 1813. Vol. II. and III. are continued by Professor Vater from the papers of the author.

'The idea,' he tells us, 'must be given up that language was communicated to the first men by their Creator, or that they were taught the use of articulate words by angels or superior intelligences.' There was a time, according to him, when the human race claimed but little privilege over the brutes; when they crept upon the earth a 'mutum et turpe pecus.' 'This is a proposition which, on a little reflection, offers itself to the mind as a first principle, and requires no proof.' (We confess that to us it does not appear so fully self-evident.) 'It is true,' he adds, 'that when we consider the artificial and complicated structure of a European language, which is capable of expressing all the shades of thought and sentiment that arise in civilised society, and of representing all the metaphysical reasonings of a Plato or a Voltaire, the production of so wonderful a contrivance seems beyond the reach of the human faculties.' 'A European war-ship, which with a burden of 2500 tons, and bearing 1000 men and 100 cannons, rides triumphantly through the ocean, and defies the rage of conflicting elements, would appear to the wondering eyes of a naked Huron, or to the miserable savage of Oonalashka, as a phenomenon altogether supernatural, and it would be impossible for him to conceive that such a work was produced by the hands of his fellow creatures. But if he were enabled to trace the art of the modern ship-builder backwards through all its stages to the fragile raft or the hollow trunk, on which the first trembling barbarian committed himself to the unstable element, his astonishment would gradually subside, and the supernatural being created by his

imagination would gradually dwindle into a simple man.' The case is similar, according to our author, when we enquire into the history and progress of language. 'It only requires a little observation to discover the stages of its advancement, and to trace it backwards to the first articulate sounds uttered by the uncouth child of nature.'—'Even when we examine attentively the whole fabric, in its complete form, we discover clear vestiges of its homely beginning. The language which flows from the mouth of a Cicero or a Newton still bears traces of those infant ages of the world, when men referred all the movements of external nature to the same voluntary powers of which they were conscious within themselves; when they fancied that the wind blows, that the sun goes down, and that the ocean roars, and when with similar ignorance they feigned mountains and rivers to be males and females.'

It is clear that the first words which a savage would utter would naturally be mere vocal sounds pronounced with the open mouth, without articulation. Accordingly words of this character abound in the vocabularies of many barbarous nations, as the South Sea Islanders, the Hurons, the Algonquins, Galibis, and Esquimaux. Some well known languages preserve many of these first attempts to form words. The Greek expresses the most simple ideas by mere vocal sounds, such as *άω, ἑω, ἱει, ἱαω, ἀΐω, ἠϊω, ὀΐω, ἀΐει, ἀια*. The addition of consonants was a considerable step in advance, and that it was a matter of some difficulty we may learn by observing how many languages are still very defective in this respect. La Hontan found it impossible to teach a Huron to articulate the labials *b*, *p*, and *m*. Scarcely are there two dialects which agree in the number of consonants. The Otaheiteans imitated the name of Cook by the word Tutu, and the Chinese, in the place of Christus, were obliged to substitute Ki-li-tu-su. Next to mere vocal sounds, the most simple class of words are those in which a single vowel follows a consonant, as ba, lo, ma, &c. These are the words which a child first pronounces. The dialects of the southern islanders are replete with such sounds, and the whole Chinese vocabulary contains scarcely any other words. On this account Mr. Adelung considers this as the nearest representative of the primitive language of mankind.

The first application of names to objects, or the invention of significant words, has often been supposed to have taken its rise from the imitation of the voices of animals, or the sounds produced by various natural causes. The serpent hisses, the bees hum, the thunder peals, the tempest roars, the wind howls among the mountains. The savage listens and imitates the sound which salutes his ears, and the word which he pronounces serves afterwards to recall to himself and his companions the idea of the object which first gave occasion to its utterance. In fact all such phenomena as are accompanied by an audible sound are distinguished in most languages by tones which are clearly imitative, and the names of animals which utter loud and distinct cries are of the same nature. Having once by these simple efforts formed the habit of communicating and receiving ideas, it is easy to conceive that a further progress could be made by associating analogous perceptions and objects. A stone falling to a great depth was frequently observed to occasion a peculiar sound. The imitation of this sound afforded a word to signify deep: the same word was afterwards extended to the opposite but connected sense of height, and it came at length to designate haughtiness, magnanimity, loftiness of mind, and whatever excites the sentiment of the sublime, either in animated or inanimate nature. How far these analogies may be carried, and how remote the derived sense of a word may become from the idea which first occasioned its invention, may be conceived by observing the terms which in several languages designate the soul or intellectual spirit, and which took their rise from words first applied to the act of breathing, or formed in imitation of the sound which a breeze produces in the foliage of a wood. As these analogies are for the most part arbitrary, and depend on peculiar habits of feeling and thinking, it may thus be imagined that every little society of men would form a language in a great measure peculiar, and that the diversities would chiefly consist in words which have a figurative sense, and therefore owe their origin to real or fancied resemblances. We find in reality that the terms furnished by natural objects, and by those analogies which are so accessible as to be universally perceived, are often similar in idioms which differ in their more abstract words. The structure of a language will thus bear the character of the nation by whom it was formed. Among the Oriental people the fancy takes a bolder flight, and discovers or invents analogies which escape the feeble perceptions and colder genius of the north.

But, if we suppose a sufficient number of words to be thus formed, we are still far from possessing a complete language. 'We have now indeed formed a canoe out of the unshapen trunk, but a rudder and sails are wanting, and we can only grope with labor and difficulty along the coast.' The distinction of nouns and verbs, and the addition of numbers, declensions, and conjugations, are necessary before our dialect can assume a sufficiently perfect state for expressing our thoughts with precision and facility. These advantages have been obtained by different nations in degrees, and by methods very various. The Chinese and other languages of similar character are absolutely destitute of inflections. Simple monosyllables are incapable of variation; they are a sort of monads or primitive particles; all the connexions and shades of ideas are performed by them in the rudest manner; variation of tone sustains an important part, and even gesticulation is used to render language more expressive. The composition of words is precluded by the mechanism of these dialects, which admits of no aggregates, and its place is rudely supplied by mere juxtaposition. In other languages our author supposes composition to be the source of all the modifications of words, and attributes declension, conjugation, &c., to this sole principle; but he has not resolved

the problem, how some languages originally monosyllabic, for such he supposes all to have been, have in the sequel entirely changed their character, and have become capable of combinations. This account of the invention of speech, though it contains little that is altogether new, appears to us on the whole well imagined and illustrated.

Having explained to his own satisfaction the origin of language, Mr. Adelung endeavours to confirm his views by enquiring what part of the earth is the native seat of the human race; but into this topic we cannot follow him.

SECT. II.—HISTORICAL DEVELOPMENT OF THE PROGRESS OF LANGUAGE.

Our author's geographical arrangement of languages is ill adapted to the purpose of a connected essay. We, therefore, present our readers with a table in which they are distributed according to their affinities, as the foundation of some few further remarks on their history.

MONOSYLLABIC LANGUAGES.

1. Chinese languages.
2. Tangut or Tibetan.
3. Barma or Birman.
   Rukheng or dialect of Arracan.
4. Mon or Peguan.
5. T'hay or Siamese.
   T'hay-j'hay or old Siamese.
   Lâo or Laos.
6. Khômen or Cambojan.
7. Anam or Cochin-Chinese.
8. Corean languages?

POLYSYLLABIC LANGUAGES.

9. Ancient Indian or Sacerdotal.

BRANCHES.

A. Sanscrit.	E. Celtic.
B. Bali.	F. German.
C. Zend.	G. Sclavonic.
D. Pelasgic.	

DIALECTS.

A. OF THE SANSCRIT.

1st. Pracrits or ancient dialects.

a. Saraswati bála báni or poetical Pracrit.
b. Hindi.
c. Gaura or Bengali.
d. Mait-'hila or Tirhut.
e. Odradesa or Orissan.
f. Tamul or Malabar language.
g. Mahàráshtra or Mahratta.
h. Karnata or Canarese.
i. Tailanga or Telinga.
k. Gurjara or Guzeratti.

2d. Bhashas or vulgar dialects.

Dialect of Multan. Gipsey language, &c. &c.

B. BALI.

The Bali is not properly the parent of any living dialect, but has contributed to modify many of the monosyllabic languages and the polysyllabic idioms of Japan and Ceylon.

C. ZEND.

a. Pahlavi.	c. Kurdish.
b. Parsi, parent of modern Persic.	d. Afghaun?

D. PELASGIC.

1. Thracian Tribes.

a. Phrygians.
b. Bithynians.
c. Heneti and Paphlagonians.
d. Mysians and Trojans.
e. Lydians.
f. Carians.
g. Lycians.
h. Cimmerii.
i. Taurians.
k. Proper Thracians.
l. Getæ or Daci.
m. Mœsians.
n. Macedonians.
o. Epirots.
p. Abantes.
q. Illyrians?
r. Veneti.
s. Pannonians.

2. Grecian Dialects.

a. Pure Æolic.	b. Celto-Æolic or Latin.
Doric.	Italian.
Ionic.	French.
Attic.	Spanish.
|	Portuguese.
Hellenic.	Romanish.
|	
Romaic.	

E. CELTIC.

a. Cambro-British.	b. Erse.
Welsh.	Irish.
Armorican.	Gaëlic.
Cornish.	Manks.
Old Helvetian.	

F. GERMANIC.

1st. Branch. Dutch or proper German.

A. SOUTH GERMAN OR GOTHIC.

Ancient Dialects.

Mœso-Gothic.	Herulic.
Vandalian.	Longobardic, &c.

Modern Dialects.

Bavarian.	Dialects of Suabia,
Austrian.	Alsace, Upper and
Swiss and Tyrolese.	Middle Rhine.

B. MIDDLE GERMAN.

Thuringian.	Franconian, &c.

C. LOW DUTCH.

Frieslandish.	Holland or Dutch.
Lower Saxon.	Belgian.

D. HIGH DUTCH.

Upper Saxony, since Luther's time, the polite language of Germany.

2d Branch. Scandinavian.

Danish.	Icelandic
Norwegian.	Swedish.

3d Branch. English.

10. HEBRAIC.

A. ÆTHIOPIC.

1. Geez.	3. Old Egyptian?
2. Amharic.	

B. CANAANITISH.

1. Hebrew.	Rabbinical.
Hebræo-Chaldeaic.	2. Phœnician.
Samaritan.	3. Punic.
Galilæan.	

C. ARABIC.

1. Old Arabic.	4. Mapulian.
2. Modern Arabic.	5. Maltese.
3. Moorish.	

D. ARAMEAN OR SYRIAC.

E. ASSYRIAN OR PROPER CHALDAIC.

11. IBERIAN.

Cantabric or Basque.
Ligurian and Sicanian, extinct.

LANGUAGES OF NORTHERN NATIONS.

12. Tchudic.
 A. Finnish.
  Livonian.
  Esthonian.
 B. Lapponic.
 C. Hungarian.
13. Permian.
14. Vogulic.
15. Language of Ostiacs on the Oby.
16. ——— of Chermisses.
17. ——— Votiaks.
18. ——— Morduines.
19. ——— Teptjerais.
20. ——— Samoides.
21. ——— Jenisean Ostiacs.
22. ——— Kamtsckatkans.
23. ——— Tschuktschi.
  B. Koriaks.
  C. Oonalashka.
  D. Esquimaux.
  E. Greenland.

NATIONS OF CAUCASUS.

25. Abassians.
26. Circassians.
 B. Cossacs of the Don.
27. Ossetes.
 B. Alani.
  Albanians of Epirus.
28. Ingushi.
29. Lesgi.
30. Armenians.
31. Georgians.

ULTRA CASPIAN NATIONS.

32. Tartar or Scythian.

A. TARTARIAN STEM.

1. Nogays.	3. Kasan.
2. Comanians.	4. Kirguis.

B. TURKISH STEM.

1. Turkmans.	4. Karamanians.
2. Usbecks.	5. Osman Turks.
3. Bukharians.	

C. MIXED WITH MONGOLES.

1. Chulymes.	3. Chuvashes.
2. Krasmojars.	4. Yakutes.

33. Mongolian.
 A. Mongole Proper.
 B. Kalmuc.
 C. Burættes.
34. Mantchurian.
 A. Mantchu Proper.
 B. Tungusian.
35. Sagalien.
36. Kurilian.
37. Japanese.
38. Formosan.
39. Ceylonese.
40. Polynesian.

A. Savage Races.
1. Andamaners.
2. Malacca Negroes.
3. Papuas.
4. New Holland.
5. New Hebrides.
6. Feejee, &c.

B. Tattooed Races.
1. Battas.
2. Bugis.
3. Pintados.
4. New Zealand.
5. Friendly Isles.
6. Society Isles.
7. Sandwich Isles, &c.
8. Easter Isle.

C. Menankabow Race.
1. Sumatra Malays.
2. Malays Proper.
3. Coast of the Indian Islands Magindano, &c.

The African and American Languages are too numerous and too little distinguished to be enumerated here.

Of the monosyllabic languages.—Thibet, the Chinese empire, and the whole of India, beyond the Ganges, contain a population much greater than that of all Europe. The languages of all these nations, with the exception of a few tribes on the coast of the Malay Peninsula, are monosyllabic. The people themselves are distinguished from the rest of mankind by their physical traits, the most striking of which are a broad flattened countenance, with their cheek bones extending laterally, compressed features, and oblique orbits. These characters do not, however, prevail among them universally, or in the same degree. Some of the tribes of the Eastern peninsula scarcely differ from some castes of Hindoos. There are few problems in the history of mankind more curious than the uniform picture which these nations present, and the unvarying character which they have preserved through so many ages. The cause of this phenomenon must be sought partly in their insulated situation, in a remote corner of the world where they are cut off from other nations by natural boundaries; and partly in the multitude of their population, which is so great as to swallow up in its mass the more warlike tribes who have occasionally penetrated their boundaries, and have exercised a temporary dominion over them.

A remarkable fact with respect to these nations is the almost endless variety of their oral languages. The same written character is used throughout the Chinese empire, and the same writing is intelligible in all its provinces. Europeans, from this circumstance, have imagined that there is one language proper to the whole nation; but this is so far from being the case, that, as Mr. Barrow informs us, there are scarcely any two provinces in China which have the same oral language; and Dr. Leyden, to whom we owe much valuable information on the literature of this family of men, declares that the same written words are read and understood by at least twenty different nations, who would scarcely un-

derstand a word of one another's speech, and would all use different words to express the same meaning. The dialect which has obtained by distinction the title of Chinese, is the Kuan-hoa, the language of the court and of the Mandarines, which was originally the proper speech of the province Kiang-nan, where the native emperors of China formerly held their residence. Still greater is the diversity which prevails beyond the limits of the empire. It is only by comparing the internal structure of these dialects, and by considering the monosyllabic form and the uniform system of intonation which they all retain, that we derive an argument for the common origin of the nations who use them; an opinion which is, however, amply confirmed by their very striking resemblance in physical peculiarities and moral traits.

The boundless variations of these languages, and their great mutability, is a fact scarcely reconcileable with the high antiquity which Mr. Adelung imputes to them. Rude unformed jargons, consisting of monosyllables unconnected by any rules of structure, are in their very nature so liable to perpetual fluctuation, that it seems absurd to consider them as relics of ancient times; and when we add to this the fact that the written characters have no relation to the vocal dialect, and therefore give no aid towards fixing and preserving the speech, as they do among nations whose letters represent sounds, the languages of this group are reduced to the same ever-changing condition with the mere oral jargon of savages, which often differs totally in contiguous districts, as in New Holland, where two neighbouring tribes call even the sun and moon by names quite distinct from each other. Since the proofs of antiquity so entirely fail in this quarter, we are naturally invited to turn our eyes to the boasted literature of China, for something in aid of the tottering hypothesis of our author. But here, as he himself confesses, we find only a glimmering and unsteady light. The famous History of China, translated by the Jesuit Joseph Anne Marie de Moyriac de Mailla, and published by the abbé Grozier in 12 vols. 4to., sets out from an epoch sufficiently remote: but what sort of documents do we draw forth from this precious store?—'Stories of emperors who find out arts and sciences by the dozen, who give command to their august consorts to invent manufactures, and who, in long-winded harangues, convince their mathematicians of the importance of discovering astronomy.' Even in that part of these annals, which is commonly considered as of unshaken authority, beginning with the year 207 B. C., our author has fallen upon a most awkward stumbling-block. The great wall of China, perhaps the most stupendous monument of human labor that exists, is declared by the Chinese Annals to have been completed 240 years B. C.

So prodigious a work, which has attracted the chief wonder of Europeans since their first acquaintance with China, could scarcely have remained unknown to any nation who carried on intercourse with that country. Yet Ptolemy, who describes the march of caravans into the country of Seres, never gives the smallest hint of its existence. The Arabian travellers, whose voyages Renaudot has published, were equally unacquainted with it: and, what is still more strange, Marco Polo, who served three years in the army of Kublai Khan, and travelled to the north of China in 1270, and who must actually have passed under the great wall, if it had existed in his time, has omitted entirely to mention it, though he is minutely accurate in noting down all that he saw worthy of observation. This fact, when taken together with the modern aspect of the structure, shows us what degree of reliance can be placed on the Chinese history, even in those parts which are reputed most authentic. It is probable, indeed, that fragments are preserved among the Chinese as among other nations from remote times; but they are neither so well ascertained, nor so definite in time and circumstances, as to give us any insight into the history of the people.

Yet we wonder to find Mr. Adelung so quietly giving up a resource which promised support to his hypothesis, and we cannot but look upon it as an extraordinary piece of magnanimity. But when he acquiesces in the conjecture of Sir W. Jones, to which for our own parts we have no particular objection, that the Chinese are the offspring of a tribe which is mentioned in the Institutes of Menu to have emigrated from India, he seems to throw to the ground the whole fabric which he has been laboring to erect; for the 'Chinas mentioned by Menu were a branch of the Hindoo stock, had been subjected to the system of castes, and, of consequence, spoke the tongue of Hindostan. What then becomes of the Ogygian antiquity of China, and her primeval language?'

We have no room to enter at length into our author's observations on the structure of these languages in particular. In general he seems to have made a good use of the resources of which he was possessed, and has given a very good digest of all the information which had been acquired on the subject of the Chinese language prior to the date of his work. Some progress had been made subsequently by our countrymen in the east, and we trust that what we have hitherto obtained is only the prelude to more important contributions. With respect to the nations of the eastern peninsula from the Ganges to China, and their dialects and literature, more valuable information is contained in the late Dr. Leyden's work, in the tenth volume of the Asiatic Researches, than the whole amount of our previous knowledge.

Of polysyllabic languages.—The chain of Mount Imaus separates the jargons of China and Thibet from a tribe of languages which has performed a much more important part as an instrument of human thought. If men had always been limited to the use of the rude uninflected dialects of north-eastern Asia, it would scarcely have been possible for them to have risen above the rank of barbarians.

The Sanscrit and its cognate dialects present the strongest contrast to the monosyllabic languages. We have observed that the latter are incapable of inflection. The relations and modes of the chief words in a sentence are

partly expressed by particles which are in themselves distinct roots, and are partly left to be understood: nouns express in themselves neither numbers, cases, nor genders; nor the verbs, moods, tenses, or persons. The Sanscrit, on the contrary, exhibits all these shades of ideas by inflections, which are in this more complicated and extensive than in any other language. A single word in Chinese is capable only of one application. In Sanscrit it gives origin to a numerous class of words, the whole of which the primitive idea pervades under an indefinite number of modifications. All the derivatives from one stock bear a certain stamp of affinity, and illustrate each other by their mutual relations. Hence this language and its sister dialects are exceedingly copious, and capable of expressing even the most general or abstract ideas with precision and at the same time with variety: they are applicable to all the purposes to which the human faculties can direct the use of words. Accordingly it is only among nations who use these dialects that the sciences have advanced, or that philosophy has flourished. Another consequence of this organised and systematic structure is the wonderful durability of this class of idioms, and the constancy with which they preserve their affinities and individual character, though scattered many thousands of years over distant parts of the earth. Their affinities are every where easily recognised, and the same families of words are traced back to similar origins: a sort of living principle seems to pervade them which preserves their organisation in vigor, and propagates it to perpetuity. It is quite the reverse with the monosyllabic tongues; each word in them is an unconnected individual. When lost, its place is supplied by another without difficulty. Hence these languages are in their nature fluctuating, and subject to constant change.

Mr. Adelung has given a rather confused and imperfect account of the Sanscrit and its dialects; at which we cannot be surprised, as he was unacquainted with what Mr. Colebrooke and other learned members of the society at Calcutta have done of late years in opening the stores of Asiatic literature, and depended chiefly for information on the presumptuous and half-learned missionary Paulinus à S. Bartholomeo, whose crude misrepresentations have frequently been opposed by foreign writers to the authority of Sir W. Jones and Mr. Colebrooke. The invidious disposition towards the English, which has been fostered of late among all ranks of people on the continent, has even extended itself to men of letters. We find symptoms of this feeling even in the work of Mr. Adelung. He takes an opportunity of informing us, that 'India since the ruin of the Mogul power has fallen under the tyranny of Mahrattas, Seiks, and Britons; the former of whom have exercised their wonted atrocity: the latter have been more systematic, but not less oppressive in their conduct.' He takes every opportunity of lessening the reputation of our countrymen as oriental scholars, and of exalting, at their expense, the fame of any pitiful Romish monk, who can be forced into competition with them. There is as much folly as injustice in this attempt. The achievements of our learned men in the literature of India have been as pre-eminent as those of our arms upon her soil. But we hope that the time has passed by when every pedant of the continent looked for patronage by insulting England, and when high Dutch philosophers were vain of receiving the *ton* from the frivolous Parisians.

As Mr. Adelung has been so unfortunate in the choice of his authorities, we shall pass by his account of the language of India, and shall present our readers with a brief sketch of what he might have done; availing ourselves of the documents which have been brought to light by our illustrious countrymen in the east; and some able comments of the late British Review.

In adverting to the opinions which have been entertained concerning the Sanscrit, it is scarcely necessary to mention the notion, that it owes its origin to the invasion of Alexander and the Macedonian colony settled in Bactria, which was proposed in order to account for the refined character of the language, and its affinity with the Greek. It would be just as reasonable to imagine that our Teutonic dialect was introduced into this country by a regiment of hussars from Hesse Cassel, or by an ambassador from the Hague. But the copious inflections of the Sanscrit, and the exquisite refinement of its grammatical system, seemed to afford somewhat better ground for the opinion that it never was the popular speech of any nation; but was formed by the concerted efforts of the Brahmins, who, by polishing and reducing to more complex rules the vulgar tongue of Hindostan, gradually constructed an artificial language, adapted only to literary composition. Mr. Colebrooke has, however, fully refuted this notion, and has shown that there is no reason to doubt that the Sanscrit was once universally spoken in India, and that it was the parent of the modern dialects which are spread through that country from Mount Imaus to Cape Comorin. 'It evidently,' he says, 'derives its origin (and some steps of its progress may even now be traced) from a primeval tongue, which was gradually refined in various climates, and became Sanscrit in India, Pahlavi in Persia, and Greek on the shores of the Mediterranean.' He might have added that the Celtic, the German, and the Sclavonian, were less ornamented dialects of the same ancient language.

The Hindoo grammarians distinguish three eras in the history of their national language. 1st. That of the ancient or classical Sanscrit. This is the idiom to which Adelung applies the term Déva Nágari, which is well known to every tyro to belong to no language whatever, but to be the designation of the alphabet used in Sanscrit composition. The second era is that of the Pracrit, under which name are included the ten provincial languages of India. The third, termed the Magad'hi, comprehends the popular dialects, or Bhashas.

The ten Pracrits are the written dialects which are now used in conversation, and are cultivated by literary men. There is reason to believe that

ten polished dialects formerly prevailed in as many different civilised nations, who once occupied all the fertile provinces of Hindostan and the Deccan. They are thus enumerated by the Hindoo grammarians:—1. The Saraswati bála báni, or 'speech of children on the banks of the Saraswati,' was the dialect of the Saraswati, a nation inhabiting the vicinity of the river Saraswati. This idiom is the Pracrit of the poets.

2. The Hindi was the dialect of the Cányacubyas, whose capital was the ancient city Canój or Canouge. This language is the ground-work of the modern Hindostani, which is intermixed with Persic and Arabic. Nine-tenths of the Hindí may be traced back to pure Sanscrit; it has been said that the remainder is wholly distinct from it, and of separate origin, but this assertion, as Mr. Colebrooke observes, requires further proof.

3. The Gaura or Bengáli contains few words which are not evidently of Sanscrit origin.

4. Mait'hila or Tirhutíya spoken in the sircar of Tirhút, and as far as the Nepaul Mountains, has a great affinity with the Bengalí.

5. Utcala or Odradésa, the language of Orissa.

These five nations of Hindoos are termed the five Gaurs or Northern Nations; the remaining five are the Dravirs or southern ones.

6. Drávira is the southern part of the peninsula where the Támel, Tamulian, or Malabar language is spoken. A great number of Sanscrit words exist in this idiom, but Mr. Marsden considers the basis of it as a distinct language.

7. Maháráshtra or Mahratta, spoken by the people of that name. This idiom also contains many words derived from an unknown source.

8. Kárnáta or the language of the Kárnátaca. This is commonly called the Canarese. It bears the same affinity to the Sanscrit as the other dialects of the Deccan.

9. Tailanga, or Telinga, the language spoken in Telingana, an ancient kingdom on the eastern coast of the peninsula. It is said to have borrowed more largely from the Sanscrit than the other dialects of the Deccan.

10. Gúrjara, the dialect of Guzerat.

All these dialects, like other modern idioms, are much less abundant in inflections than the parent Sanscrit. Auxiliary verbs and particles supply the place of variations in the radical words.

The Magad'hi, or third class of languages, includes the bhashas, or vulgar dialects of India. Among them is the idiom prevalent in Multan, concerning which Adelung has announced a very curious fact. The wandering people who are dispersed over a great part of Europe, and are known by the names of Gipseys, Bohemians, and Zigeuners, were perceived by Grellmann to be of Hindoo descent; but that author erred in confounding the Sudras, a class of respectable character, with the outcast Pariars; and he was mistaken in deriving the Gipseys from the former. These vagrants call themselves 'Roma;' hence Whiter, the author of the Etymologicum Magnum, 'imputes to them the building of Rome!' Pallas first perceived that the dialect of Multan bears a strong analogy with the Gipsey language; and Adelung has proved, by an extensive comparison of their idioms, that this people certainly originated from some low caste in that part of India.

We may now advert to the affinity between the Sanscrit and the languages of the West, to which we have said that it is related. If this affinity were confined to a resemblance in any given number of roots, it might be attributed to the effects of accidental intercourse. It is only an essential affinity in the structure and genius of languages that demonstrates a common origin. This sort of relationship exists in the Sanscrit, the ancient Zend as well as the modern Persic, the Greek, the Latin, the German dialects; and is found, though not to the same extent, in the Celtic and Sclavonic. In the Hebrew and its cognate idioms, as well as in the Coptic, there are many Sanscrit roots, bearing little or no resemblance to the structure of that language. A striking example of affinity between these dialects occurs in the numerals, which we subjoin:—

Sanscrit.	Persic.	Greek.	Latin.	Russian.	German.	English.	Welsh.	Gaelic.
Eka,	ek,	ἑις, ἑν.	unus,	odin,	eins, ein,	one,	un,	aon.
Dwau,	du,	δυω,	duo,	dwa,	zwey,	two,	dau, dwy,	da.
Traya,	se,	τρεις,	tres,	tri,	drey,	three,	tri,	tri.
Chatur,	chehar, chatuwar, (Zend),	τετταρες,	quatuor,	chetare,	vier,	four,	pedwar, pettor (Oscan)	ceither.
Pancha,	pansh,	πεντε, πεμπε,	quinque,	pyat,	fuinf,	five,	pump,	cóig.
Shash,	shesh,	ἑξ,	sex,	shest,	sechs,	six,	chewe.	sia.
Sapta,	heft, hapte (Zend),	ἑπτα,	septem,	sedm, sem,	sieben,	seven,	saith,	seachd.
Ashta,	hesht,	ὀκτω,	octo,	osm,	acht,	eight,	wyth,	ochd.
Nova,	nu,	ἐννεα,	novem,	desyat,	neun,	nine,	naw,	noi.
Dasa,	deh, dese (Zend),	δεκα,	decem,	desyat,	zehn,	ten,	dêg,	deach.
Ekadas,	yazdeh,	ἑνδεκα,	undecim,		eilf,	eleven,	un ar ddêg,	aon deug.
Dwadas,	duazdeh,	δωδεκα,	duodecim,		zwoelf,	twelve,	deuddêg,	dadhug.
Vinsati,	bist,	ἐικοσι,	viginti,		zwanzig,	twenty,	ugain,	fichid.
Trinsati,	si,	τριακοντα,	triginta,		dreyssig,	thirty,	dêg ar hugain,	deich thafichid
Sat,	sad,	ἑκατον,	centum,		hunaert,	hundred,	cant,	ciad

The ordinals coincide remarkably in Greek, Latin, and Sanscrit, as prat'hama or protoma, *πρωτα*, prima; dwitya, *δευτερα*; tritya, *τριτα*, tertia; chetoorta, *τεταρτα*, quarta; penchema, *πεμπτα*, quinta; sheshta, *ἑκτα*, sexta; septima, *ἑπτα*, septima; ashtima, *ὀγδοα*, octava; novuma, nona (regularly deduced from the cardinal it would be novima); decima, *δεκατα*, decima, &c.

Here, as in most instances, we may observe that the Latin agrees with the Sanscrit much more nearly than the Greek.

The following are a few examples of roots which ramify through all these languages: the list might be extended to an almost indefinite number.

Pita, pitara, Sanscr.; peder, Pers.; *πατηρ*, Gr.; pater, Lat. (whence Ju-piter, Dies-piter); vater, Germ.; father.

Tada, S.; tâd, Welsh; tat'air, Irish; otshe, Russ.; tatta, vulgar German; we may add, taat, Finnish, and aita, Basque; daddy, vulgar English; father.

Mata, matara, S., mother; mader, P.; *μητηρ*, Gr.; mater, L.; mutter, Germ.; mater, Sclav.

Bhrata, bhratara, S., brother; bradar, P.; *φρατὴρ* (of the same tribe), Gr.; frater, L.; bruder, Germ.; brawd, brodyr, W.

Swasara, S., sister; kuaher, P.; soror, L.; schwester, Germ.; chwaer, W.

Padsja, S., boy; a-pos (privative), Pers.; *παις*, Gr.; *απαις* (privative); bachgen, W.

Duhita, duhitara, S., daughter; dochter, P.; *θυγατηρ*, Gr.; tochter, Germ.

Agni, S., fire; ignis, L.; ogon, Russ.; *πυρ*, Gr.; feuer, Germ.; fyre, English.

Apa, S., water; ap. P.; aqua, L.

Uda, S., the sea; Udakam, S., water; } *ὑδωρ*, Gr.; udus, L.; wasser, Germ.; y dwr, W.; water, English.

Dhara, S., earth; terra, L.; *ερα*, Gr.; erde, Germ.; daiar, tir, W.; *γη*, Gr.; ke, ge, Gaëlic.

Bhumi, S.; Jiami, S.; } bum, P.; humus, Lat.; zumin, P.; zemlija, Russ.

Naba (the air), S.; Nibu (cloud), S.; } *νεφελη*, Gr.; nubes, nebula, L.; nebel, G.; nêv, W.; nebesi, Russ.

Himmala (heaven), himmel, Germ.

Nisa, S., night; *νυξ*, Gr.; nox, L.; notch, Russ.; nicht, Germ.: nôs, W.

Divos, S.; dies, L.; day, Eng.; dydd, W.; tag. Germ.

Jajanmi S. (beget); Genita, S. (begotten); Janata, S. (nations); } *γεγνω*, *γεννασ*, *γενς*, Gr.; gigno, L.; gânu, W.; kind, Germ. genitus, L. gentes, gens, genus, L.

Mrityu, S.; mors, L.; mrété. Zend; mertovii, Russ.; mord. morsch, Germ.; marw, W.

Yuvan, S., Yûn, S., } young; } Iuwan, P.; juvenis, junior, juvencus, L.

Ieuangc, W.; and yeong, Anglo-Saxon; jovank, Armoric.

Yauvaua, S. youth; iau, W.

Ioban, Hindi.

Jugend, Germ.; juventus, L.

St'ha, S. (stand); St'han (station); } Istadan, P. (to stand).

Estam, P.; } sto, L.; } *ιστημι*, Gr.; } I stand.
Estad, P.; } stat. L.; } *ιστησι*, Gr.; } he stands.

Stehen, stand, Germ.; st'hira, S. *στερεος*, Gr. stier, Germ. } firm.

From each of the above roots is derived a large catalogue of words in all the languages mentioned. In grammatical structure the Sanscrit scarcely differs more from the Greek and Latin than they differ from each other.

The conjunctions of the verbs afford the strongest example of coincidence. The following is the present tense of the verb substantive:—

Sanscrit	asmi	asi	asti —	smah	st'ha	santi.
Greek	*εσμι*	*εσσι*	*ισπι* —	*εσμεν*	*εστε*	*εισι* or *εντι*.
Russian	esm	esi	est —	esmui	esti	sut.
Latin	sum	es	est —	sumus	estis	sunt.
Persian	am	ai	ast —	aïm	aïd'	and.
Welsh	wyv	wyt	oes —	ym	ych	ynt.
English	am	art	is —	are	are	are.

This verb is defective in many languages. In Latin and in Welsh several tenses are formed from an old verb which only survives in the Sanscrit in a tolerably perfect form. This is bhavimi, bhavasi, bhavati, &c., answering to the German ich bin, du bist, &c. The preter tense of this verb in Latin, fui, fuisti, fuit, coincides with the Welsh bûm, buost, bû; and the Latin fuissem, fuisses, fuisset, &c., with the Welsh buaswn, buasit, buasai, buasem, buasech, buasent. The future in the Russian agrees with the Welsh, as budu, budesh, budet—budem, &c., which, in Welsh, is byddav (pronounced budhav), byddi, bydd—byddwm, byddwch, byddant.

The verb to eat coincides almost as closely

Sanscrit	admi	atsi	atti —	admas	att'ha	adanti.
Latin	edo	edis	edit —	edimus	editis	edunt.
		es	est		estis	
Greek	*ἐδω*	*ἐδεις*	*ἐδει* —	*ἐδομεν*	*ἐδετε*	*ἐδοντι* (Æol.).
Russian	iem	iesh	iest —	iedim	iedite	iedyat.
German	esse	issest	isst —	essen	esset	essen.

Some Sanscrit verbs coincide most with the Greek, others the Latin, as

Jivāmi	jivāsi	jivāti —	jivamāh	jivathāh	jivānti,
with Vivo	vivis	vivit —	vivimus	vivitis	vivunt.

Dadāmi, dadāsi, dadāte, with *διδῶμι*, *διδῶς*, *διδῶσι*, &c.

The following are some miscellaneous examples:—

Russian	verchu	vertish	vertit —	vertim	vertite	vertyat
Latin	verto	vertis	vertit —	vertimus	vertitis	vertunt.

Again,

Welsh	Elwn	elit	elai	elym	elych	elynt.
Greek	ἔλθοιμι	ἔλθοις	ἔλθοι	ἔλθοιμεν	ἔλθοιτε	ἔλθοιεν.

In all the above instances the German is more remote from the Sanscrit than the other languages; in the following it coincides remarkably with the common prototype. Varttita, er werde (he shall be), vetsi, vetti—du weisst, er weiss (thou shalt know, he will know); schrityati, er schreitet (in Latin, scribit) (writes); shlissyati, er um-schliesset (he encloses); vindati, er findet (he finds); mishrati, er mischt (miscit) (he mixes).

The nearest relatives of the Sanscrit are two languages which, like it, have been for many ages confined to the use of sacerdotal orders. From eighteen to twenty centuries have elapsed since the Zend and the Bali were living dialects: both of them coincide very nearly with the Sanscrit in their vocables, and are formed from the roots of that language according to the regular laws of elision and contraction. This fact was pointed out by Sir W. Jones, and has been confirmed by Dr. Leyden, to whom we must refer the reader for details.

The modern Persic, as is universally known, is a mixture of the Parsee with Arabic.

The next offspring of the Indian family has held a still more conspicuous place in the history of literature and human society than the preceding; this is the *Pelasgian* stem, from which are descended the Greeks and Romans, and the modern nations in the south of Europe, who speak dialects of the Latin. Our author has given good reasons for including the Thracians in the same stock, as well as the numerous population of Asia Minor, and all the European tribes who appear to have been allied on the one hand to the Getæ and on the other to the Pelasgi. The Lydians, Lycians, Phrygians, &c., are connected by many historical facts with the lineage of the Greeks and Thracians. The authority of Strabo is a far better reason for classing the Cimmerii with the Thracians and Getæ, than the mere resemblance of a name can afford for identifying this nation with the Cimbri in Denmark, or the Cambro-Britons in Wales. Yet many modern writers, among whom is even Mr. Townsend, talk of the Cimmerii in Britain, as if the name were synonymous with Welsh. The Tauri, whose celebrated rites in honor of Diana, or of some unknown goddess to whom the Greeks gave that name, form the foundation of the romantic drama of Iphigenia, were probably a remnant of the Cimmerian stock. We learn from Herodotus that they were a distinct nation from the Scythians, remaining within the old Cimmerian confines.

With respect to the Getæ, and their relation to the Goths, our author adopts the opinion of M. d'Anville. All the ancients supposed the barbarians who invaded the Roman empire in the reign of Decius, and who afterwards conquered it, to have been the same people over whom the legions of Trajan had triumphed, and who had been known from early antiquity under the name of Getæ. We are certain, however, that the Getæ were Thracians. On the other hand, we know that the language of the Goths was a German dialect. This appears from the translation of the Bible into the Mœso-Gothic by the bishop Ulphilas. The manners also of the Getæ distinguish them from the Germans: they lived in waggons, and roamed about like their neighbours the Scythians. From these facts the learned Cluverius thought himself authorised to depart from the unanimous opinion of antiquity, and to announce the Goths as a new people. He supposes that they descended from the shores of the Baltic, and, entering the empire through the Getic country, were mistaken by the Romans for their ancient enemies. D'Anville and Grotius followed Cluverius, and Mr. Adelung joins himself to their party. We have no room to enter into the discussion of this question; but shall merely observe that the German dialects, and particularly the Mœso-Gothic, are found to bear a strong affinity to the Pelasgian, as Dr. Jamieson, in his Hermes Scythicus, and Mr. Townsend have sufficiently proved. This fact, of which Mr. Adelung was aware, puts the question with respect to the Getæ in a very different light from that in which it appeared to the excellent geographer who first started it. Adelung derives the Illyrians, the supposed ancestors of the Albanians, from the Thraco-Pelasgians, and refers to a work of Thunmann, entitled Geschichte der östlichen Europäischen völker. As far as we know, this work has never been imported into England; but we are at a loss to conjecture what proofs can be found to identify the modern Albanians with the Grecian race. Our author is aware of this difficulty, and conjectures that these barbarians are not the Aborigines of Illyrium, but the remnant of some of the hordes, who made their way into Europe during the declining ages of the Byzantine empire. The Alani, a nation of Caucasus, who were perhaps the Albanians of the Caspian shores, may possibly have left relics of their once formidable name in the coasts of the Adriatic. At the era of the Turkish conquest many of the Albanians emigrated, and still preserve their language in their hamlets in Calabria and Sicily.

The origin of the Pelasgi, and their relation to the Hellenes or Greeks properly so called, has been a fertile subject of conjecture and dispute. Fourmont deduced the Pelasgi from Peleg, and identified them with the Philistines. D'Ancarville insisted on deriving them from the Titans. Larcher, who should have been better informed, makes them Phœnicians, and Pellouter forces them into the ranks of his favorite Celts. Ou. author adopts the only opinion which carries with it a shadow of probability: he considers the Pelasgi and Hellenes as one race. The passages from which this inference must be drawn occur so frequently in the writings of the Greek historians, that it is surprising they have been so often overlooked. We are told repeatedly by the Greeks, that the first inhabitants of the Peloponnesus were Pelasgi; and that, when the Dorians introduced the Hellenic name into that country, the Arcadians, who defended themselves in their mountainous territory, and continued to boast that they were older than the moon, were

still called Pelasgi. Yet we know that the Arcadian language was Greek, though a rude and unpolished dialect; and nobody will pretend that the Spartans and Argives, who fought under the Atridæ, were not Greeks, though it is certain that they were Palasgians. The name of Hellenes belonged at first, as Thucydides informs us, to a kind of feudal association among the Thessalian princes, under Hellen son of Deucalion, and was extended over the Peloponneaus by the conquest of the Dorians. At what period the Athenians entered the confederacy we know not; but, whenever it was, we may be sure that they did not, as Herodotus conjectures, abandon on that occasion their old Pelasgian speech, and learn universally a new language. Possibly the story of the death of Codrus, which savors strongly of Grecian fiction, was invented in order to conceal the submission of Athens to the Hellenic league.

The population of Italy is a very curious subject, and we regret that Adelung, who was so competent to such researches, has done little more than copy the speculations of Frèret on this topic.

The chief information we possess at present concerning the Etruscan language is contained in a work of Lanzi, entitled Saggio di Lingua Etrusca. It appears that Mr. Adelung intended to insert some extracts from this work in the volume before us. These the editor has suppressed, under the singular pretext that they contradict several of the author's conclusions. He deferred these extracts in order to insert them in an Appendix at the end of the work. No such Appendix, however, has made its appearance.

The most interesting part of Mr. Adelung's work is the historical account he has given of the Latin tongue from its rude beginning to its period of classical refinement, and to its subsequent degeneracy into the Romance of the middle ages, and the modern dialects of the south of Europe. The oldest specimen we have of the Latin language appears to be a hymn of the Fratres Arvales, a well known order of priests. It is referred to the age of Romulus.

Enos Lases juvate
Nos Lares juvate
Neve luerue Marmar Sins incurrere
Neve luem Mamers Sines incurrere
in Pleores satur fufere Mars lumen sali
in flores ador fieri Mars λυμην maris
sta Berber, Semunes Alternei advocapit
Siste Semones alterni advocate
conctos.
omnes.

Such was an inscription discovered at the repairing of St. Peter's Church in 1777. The laws of Numa, of which some fragments are preserved by Festus, must be nearly as ancient as the foregoing. The following is a specimen of them:—Sei hemonem fulmin Jobis ocisit nei supera genua tolitod; hemo sei fulmined ocisus escit oloe iousta nuli fieri oportetod. Se cuips hemonem loebesom dolo sciens mortei duit, pariceidad estod, &c.

As late as 261 years before the Christian era the old Celtic terminations in od and ai, were retained in the Latin language. The words pucnandod and prædad occur in the inscription in memory of the victory of Duilius. From this rude state it is surprising how soon the language became refined by a succession of great orators and poets, who had the example of the Greeks before them, and made the dialect of Rome approach continually towards the elegant structure of the Attic idiom. Fabius Pictor, Porcius Cato, Ennius, Plautus, Terence, and Cicero, form the series of illustrious men who brought the language from rude simplicity to its utmost refinement.

This rapid improvement accounts, as our author judiciously observes, for the confinement of pure Latinity to so small a number of the people: the lower orders were not able to keep up with the change. 'Cicero knew only five or six Roman ladies in his time who spoke their language with purity and correctness;' when he heard his mother-in-law Lælia speak, he fancied he was listening to Plautus. Even the comic poets sinned every moment on the theatre against the purity of the language. Hence we may judge what was the state of the vulgar tongue. Quintilian complains that the populace could not utter an exclamation of joy without a barbarism. Already Plautus had divided the Latin tongue, as it was spoken at Rome, into Noble and Plebeian. Afterwards, when the difference became yet more remarkable, the former was named classic, because it was only to be found among citizens of the first classes, and lingua Urbana, and Urbanitas; the latter was termed Vulgaris, and Rustica, because it was the most corrupt in the country. It was more difficult to acquire the classical Latin, even when flourishing in its highest perfection, than to learn the language of any foreign nation. Quintilian complains that it was a very hard matter for his scholars to learn Latin in the midst of Rome; and we are told by Cicero, 'that he sometimes employed several days in studying the purity of a single expression.'

It is not difficult to understand the causes of the decline of Latinity after the establishment of the monarchy. When oratory was no longer cultivated, the great incentive to improvement was lost. The distinguishing majesty of the Roman language ceased to exist when the dignity of republican manners had given way to the frivolous refinements of a court. A false taste immediately displayed itself. The higher class of citizens to whom the purity of speech had been confined were exterminated by the tyrants of Rome, and, amidst the turbulent horrors of a despotic government, people of the lowest order frequently rose to the highest rank. Even barbarians found their way to the senate house, and, before the reign of the second Claudius, an Arabian and a Goth had seated themselves on the throne of the Cæsars. The language of Cicero was now extinct, and nothing remained but the lingua rustica, which gradually prepared itself for its transition into the modern dialects.

But it was not till the irruption of the northern nations that the important change took place which destroyed the structure of the Latin language. The dialect was vulgar and debased before, but still it was Latin. It retained its

inflections; the nouns were declined in cases, and the verbs in conjugations. But the learning of these required greater attention than the barbarians could bestow, and, in the dialects which were formed after the mixture of the conquerors with the old population, the use of particles and auxiliary verbs supplied the place of the old inflections.

We now pass to our author's account of the *Celtic* languages, and here we find nothing but inaccuracy and confusion. It is remarkable that foreign writers who touch upon this subject continually involve themselves in perplexity and error. Perloutier and Mallet, though learned authors, particularly the latter, are full of mistakes with respect to the Celtic people and their languages. They ludicrously pronounce the high Dutch to be the most perfect specimen extant of this ancient idiom. Adelung, who has been deceived by Macpherson and other Scottish writers, represents the Gaëlic people as the only genuine offspring of the Celtæ. He imagines the Welsh to be the descendants of the Belgæ, who had possessed themselves of the south coast of Britain, before the arrival of the Romans, and avers that they had no claim to the title of ancient Britons, but are comparatively new comers; that their language is a jargon compounded of various shreds from other tongues, and that nearly one-half of it is of German origin. He chooses to give it the name of Cimbric. We cannot quietly see our countrymen of the principality so unfairly stripped of the honor on which they have so long plumed themselves, without offering a few words in their behalf. We have sought for a motive for Mr. Adelung's unprovoked aggression, and have found it in the old name of Cymru (pronounced Cumri), which the Welsh give themselves to this day, and which he is determined to identify with Cimbri; in short, he is resolved to make our countrymen pass for a branch of that nation of savage monsters who laid waste the north of Italy and were defeated so shamefully by Caius Marius. But he is well aware that the dialect of the Cimbri was nearly allied to his own language. The names of the leaders of this people are evidently German, and we are informed by several Italian writers that a remnant of them still preserve their northern speech in some hilly cantons in the Vicentine and Veronese, where they were visited by a Danish prince who found them able to understand the language of his people.

Their intimate connexion with the Teutones is a strong symptom of Germanism, and their fierce blue eyes, which are mentioned by Plutarch, bear the same testimony. Moreover we are expressly told by Cæsar, Tacitus, Strabo, and Pliny, that they were a native German race. This being settled, the only way of finding any affinity in their pedigree with that of the Welsh is to represent the latter as a branch of the Belgic Gauls, who, according to Cæsar, were in great part of German, or possibly of Cimbric origin.

An appeal to the Welsh language completely refutes this unfounded conjecture. The dialect of the Welsh, as found in the Triads and in the writings of the old bards, is a far more genuine Celtic than that of the Gaëls. And, if either people have ever been so far intermixed with foreigners as to destroy the integrity of its language, it was certainly the latter. One argument will serve amply to demonstrate the truth of this position. We have frequently had occasion to observe that the oldest dialects are more copiously inflected than modern ones. The Sanscrit has in this respect the advantage of the Greek (if it be an advantage), and of the popular dialects of India; and the Greek of the Romaic, or modern Greek. But the greatest disintegration in the structure of a language takes place when a nation becomes so mingled with foreigners as to constitute a new people. In all these instances the idioms are found to have lost a great part of their inflections. Whenever indeed we find two dialects of one language, one of which has an inflected, and the other a simple structure, we may conclude the former to have undergone fewer alterations by foreign intermixture than the latter. Such is the difference that subsists between the Welsh and Gaëlic. The Welsh abounds with inflections of a particular kind, consisting of regular permutations of the initial consonants of words, which seem to have originated on a similar principle with the euphonical orthography of the Sanscrit. Most words are capable of four such modifications. Thus: ty, a house, becomes in different positions dy, nhy, and thy; pen, a head, becomes ben, mhen or phen; cu, a dog, gu, nghu, or chu, &c. Besides this example, the Welsh has a great variety of terminations in the plurals of nouns; it has four degrees of comparison in adjectives, and a copiously inflected verb. The Gaëlic has only one permutation of the initial consonants, and is deficient in all the other particulars above-mentioned. From these circumstances we may fairly infer that the Welsh is a more perfect or less corrupted dialect of the Celtic. Its vocabulary indeed contains very few foreign words, with the exception of those which have plainly been introduced from the Latin and modern English.

All the historical facts of which we are in possession favor this conclusion. Cæsar mentions the Belgic invaders as possessing merely the sea-coast of Britain. He says, 'Interior pars ab iis incolitur quos natos in insula ipsa memoriæ proditum dicunt; maritima pars ab iis quos prædæ aut belli inferendi causa ex Belgis transierant.' Now the Welsh at the departure of the Romans, and consequently at their arrival, possessed so great a portion of the island, that they cannot be the people here described as carrying on piracy on the coasts. We know that they had extended their possessions into Scotland. Dumbarton was a fortress belonging to the Strathclwyd Britons; and Mr. Chalmers has proved indisputably that the names of places throughout the Lowlands of Scotland, as that of Aberdeen for example, are derived from the Welsh, whence we must conclude either that the Caledonians were of the Cambro-Briton race, or that the Welsh possessed the northern part of the island before the arrival of that people. These facts prove that the Welsh are the descendants of a nation who at one period had possession of the whole of this island, and who

retained by far the greater part of it until the Saxon conquest; they are not, therefore, of the Belgian race. The names of places in Gallia Celtica also afford proof that the language of the genuine Celtæ was Welsh, and not Irish. Those particularly which are still preserved in Helvetia are all Welsh.

It is remarkable that, notwithstanding the attention which has been directed to this subject, there is scarcely any point of importance relating to Celtic history which is not still involved in obscurity. The little progress that has been made can only be attributed to the manner in which enquiries have been conducted, and to the love of conjecture, by which our antiquarians have been bewildered. Mr. Adelung has certainly not contributed to dispel this darkness.

His disquisition on the *German* language contains a very elaborate and learned survey of the whole compass of Teutonic literature. He divides the dialects of this great nation into three principal branches, viz. the German, Scandinavian, and English. The German is again subdivided into South German or Gothic, Middle German, and Low German or Low Dutch. The South German dialects are all distinguished by their harsh and guttural pronunciation. This branch of the nation includes the Goths and Vandals, the Heruli, Quadi, Marcomanni, Burgundians, and Lombards. The South German is spoken in all the countries peopled by these nations and the Alemanni. The Bavarians, Austrians, Swiss, Suabians, and the people of Alsace and the Upper and Middle Rhine belong to this class. The Middle Dutch includes the vulgar dialects of Thuringia, Franconia, &c. The Low Dutch is spoken by the people of Lower Saxony, Friesland, Holland, and Belgium.

High Dutch is considered by Adelung, not as popular language of any particular province, but as a refined idiom formed by and adapted for polite conversation and literature. The dialect of Upper Saxony, as spoken by the better orders, served as a basis for it, and it was chiefly diffused and rendered a general language by means of the Reformation and the writings of Luther.

Adelung's account of the *Scandinavian* and *English* contains nothing remarkable, except that he denominates the oldest specimens of our language Danish-Saxon, which, as he contends, succeeded the extinct Anglo-Saxon. In the distribution of the *Sclavonian* nations he follows Dobrowsky, who, it seems, has adopted the old division of Procopius and Jornandes. The Antes, or Eastern branch, includes the Russians and Sclavonians of Illyrium. Under the Slavini, or Western, are enumerated the Polet, Bohemians, Servians, and Northern Wends, who spoke the Sclavonian language in Pomerania as lately as 1404, when it became extinct. Under the Sclavonian family might be arranged, as a subdivision, the Littish or Lithuanian idioms, which are a mixture of Sclavonian and German. A dialect of this language was formerly spoken in old Prussia.

We have now followed our author in his review of this great family of nations, who have spread the remains of one ancient idiom over so great a portion of the globe. A connected chain of languages, which every where claim a common origin, and differ only in dialect, extending from Cape Comorin to Iceland and Scandinavia, is a striking phenomenon, and one which excites doubt when first announced; it is found, however, to rest on sufficient proof to satisfy the utmost scepticism. That all these nations were colonies from India, or from some eastern country not far distant from it, is a conclusion which follows inevitably; but the period of their emigration, and the circumstances that attended it, will probably remain for ever involved in impenetrable darkness.

The West of Europe, in the time of Herodotus, was inhabited by the Celtæ and Cynetæ. We know who the former were; the latter remain to be the subject of conjecture. It has been supposed that the old Iberians are designated by this name: however this may be, they were certainly a very ancient people, and probably were seated in the west of Europe before the arrival of the Celts. Their language is yet preserved in the mountains of Biscay; and, though it presents the most remote and most curious relic of European antiquity, has received as yet very little attention from the learned. Some Spanish writers have declared it to be the antediluvian tongue; and we have perused a large octavo volume, by a Castilian author, in the hope of gaining some new light on its structure and origin; but have only learnt that the Cantabric was the idiom in which the angel spoke to Abraham in the land of Charran. The elder baron Von Humboldt has long ago promised to give a perspicuous and detailed account of the Biscayan people and their antiquities. In the mean time we must make the best use we can of the information contained in the several works of Larramendi, of which we possess a very good abstract in the collection of M. Adelung.

The old Cantabrian or Iberian race possessed all Spain, as appears by the names of places throughout the peninsula, which are derived from their language. But they were not confined to Spain: we learn from Diodorus and Seneca, that the Sicani, who were driven by the Ligurians into Sicily, and the people of Corsica were of this race, and spoke the Iberian language. The Aquitani are associated with them by Cæsar and Strabo. The Ibero-Ligyes of Scylax belonged to the same family, as well as the Ligurians of Italy, whom we find mentioned by Æschylus in a fragment of the lost tragedy of Prometheus Delivered. They are represented as guarding the confines of the country, and intercepting the journey of Hercules from Caucasus to Hesperia.

> *Ηξεις δὲ Λιγύων ἐις ἀτάρβητον στρατὸν*
> *ἔνθ' οὐ μαχῆς σάφ οἶδα και θοῦρος περ ὢν*
> *μέμψει.*

A number of German words are contained in the Basque, probably derived from intercourse with the Visigoths of Spain. Such are baldra, belt; cilhar, silver; dorrea, door; dantza, dance, &c. A much greater number are of Latin origin; as abitua, habit; abitoa, fir-tree; amatu, to love, &c. Some vocables are Celtic; but, after abstracting all these additions, there remains so much which is peculiar, that the Basque must

be considered as an original language, distinct from all other idioms with which we are acquainted. 'The slightest comparison,' says Mr. Adelung, 'suffices to distinguish it from the Celtic, with which many authors have connected it. The difference prevails as well in particular words, as in the whole of the grammatical structure' He has added a vocabulary in proof of the former point; the latter is exceedingly evident. The Basque abounds in multifarious inflections; but they are not founded on the principle which modifies the Indian dialects: they are formed by a variety of particles, suffixed to or inserted in the middle of the radical words. By means of these are produced six cases in the nouns, with a double declension to each, and eleven moods of the verbs, viz. an indicative, consuetudinary, potential, voluntary, obligatory, necessary, imperative, subjunctive, optative, penitudinary, and infinitive. The following is a specimen:—il-dau, he is dead; il-ete-dau, he must be dead; il-edo-dau, it is probable that he is dead.

From the Biscayan, in the west of Europe, we proceed to the Finnish, and Lapponic, in the north, another wholly unconnected family of languages. To the nations of this stock, collectively, Adelung gives the name of Tchudes; and he establishes, on a firm basis, the old opinion of Leem and Gunnerus of Drontheim, which has been called in question by misinformed writers, that the Finns, Laplanders, and Esthonians are tribes of one kindred; and that the Hungarians or Madjars, as they call themselves, are a remote branch of the same stock, the language of the latter being much intermixed with that of the Petchenegars, and other Tartar tribes, with whom they have been associated and mingled. A Laplander and a Finn cannot understand each other: the language of the former is split into a number of dialects, each wandering alone, having one peculiar to itself; so that one family, as often happens among savages, is scarcely intelligible to another. In many particulars the Lapponic coincides more nearly with the Hungarian than the Finnic; yet with the latter it is manifestly allied, as our author proves by a careful analysis of the grammatical structure of both. In the work of Leem, which contains a very excellent and interesting account of the Norwegian Laplanders, we find that their language has some traits which remind us of the Celtic, and we should not be surprised if a careful comparison should point out more. It is, indeed, highly probable, that when the Asiatic colonies arrived with their druidical hierarchy in the north of Europe, they found that country already occupied by tribes of Tchudic race, and that some intermixture followed. A permutation of consonants prevails in the Lapponic, not unlike that of the Celtic dialects. The nouns have from ten to fifteen cases; these, however, are not real inflections, but formed by prepositions, or rather suffixes added to the terminations of the nouns. Other inflections are very abundant, but mostly on the same principle. The present tense of the verb substantive is as follows:—

Lapponic.—Sing. 1. Leh. 2 lep. 3 le.—Dual. 1. Len. 2 lepen. 3 lepe.—Plural. 1. Lepe. 2 lepet. 3. lan.

Finn.—Sing. 1. Olen. 2 olet. 3 on.—Plural. 1. Olemme. 2 olette. 3 owat.

The numerals are nearly the same in the two languages up to ten, the term for which is totally different. The number nine was probably the last term of their arithmetic, when the tribes of the Tchudic stock first separated. They give themselves the same national denomination. In short, it is evident that they were formerly one people.

The origin of this nation is a curious question; and here the Hungarians come to our aid. This tribe, the Ongres, Ugurs, or Madjars, of different writers, are deduced by Abulgasi from the Huns. His opinion is supported only by the resemblance of the names; and this circumstance does more to invalidate it than the difference of bodily characters between the present Hungarians and the ancient Huns, which, though very considerable, may be accounted for by the agency of physical causes. The Ongres come first to our view in the fourth century, when they inhabited Bashkiria, between the Tobol, the Volga, and the Jaik. In the seventh century we find them in alliance with the Chazares, living on plunder and the chace, in the department of Catharinoslav. Towards the end of the ninth century seven tribes, of which the most considerable was called Madjars, were driven out of their territory by the Petchenegers, and passed the Carpathian mountains into Pannonia, where they settled, and gave a new name to that country. The tribes of Ongres, who remained in Asia, were seen by Rubruquis in 1251. As it is proved incontestably that the Finnish language is allied to the Hungarian, these nations must be held to be of one race, and to have emigrated originally from the same quarter.

The old writers are exceedingly anxious, as usual, to force a comparison between the Lapponic and the Hebrew. Olave Rudbeck, a Swede, had the boldness to assert, that out of 2000 or 3000 words, there are only 200 or 300 which are not from Hebrew or Syriac. We only notice this absurd declaration to express our astonishment that Mr. Townsend has been so far deceived by it as to pronounce peremptorily that the Lapponic is more 'pure,' by which he means nearer to the Hebrew than the modern dialects of Arabia. Thus we find in the extremities of Europe, towards the north and west, the remains of nations, who from their situation must be supposed to have occupied this portion of the earth before the arrival of the Indian colonies. The languages of the Cantabrians and Tchudes are totally distinct from each other, and from those of the Indian stock. Even the numerals, which coincide so extensively in languages otherwise unconnected, have here no resemblance. The Tchudes probably possessed all the southern shores of the Baltic, from which they were expelled by the Germans, and driven into Scandinavia.

The north of Asia, from the country occupied by the Finns to the sea, which separates this continent from America, is peopled by tribes of various origin, which are arranged by Mr. Adelung in three departments. The first contains seven

nations of mixed race, who are more or less connected with the Tchudes; the second consists of the people called Samoiedes, and various scattered tribes, who claim a common origin with them; in the third are placed several nations, whose history has not been investigated, and who speak languages quite unconnected. As these nations are very little known, we shall extract some of the most interesting of our author's observations concerning them.

1. The seven nations called Permians, Vogules, Ostiacs of the Oby, Tcheremisses, Votiacs, Mordouines and Teptjerais, have been represented by Pallas, Gmelin, and others, as so many tribes of Finns, and their languages are generally said to be Tchudic dialects. Adelung shows that this affinity has been very much exaggerated. Of 200 Permian vocables, which Müller the Russian historian has collected, seventeen are of Finnish origin: he found only eight in the same number of Vogulian words, sixteen in the Tcheremissic, and twenty-two in the Votiac vocabularies. In several of these there is a considerable mixture of Tartar words, which may well be accounted for from the long dominion of that people. The great mass of vocables in their language is apparently distinct, and of separate origin in each.

The Permians now inhabit the governments of Archangel and Kasan. In the middle ages they seem to have possessed all the country between the White Sea and the Ural Mountains. Ohthere, the celebrated voyager and friend of Alfred, represents the Biarmahs as a very populous nation, and says they spoke the same language as the Finns. The Icelandic traditions tell us, that this region was formerly enriched by the commerce of Persia and the Indies. It is difficult to imagine what was the foundation of this rumor.

2. The Samoiedes are the most destitute wretches of the whole human race. They procure a miserable subsistence by fishing along the shores of the Icy Sea, and extend from the neighbourhood of Archangel to the Lena. They probably inhabited formerly a more hospitable climate, and were driven to the northern coasts by the Tartars and Mongoles; some tribes of the same kindred are dispersed around the shores of lake Baikal and the borders of Mongolia. The tribes who wander through these wide regions have such a diversity of dialect, that it is difficult to recognise their mutual resemblance; yet a careful examination discovers enough to identify the race. Perhaps in a few ages these traces will be lost.

3. Between the Lena and Béhring's Straits are found several hunting or fishing tribes, who are for the most part addicted to the Shaman paganism. The Jeniscan Ostiacs, the Tchuktschi, and the Kamtschadales, are those whose names are best known in Europe. As far as we can judge, by the vocabularies which have been collected of their languages, no affinity can be discovered between them, or any resemblance with the idioms of nations better known, with one remarkable exception, which we shall hereafter notice. Such is the result of Mr. Adelung's observations on these remote tribes, and their languages. We may remark, however, that in his anxiety to avoid the common error of philologists, he approaches the opposite extreme, and scarcely allows their due weight to real coincidences. A few vocables common to two distant nations do not, indeed, authorise our classing their languages together; but, if such a coincidence cannot be referred to accident, it proves a connexion more or less remote between the nations in whose dialects it occurs. Traces are to be met with in the idioms of many remote nations in northern Asia, which point out this sort of affinity between them and the southern races.

The Caucasian nations are distributed into five principal branches, distinguished from each other in languages and in origin. 1. The Abassians inhabit the north-western tract: they are probably the nation who, in the time of Strabo, practised piracy on the shores of the Euxine: they are now wild mountaineers, and as much distinguished from their neighbours by their features as by their languages, which have no affinity with any other. 2. The Circassians, or more properly Kasaeks, possess the northern declivities of Caucasus and the neighbouring plains. A tribe of this race, intermixed with Russians, gave origin to the Cossacs of the Don. The Circassian bards retain among them the tradition of the Amazons, a nation of women, who, as they say, settled in the territory of the Nogay Tartars, and intermarried with that people. This is exactly the story of Herodotus: he says the Amazons came into the country of the Scythians, who appear, from a variety of circumstances, to have been the ancestors of the proper Tartars. 3. The Ossetes, on the high mountains above the Circassians, are, according to Klapwroth, of Medo-Sarmatian race. He gives some reasons for believing them to be the remains of the celebrated Alani. 4. The Ingushi are a wild people, dwelling near the sources of the Terek. 5. The Lesgi are divided into many tribes, or rather the name includes various hordes, who have little or no affinity. The languages of all these nations are said to be essentially distinct.

The more fertile and level countries, which border on the Caucasus to the southward, are called by Europeans Georgia, but more properly Gurgisthan, from the river Kur, the Cyrus of the Greeks. This country is the seat of a nation well known to antiquity, under the names of Iberians and Colchians, who carried on commerce on the Caspian and Euxine Seas. According to Klaproth they have ancient writings in a peculiar character which record the invasion of Asia by the Cimmerii of Herodotus. It is agreed by all writers that their language has no affinity with any other known idiom.

The Armenians are a remarkable nation of western Asia, whose language has been preserved from the beginning of the fifth century by the use of letters. The idiom of that time differed however widely from the modern dialect, as we learn from a translation of the Bible executed by Miesrob, whose pupil was the historian Moses of Chorene. The Armenian language differs widely from all others, even in those vocables which are necessary to the rudest nations; yet its grammatical structure, which has an affinity with that of the Greek and Sanscrit induces a

suspicion that this diversity has been the effect of a gradual fluctuation.

The high mountainous ridge of Asia, which rises from the north of the Caspian, and stretches across to the Eastern Ocean, has been, from the remotest periods of history, the abode of several barbarous nations, who have poured themselves down from time to time on the more polished nations of the south, and have every where rendered their name terrible to future ages. The nomadic hordes of this elevated plain belong to three great races, equally illustrious in deeds of blood.

1. The native region of the Turks or Tartars is the western declivity of this steppe towards the Caspian Sea, and the banks of the Volga. This immense nation is divided into a number of departments, whose names and affiliations our limits will not permit us to pursue. There is sufficient evidence of their belonging to one stock, though their languages are infinitely diversified. The Scythians of the Greeks, in the definite sense of that name, were this same nation, and it is remarkable that the Nogay Tartars, as Klaproth informs us, from local observations, have still that distemper prevalent among them, to which Herodotus ascribes so curious an origin. The language of the Ottomans is better known than the dialects of other Tartar hordes. The modern Turkish is mixed with Arabic and Persic, but its Tartarian basis is easily distinguishable from these additions, and contains such a number of German vocables, as prove a remote connexion between the Tartar and German races. We may observe that the Sauromatæ, who spoke the Scythian language in the time of Herodotus, are certainly connected with the Sclavonian family. The features of the Tartar nations are European.

2. The mountains of Altai are the cradle of the Mongolian race, whose features distinguish them as widely as those of the negro from the rest of mankind. Three great nations belong to this stock: the Kalmucks, the Burættes, and the proper Mongoles. These people are probably the Argippæi of Herodotus, and the Seres of the later Greeks: they are doubtless the Hiong-nu of the Chinese historians, and the Hunns who laid waste Europe. Their language, which is better known than many others, is polysyllabic, but formed in the structure of the monosyllabic dialects; yet it is not without some traces of resemblance to the European languages. A number of words contained in the vocabulary given by Strahlenburg exist, as Vallancey has remarked, in the modern Irish; Mr. Townsend has copied them in his remarks on the Gaëlic language.

3. The eastern region of the Asiatic steppe is the seat of the Mantshurian, or Mant-shoo race, the conquerors of China. The Tungusians, divided into the Rein-deer, Horse, and Dog-Tungusians, and the Fishing Tungusians, who wander from the river Ienisay to the limits of Daouria, are a branch of this family. They have a distinct language of peculiar structure. Yet, divided as they are from all connexion with European history, they have a number of words which are found in several of our dialects. Mr. Adelung has given a list of them, a part of which we extract:—'Ura, Gr. ουρα; kalpin, Gr. κολπος; chop, Germ. schopf, Eng. top; non, Germ. nonne (girl); heren, Germ. heer· Eng. array; kisun (word) kisureme (to talk), Germ. kosen, Fr. causer; hife, Germ. hafe, avena, Lat. (pipe); fahala (black), Germ. fahl; farshe, pars, part; morin, Eng. mare; singui, sanguis; furu, furor, fury; mala, malleus, hammer; ania, annus, year, &c.'

Beyond Mantchuria, to the eastward, the peninsula of Corea contains a number of states, formerly independent, but now united under one sovereign, who is tributary to China. The Chinese pretend that this subjection took place 2188 years before Christ. The Jesuits who went from Pekin to Corea found that the nations neither understood the Chinese nor the Mantchurian language. Their dialect seems to be of the monosyllabic class. In the island of Sagalien, the longest in the world, the inhabitants change their name and language in every village.

The people of the Kuriles, who are said to be covered with hair on their backs, speak a peculiar language. The Japanese suppose themselves to be descended from the Chinese. Their language, however, gives no support to this opinion. It is polysyllabic, and totally different from the Chinese, and, as far as we know, from all other languages. The same remark may be made of the idiom of Formosa.

The extensive traces of one language scattered over the islands of the Indian Seas and Pacific Ocean are a very curious phenomenon. Adelung is very imperfectly informed concerning the history of these islanders, which has been solely investigated by our countrymen, particularly by Leyden, Marsden, and the companions of Cook. An opinion long prevailed that all these tribes were colonies from Malacca, although many striking facts opposed themselves to such a conclusion. Marsden however has shown that the Malays themselves are a colony from the islands, which settled at some remote period on the main land. The inhabitants of all this region, which has been termed Polynesia, may be distributed into three classes, according to the different states of society in which they are found.

1. The negro races, who are every where savages, inhabit the larger islands, and the interior of some others, of which they appear to be the oldest inhabitants. Their languages are very various, and often radically different in adjoining islands; the dialects however of some of their tribes resemble those of the second class. 2dly. The tattooed tribes, to whom belong the Battas of Sumatra, the Pintados of the Philippines, and the natives of the remote isles in the Pacific. Their languages resemble the Otaheitean. 3dly. The Menangkabow race is settled in many of the Indian islands, and on the Malayan coast.

We regret that the great length to which these observations have already extended forbids us from following Mr. Adelung and his successor, professor Vater, through their history of the dialects of the African and American savages. Their remarks on the latter particularly, which are comprised in the last part of the Mithridates, and appeared at a later period than the rest of the

work, are very interesting. The most striking fact which presents itself is the endless diversity of the idioms which prevail among these wild nations. Their languages are so numerous that Mr. Jefferson, from this circumstance, fancied that the population of America must be more ancient than that of the eastern continent.

Sec. III.—Of the difference between Transpositive and Analogous Languages.

Such is a survey, which the labors of Adelung have enabled us to make rather extensive, of the history of all the greater dialects of human speech. We feel disposed, before closing this article, so far to enter into the genius or idiom of particular languages as to enquire into the relative advantages of the transpositive and analogous ones.

The learned reader knows that the several changes which take place in the arrangement of the words, in every *transpositive* language, could not be admitted without occasioning great confusion unless certain classes of words were endowed with particular variations, by means of which they are made to refer to the other words with which they ought naturally to be connected. From this cause proceeds the necessity of several variations of verbs, nouns, and adjectives; which are not in the least essential or necessary in the *analogous* languages.

It is generally supposed that every language, whose verbs admit of inflection, is on that account much more perfect than one where they are varied by auxiliaries: we shall now examine this with some degree of attention; and, that what is said on this head may be the more intelligible, we shall give examples from the Latin and English languages. We make choice of these languages because the Latin is more purely transpositive than the Greek, and the English admits of less inflection than any other language with which we are acquainted.

If any preference be due to a language, from the one or the other method of conjugating verbs, it must in a great measure be owing to one or more of these three causes: either it must admit of a greater variety of sounds, and consequently more room for harmonious diversity of tones in the language,—or allow a greater freedom of expression in uttering any simple idea, by the one admitting of a greater variety in the arrangement of the words which are necessary to express that idea than the other,—or, lastly, a greater precision and accuracy, in fixing the meaning of the speaker, arise from the use of one of these forms than from that of the other; for as every other circumstance which may serve to give a diversity to language, such as the general and most prevalent sounds, the frequent repetition of any one particular letter, and a variety of other circumstances of that nature, which may serve to debase a particular language, are not influenced in the least by the different methods of varying the verbs, they cannot be here considered. We shall therefore compare the advantages and disadvantages which may accrue to a language, by inflecting its verbs, with regard to each of these particulars,—variety of sound, variety of arrangement, and accuracy of meaning.

The first particular that we have to examine is, whether the one method of expressing the variations of a verb admits of a greater variety of sounds? In this respect the Latin seems, at first view, to have a great advantage over the English: for the words amo, amabam, amaveram, amavero, amem, &c., seem to be more different from one another than the English translations of them, I love, I did love, I had loved, I shall have loved, I may love, &c.; for although the syllable *am* is repeated in every one of the first, yet, as the last syllable usually strikes the ear with greater force, and leaves a greater impression than the first, it is very probable that many will think the frequent repetition of the word *love*, in the latter instance, more striking to the ear than the repetition of *am* in the former. We will therefore allow this its full weight, and grant that there is as great, or even a greater, difference between the sounds of the different tenses of a Latin verb, than between the words that are equivalent to them in English. But, as we here consider the variety of sounds of the language in general, before any just conclusion can be drawn we must not only compare the different parts of the same verb, but also compare the different verbs with one another in each of these languages. And here, at first view, we perceive a most striking distinction in favor of the analogous language over the inflected; for, as it would be impossible to form a particular set of inflections, different from one another, for each particular verb, all those languages which have adopted this method have been obliged to reduce their verbs into a small number of classes; all the words of each of which classes, called conjugations, have the several variations of the moods, tenses, and persons, expressed exactly in the same manner, which must of necessity introduce a similarity of sounds into the language in general, much greater than where every particular verb always retains its own distinguishing sound. To be convinced of this we need only repeat any number of verbs in Latin and English, and observe on which side the preference with respect to variety of sounds must fall.

Pono,	*I put.*	Bibo,	*I drink.*
Dono,	*I give.*	Scribo,	*I write.*
Cano,	*I sing.*	Moveo,	*I move.*
Sono,	*I sound.*	Doleo,	*I ail.*
Orno,	*I adorn.*	Obeo,	*I die.*
Pugno,	*I fight.*	Gaudeo,	*I rejoice.*

The similarity of sounds is here so obvious in the Latin as to be perceived at the first glance; nor can we be surprised to find it so, when we consider that all their regular verbs, amounting to 4000 or upwards, must be reduced to four conjugations; and even these differing but little from one another, which must of necessity produce the sameness of sounds which we here perceive; whereas every language that follows the natural order, like the English, instead of this small number of uniform terminations, have almost as many distinct sounds as original verbs in their language.

But if, instead of the present of the indicative mood, we take almost any other tense of the Latin verb, the similarity of sounds will be still

more perceptible, as many of these tenses have the same termination in all the four conjugations, particularly in the imperfect of the indicative: as,

Pone-bam;	*I did put,*	*I put.*
Dona-bam;	*I did give,*	*I gave.*
Cane-bam;	*I did sing,*	*I sung.*
Sona-bam;	*I did sound,*	*I sounded.*
Orna-bam;	*I did adorn,*	*I adorned.*
Pugna-bam;	*I did fight,*	*I fought.*
Bibe-bam;	*I did drink,*	*I drank.*
Scribe-bam	*I did write,*	*I wrote.*
Move-bam;	*I did move,*	*I moved.*
Dole-bam;	*I did ail,*	*I ailed.*
Obi-bam;	*I did die,*	*I died.*
Gaude-bam;	*I did rejoice,*	*I rejoiced.*

It is unnecessary to make any remarks on the Latin words in this example: but in the English translation we have marked in the first column the words without any inflection; and in the second have put down the same meaning by an inflection of our verb; which we have been enabled to do, from a peculiar excellency in our language unknown to any other either ancient or modern. The numerous tenses ending in *am*, *bam*, and *ram*, sound peculiarly barbarous when conjoined in the same sentence with other words ending also in *am*: thus what can be more uncouth than this?—Causam quam nesciebam diligentissime investigabam;—or even than Cicero's famous poetical line, though none of these verbs occur in it, O fortunatam natam, me consule Romam? Were it necessary to pursue this subject farther, we might observe that the perfect tense in all the conjugations ends universally in *i*, the pluperfect in *eram*, and the future in *am* or *bo*; in the subjunctive mood, the imperfect universally in *rem*, the perfect in *erem*, the pluperfect in *issem*, and the future in *ero*: and as a still greater sameness is observable in the different variations for the persons in these tenses, seeing the first person plural in all tenses ends in *mus*, and the second person in *tis*, with little variation in the other persons, it is evident that, in respect of diversity of sounds, this method of conjugating verbs by inflection is greatly inferior to the more natural method of expressing the various connexions and relations of the verbal attributive by different words, usually called auxiliaries.

The second particular, by which the different methods of marking the relation of the verbal attributive can affect language, arises from the variety of expressions which either of these may admit of in uttering the same sentiment. In this respect, likewise, the method of conjugating by inflexion seems to be deficient. Thus the present of the indicative mood in Latin can at most be expressed only in two ways, viz. *scribo*, and *ego scribo;* which ought perhaps in strictness to be admitted as only one; whereas, in English, we can vary it in four different ways, viz. 1. *I write;* 2. *I do write;* 3. *write I do;* 4. *write do I.* Though this last variation cannot, in serious composition, be considered as good language, yet examples might be given from some of our best authors. But in works of humor, such as Butler's Hudibras, and some of Shakspeare's plays, it produces a fine effect, by giving a burlesque air to the language. And if we consider the further variation which these receive in power as well as in sound, by having the emphasis placed on the different words, instead of four we shall find eleven different variations: thus, 1. *I* write, with the emphasis upon the *I;*—2. I *write*, with the emphasis upon the word *write*. Let any one pronounce these with the different emphasis necessary, and he will be immediately satisfied that they are not only distinct from each other with respect to meaning, but also with regard to sound; and the same must be understood of all the other parts of this example: thus,

3. *I* do write,	8. Write I *do*,
4. I *do* write,	9. *Write* do I,
5. I do *write*,	10. Write *do* I,
6. *Write* I do,	11. Write do *I*.
7. Write *I* do,	

None of the Latin tenses admit of more variations than the two above mentioned: nor do almost any of the English admit of fewer than in the above example; and several of these phrases, which must be considered as exact translations of some of the tenses of the Latin verb, admit of many more. Thus the imperfect of the subjunctive mood, which in Latin admits of the above two variations, admits in English of the following:—

1. I might have written.
2. Written I might have.
3. Have written I might,
4. Written might have I.
5. I written might have.
6. Have written might I.

And, if we likewise consider the variations which may be produced by a variation of the emphasis they will amount to no less than twenty-four, instead of two. If we likewise consider, that the Latins were obliged to employ the same word, not only to express 'I *might* have written,' but also, 'I *could*, I *would*, or I *should* have written;' each of which would admit of the same variations as the word *might*; we have in all ninety-six different expressions in English for the same phrase which in Latin admits only of two, unless they have recourse to other forced turns of expression, which the defects of their verbs in this particular have compelled them to invent. We may therefore safely conclude, that the mode of varying verbs by inflection affords less variety in the arrangement of the words of the particular phrases, than the method of varying them by the help of auxiliaries.

But if there should still remain any doubt whether the method of varying the verbs by inflection is inferior to that by auxiliaries, with regard to diversity of sounds, or variety of expression; there cannot be the least doubt, but that with respect to precision, distinctness, and accuracy, in expressing any idea, the latter enjoys a superiority beyond all comparison.—Thus the Latin verb *amo* may be Englished either by the words, *I love*, or *I do love*, and the emphasis placed upon any of the words that the circumstances may require: by means of which the meaning is pointed out with a force and energy which it is altogether impossible to produce by the use of

any single word. The following line from Shakspeare's Othello may serve as an example:—

> ———Excellent wretch!
> Perdition catch my soul, but *I* DO *love* thee:

In which the strong emphasis upon the word DO, gives it a force and energy which conveys, in an irresistible manner, a most perfect knowledge of the situation of the mind of the speaker at the time.—That the whole energy of the expression depends upon this seemingly insignificant word, we may be satisfied, by keeping it away, thus:

> ———Excellent wretch!
> Perdition catch my soul, but *I love* thee.

How poor—how tame—how insignificant is this, when compared with the other! Here nothing remains but a tame assertion, ushered in with a pompous exclamation, which could not here be introduced with any degree of propriety. Whereas, in the way that Shakspeare has left it to us, it has an energy which nothing can surpass; for, overpowered with the irresistible force of Desdemona's charms, this strong exclamation is extorted from the soul of Othello in spite of himself. Surprised at this tender emotion, which brings to his mind all those amiable qualities for which he had so much esteemed her, and at the same time fully impressed with the firm persuasion of her guilt, he bursts out into that seemingly inconsistent exclamation, *Excellent wretch!* and then he adds in the warmth of his surprise,—thinking it a thing most astonishing, that any warmth of affection should still remain in his breast, he even confirms it with an oath,—*Perdition catch my soul, but I* DO *love thee*—'In spite of all the falsehoods with which I know thou hast deceived me—in spite of all the crimes of which I know thee guilty—in spite of all those reasons for which I ought to hate thee—in spite of myself,—still I find that I love,—yes, I DO love thee.' We look upon it as a thing altogether impossible to transfuse the energy of this expression into any language whose verbs are regularly inflected.

We might thus go through all the other tenses, and show that the same superiority is to be found in each.—Thus, in the perfect tense of the Latins, instead of the simple *amavi*, we say I *have loved*; and, by the liberty we have of putting the emphasis upon any of the words which compose this phrase, we can, in the most accurate manner, fix the precise idea which we mean to excite; for if we say *I* have loved, with the emphasis upon the word *I*, it at once points out the person as the principal object in that phrase, and makes us naturally look for a contrast in some person, and the other parts of the phrase become subordinate to it:—HE *has loved* thee much, but I *have loved* thee infinitely more.' The Latins too, as they were not prohibited from joining the pronoun with their verb, were also acquainted with this excellence, which Virgil has beautifully used in this verse:

> ———*Nos* patriam fugimus;
> *Tu*, Tityre, lentus in umbra, &c.

But we are not only enabled thus to distinguish the person in as powerful a manner as the Latins, but can also with the same facility point out any of the other circumstances as principals; for if we say, with the emphasis upon the word *have*, '*I* HAVE *loved*,' it as naturally points out the time as the principal object, and makes us look for a contrast in that peculiarity, I HAVE; 'I *have* loved indeed:—my imagination *has* been led astray—my reason *has* been perverted:—but, *now* that time has opened my eyes, I can smile at those imaginary distresses which once perplexed me.'—In the same manner we can put the emphasis upon the other word of the phrase, *loved*,—'*I have* LOVED.'—Here the passion is exhibited as the principal circumstance; and, as this can never be excited without some object, we naturally wish to know the object of that passion—'Whom? what have you *loved?*' are the natural questions we should put in this case. 'I have LOVED—Eliza.'—In this manner we are, on all occasions, enabled to express, with the utmost precision, that particular idea which we would wish to excite, so as to give an energy and perspicuity to the language, which can never be attained by those languages whose verbs are conjugated by inflection; and if to this we add the inconvenience which all inflected languages are subject to, by having too small a number of tenses, so as to be compelled to make one word on many occasions supply the place of two, three or even four, the balance is turned still more in our favor.—Thus, in Latin, the same word AMABO stands for *shall* or *will* love, so that the reader is left to guess from the context which of the two meanings it was most likely the writer had in view.—In the same manner, *may* or *can* love are expressed by the same word AMEM; as are also *might*, *could*, *would*, or *should* love, by the single word AMAREM; so that the reader is left to guess which of these four meanings the writer intended to express: which occasions a perplexity very different from that clear precision of which our language allows, by not only pointing out the different words, but also by allowing us to put the emphasis upon any one of them we please, which superadds energy and force to the precision it would have had without that assistance.

On the whole, therefore, we must conclude, that the method of conjugating verbs by inflection is inferior to that which is performed by the help of auxiliaries;—because it does not afford such a diversity of sounds,—nor allow such variety in the arrangement of expression for the same thought,—nor give so great distinction and precision in the meaning.—It is, however, attended with one considerable advantage above the other method: for, as the words of which it is formed are necessarily of greater length, and more sonorous, than in the analogous languages, it admits of more flowing harmony of expression; for the number of monosyllables in this last greatly checks that pompous dignity which naturally results from longer words. Whether this single advantage is sufficient to counterbalance all the other defects with which it is attended, is left to the reader to determine:—but we may remark, that even this excellence is attended with some peculiar inconveniences, which shall be more particularly pointed out in the sequel.

Perhaps it may still be objected, that although the comparison we have made above may be fair, and the conclusion just, with regard to the Latin and English languages; yet it does not appear clear, that on that account the method of conjugating verbs by inflection is inferior to that by auxiliaries; for, although it be allowed that the Latin language is defective in point of tenses, yet if a language were formed which had a sufficient number of inflected tenses to answer every purpose; if it had, for instance, a word properly formed for every variation of each tense; one for *I love*, another for *I do love*; one for *I shall love*, another for *I will love*; one for *I might*, another for *I could*, and *would*, and *should love*; and so on; that this language would not be liable to the objections brought against the inflection of verbs: and that of course these objections are only valid against those languages which have followed that mode, and executed it imperfectly. —We answer that, although this would in some measure remedy the evil, yet it would not remove it entirely. For, in the first place, unless every verb, or every small number of verbs, were conjugated in one way, having the sound of the words in each tense, and division of tenses, different from all the other conjugations,—it would always occasion a sameness of sound, which would in some measure prevent that variety of sounds so proper for a language. And, even if this could be effected, it would not give such a latitude to the expression as auxiliaries allow; for although there should be two words, one for *I might*, and another for *I could* love; yet as these are single words, they cannot be varied; whereas, by auxiliaries, either of these can be varied twenty-four different ways. In the last place, no single word can ever express all that variety of meaning which we can do by the help of our auxiliaries and the emphasis. *I have loved*, if expressed by any one word, could only denote at all times one distinct meaning; so that, to give it the power of ours, three distinct words at least would be necessary.—However, if all this were done; that is, if there were a distinct conjugation formed for every forty or fifty verbs;—if each of the tenses were properly formed, and all of them different from every other tense as well as every other verb; and these all carried through each of the different persons, so as to be all different from one another;—and if likewise there were a distinct word to mark each of the separate meanings which the same tense could be made to assume by means of the emphasis; and if all this infinite variety of words could be formed in a distinct manner, different from each other, and harmonious; this language would have powers greater than any that could be formed by auxiliaries, if it were possible for the human powers to acquire such a degree of knowledge as to employ it with facility. But how could this be attained, since upwards of 10,000 words would be necessary to form the variation of any one verb, and 100 times that number would not include the knowledge of the verbs alone of such a language. This assertion may perhaps appear very much exaggerated; but let any one mark all the variations of tense, mood, person, and number, which an English verb can be made to assume, varying each of these in every way that they will admit, both as to the diversity of expression and the emphasis; he will soon be convinced that we have here said nothing more than enough. How much, therefore, ought we to admire the simple perspicuity of our language, which enables us, by the proper application of ten or twelve seemingly trifling words, the meaning and use of which can be attained with the utmost ease, to express all that could be expressed by this unwieldly apparatus? What can equal the simplicity or the power of the one method, but the well known powers of the twenty-four letters, the knowledge of which can be obtained with the utmost ease—and their powers know no limits?—or what can be compared to the fancied perfection of the other, but the 33,000 hieroglyphical characters, in which the Chinese write their unintelligible language, and which require half the life of a man to learn to read?

After the verbs, the next most considerable difference we find between the analogous and transpositive language is in the nouns; the latter varying the different cases of these by inflection; whereas the former express all the different variations of them by the help of other words, prefixed, called prepositions. Now, if we consider the advantages and disadvantages of either of these methods, we shall find that with regard to the first particular, viz. variety of sounds, almost the same remarks may be made as upon the verbs; for, if we compare any particular noun by itself, the variety of sound appears much greater between the different cases in the transpositive, than between the translations of these in the analogous language. Thus, *rex*, *regis*, *rege*, *regem*, &c., are more distant from one another in point of sound, than the translations of these, *a king*, *of a king*, *to a king*, *a king*, &c. But if we proceed one step further, and consider the variety which is produced in the language in general, by the one or the other of these methods, the case is entirely reversed. For as it would have been impossible to form distinct variations, different from one another, for each case of every noun, they have been obliged to reduce all their nouns into a few general classes, called declensions, and to give to all those included under each class the same termination in every case; which produces a like similarity of sound with what we observed was occasioned to the verbs from the same cause; whereas in the analogous languages, as there is no necessity for any constraint, there is almost as great a variety of sounds as there are of nouns. The Latins have only five different declensions; so that all the great number of words of this general order must be reduced to the very small diversity of sounds of which these few classes admit; and even the sounds of these few classes are not so much diversified as they might have been, as many of the different cases in the different declensions have exactly the same sounds. We might here produce examples to show the great similarity of sounds between different nouns in the Latin language, and variety in the English, as we did of the verbs: but, as every reader in the least acquainted with these two languages must be satisfied of this, we think it unnecessary to enlarge.

But if the inflection of nouns is a disadvantage to a language in point of diversity of sounds, it is very much the reverse with regard to the variety it allows in the arranging the words of the phrase. Here, indeed, the transpositive language shines forth in all its glory, and the analogous must yield the palm without dispute. For as the nominative case (or that noun which is the cause of the energy expressed by the verb) is different from the accusative (or that noun upon which the energy expressed by the verb is exerted), these may be placed in any situation that the writer shall think proper, without occasioning the smallest confusion: whereas in the analogous languages, as these two different states of the noun are expressed by the same word, they cannot be distinguished but by their position alone; so that the noun which is the efficient cause must always precede the verb, and that which is the passive subject must follow; which greatly cramps the harmonious flow of composition. Thus the Latins, without the smallest perplexity in the meaning, could say either *Brutum amavit Cassius*, or *Cassius amavit Brutum*, or *Brutum Cassius amavit*, or *Cassius Brutum amavit*. As the termination of the word Cassius always points out that it is in the nominative case, and therefore that he is the person from whom the energy proceeds; and, in the same manner, as the termination of Brutum points out that it is in the accusative case, and consequently that he is the object upon whom the energy is exerted; the meaning continues still distinct and clear, notwithstanding all these several variations: whereas, in the English language, we could only say, *Cassius loved Brutus*, or, by a more forced phraseology, *Cassius Brutus loved*: Were we to reverse the case, as in the Latin, the meaning also would be reversed; for if we say *Brutus loved Cassius*, it is evident, that, instead of being the person beloved, as before, Brutus now becomes the person from whom the energy proceeds, and Cassius becomes the object beloved. In this respect, therefore, the analogous languages are greatly inferior to the transpositive; and indeed it is from this single circumstance alone, that they derive their chief excellence.

But although it thus appears evident, that any language, which has a particular variation of its nouns to distinguish the accusative from the nominative case, has an advantage over those languages which have none: yet it does not appear that any other of their cases adds to the variety, but rather the reverse: for, in Latin, we can only say *amor Dei*: in English the same phrase may be rendered, either,—*the love of God*—*of God the love*,—or, by a more forced arrangement, *God, the love of*, or, by a very common abbreviation, *God's love*. And as these oblique cases, as the Latins called them, except the accusative, are clearly distinguished from one another, and from the nominative, by the preposition which accompanies them, we are not confined to any particular arrangement with regard to these as with the accusative, but may place them in what order we please, as in Milton's elegant invocation at the beginning of Paradise Lost —

> Of man's first disobedience, and the fruit
> Of that forbidden tree, whose mortal taste
> Brought death into the world, and all our wo,
> With loss of Eden, till one greater man
> Restore us, and regain the blissful seat,
> Sing, heavenly Muse.

In this sentence the transposition is almost as great as the Latin language would admit of, and the meaning as distinct as if Milton had begun with the plain language of prose, thus,—'Heavenly Muse, sing of man's first disobedience, &c.

The little attention which seems to have been paid to this peculiar advantage, from the use of an accusative case different from the nominative is indeed surprising. The Latins, who had more occasion to attend to this than any other nation, and even the Greeks themselves, have in many cases overlooked it. For all nouns of the neuter gender, both in Greek and Latin, have in every declension their nominative and accusative singular alike: nor in the plural of such nouns is there any distinction between these two cases; and in Latin all nouns whatever, of the third, fourth, and fifth declensions, have their nominative and accusative plural alike. So that their language reaps no advantage in this respect from almost one-half of their nouns. Nor have any of the modern languages in Europe attempted to copy from them in this particular; from which perhaps more advantage would have been gained, than from copying all the other supposed excellences of their language.

Let us now consider whether the inflection of nouns gives any advantage over the method of defining them by prepositions, in point of distinctness and precision of meaning. In this respect too the analogous languages have the superiority. Indeed this is the particular in which their greatest excellence consists, nor is it disputed, but that, in point of accuracy and precision, this method must excel all others, however, defective it may be in other respects. We observed, when speaking of verbs, that it might perhaps be possible to form a language by inflection which should be capable of as great accuracy as in the more simple order by auxiliaries: but this would have been such an infinite labor, that no human powers would have been able to accomplish it. More easy would it have been, to have formed the several inflections of the nouns so different from one another, as to have rendered it impossible ever to mistake the meaning. Yet even this has not been attempted. And, as we find that those languages which have adopted the method of inflecting their verbs are more imperfect in point of precision than the other, so the same may be said of inflecting the nouns: for, not to mention the energy which the analogous languages acquire by putting the accent upon the noun, or its preposition (when in an oblique case), according as the subject may require, to express which variation of meaning no particular variety of words has been invented in any inflected language; they are not even complete in other respects. The Latin, in particular, is in many cases defective, the same termination being employed in many instances for different cases of the same

noun. Thus the genitive and dative singular and nominative and vocative plural, of the first declension, are all exactly alike, and can only be distinguished from one another by the formation of the sentences;—as are also the nominative, vocative, and ablative singular, and the dative and ablative plural. In the second the genitive singular, and nominative and vocative plural, are the same; as are also the dative and ablative singular, and dative and ablative plural; except nouns in um, whose nominative, accusative, and vocative singular, and nominative, accusative, and vocative plural are alike. The other three declensions agree in as many of their cases as these do; which evidently tends to perplex the meaning, unless the hearer is particularly attentive to, and well acquainted with, the particular construction of the other parts of the sentence; all of which is totally removed, and the clearest certainty exhibited at once, by the help of prepositions in the analogous languages.

It is not necessary to enter into such a minute examination of the advantages or disadvantages attending the variation of adjectives; as it will appear evident, from what has been already said, that the endowing them with terminations similar to, and corresponding with, substantives, must tend still more to increase the similarity of sounds, than any of those particulars we have already taken notice of; and were it not for the liberty which they have, in transpositive languages, of separating the adjective from the substantive, this must have occasioned such a jingle of similar sounds as could not fail to have been most disgusting to the ear: but as it would have been impossible in many cases, in those languages where the verbs and nouns are inflected, to have pronounced the words which ought to have followed each other, unless their adjectives could have been separated from the substantives; therefore, to remedy this inconvenience, they were forced to devise this unnatural method of inflecting them also; by which means it is easy to recognise to what substantive any adjective has a reference, in whatever part of the sentence it may be placed. In these languages, therefore, this inflection, both as to gender, number, and case, becomes absolutely necessary; and by the diversity which it admitted in the arranging the words of the several phrases might counterbalance the jingle of similar sounds which it introduced into the language.

Having thus examined the most striking particulars in which the transpositive and analogous languages differ, and endeavoured to show the general tendency of every one of the particulars separately, it would be improper to dismiss the subject without considering each of these as a whole, and pointing out their general tendency in that light: for it often happens in human inventions, that every part which composes a whole, taken separately, may appear extremely fine; and yet, when all these parts are put together, they may not agree, but produce a jarring and confusion very different from what was expected.

Though all languages agree in this respect, that they are the means of conveying the ideas of one man to another, yet as there is an infinite variety of ways in which we might wish to convey these ideas, sometimes by the easy and familiar mode of conversation, and at other times by more solemn addresses to the understanding, by pompous declamation, &c., the genius of one language may be more properly adapted to the one of these than the other, while another language may excel in the opposite particular. This is exactly the case in the two general idioms of which we now treat. Every particular in a transpositive language is peculiarly calculated for that solemn dignity which is necessary for pompous orations. Long sounding words, formed by the inflection of the different parts of speech, flowing periods, in which the attention is kept awake by the harmony of the sounds, and in expectation of that word which is to unravel the whole,—if composed by a skilful artist, are admirably suited to that solemn dignity and awful grace which constitute the essence of a public harangue. On the contrary, in private conversation, where the mind wishes to unbend itself with ease, these become so many clogs which encumber and perplex. At these moments we wish to transfuse our thoughts with ease and facility—we are tired with every unnecessary syllable—and wish to be freed from the trouble of attention as much as may be. Like state robes, we would wish to lay aside our pompous language, and enjoy ourselves at home with freedom and ease. Here the solemnity and windings of the transpositive language are burdensome; while the facility with which a sentiment can be expressed in the analogous language is what we wish to acquire. Accordingly, in Terence and Plautus, where the beauties of dialogue are most charmingly displayed, transposition is sparingly used. In this humble, though engaging sphere, the analogous language moves unrivalled;—in this it wishes to indulge, and never tires. But it in vain attempts to rival the transpositive in dignity and pomp: the number of monosyllables interrupt the flow of harmony; and, although they may give a greater variety of sounds, yet they do not naturally possess that dignified gravity which suits the other language. This, then must be considered as the striking particular in the genius of these two different idioms, which marks their characters. If we consider the effects which these two different characters of language must naturally produce upon the people who employ them, we shall perceive that the genius of the analogous language is much more favorable for the most engaging purposes of life, the civilising the human mind by mutual intercourse of thought, than the transpositive For as it is chiefly by speech that man is raised above the brutes; as by this he improves every faculty of his mind, and, to the observations which he may himself have made, has the additional advantage of the experience of those with whom he converses, as well as the knowledge which the human race have acquired by the accumulated experience of all preceding ages;—as it is by the enlivening glow of conversation that kindred souls catch fire from one another, that thought produces thought, and each improves upon the other, till they soar beyond the bounds which human reason, if left alone,

could ever have aspired to;—we must surely consider that language as the most beneficial to society which most effectually removes these bars that obstruct its progress. Now, the genius of the analogous language is so easy, so simple and plain, as to be within the reach of every one who is born in the kingdom where it is used, to speak it with facility: even the rudest among the vulgar can hardly fall into any considerable grammatical errors: whereas, in the transpositive languages, so many rules are necessary to be attended to, and so much variation is produced in the meaning by the slightest variations in the sound, that it requires a study far above the reach of the illiterate ever to attain. So that, how perfect soever the language may be when spoken with purity, the bulk of the nation must ever labor under the inconvenience of rudeness and inaccuracy of speech, and all the evils which this naturally produces. Accordingly, we find, that in Rome, a man, even in the highest rank, received as much honor, and was as much distinguished among his equals, for being able to converse with ease, as a modern author would be for writing in an easy and elegant style; and Cæsar, among his contemporaries, was as much esteemed for his superiority in speaking the language in ordinary conversation with ease and elegance, as for his powers of oratory, his skill in arms, or his excellence in literary composition. It is needless to point out the many inconveniences which this must unavoidably produce in a state. It naturally tends to introduce a vast distinction between the different orders of men; to set an impenetrable barrier between those born in a high and those born in a low station; to keep the latter in ignorance and barbarity, while it elevates the former to such a height as must subject the other to be easily led by every popular demagogue. The history of the nations who have followed this idiom of language confirms this observation. See GRAMMAR and PHILOLOGY.

LANGUEDOC, a province of the south of France, now divided into the departments of the Tarn, the Higher Garonne, the Herault, the Aude, the Garde, the Ardeche, the Higher Loire, and the Lozere. See FRANCE. It has the Rhone on its eastern, and the Garonne on its western side: being of an oblique form, about 170 miles from east to west, and ninety from north to south. The Upper or Western Languedoc formerly had Toulouse for its capital; and the Lower or Eastern, Montpelier. It has a population of full 2,000,000, and an area of 16,000 square miles. Its rivers are, the Rhone, Garonne, Aude, Tarn, Allier, and Gordan. In its soil Languedoc is highly favored, and it exports large quantities of wine and brandy. Corn cultivated by frequent irrigation, vines, olives, and mulberries variegate the interior, and fisheries and salt works occupy the inhabitants of its coasts.

In the north-east, or mountainous portion of the province, the climate is cold and the cultivation but very partial. Here, however, it is rich in mines of iron and copper, and in particular spots are found quarries of alabaster. On these mountains are fed vast flocks of sheep, the wool of which, mixed with that imported from Spain, affords materials for the manufactories at Lodeve, Carcassonne, and other towns of this province. Near Cette commences the celebrated canal of Languedoc, begun in the reign of Louis XIV. and which extends from east to west nearly 140 miles, until it reaches the Garonne near Toulouse; effecting a communication by water from the Atlantic to the Mediterranean. The bridges over it are seventy-one in number; the aqueducts which carry it over streams and rivers are fifty-eight, and the sluices 103. A remarkable tunnel in its course is at the hill of Malpas, and is 500 feet in length, and twenty in breadth.

Languedoc was known to the Romans as the Provincia Narbonensis Prima: it afterwards fell under the government of the count of Toulouse, until in the thirteenth century, partly by marriage and partly by conquest, it was united to the French crown.

LANGUET (Hubert), a native of Viteaux in Burgundy, born in 1518. He gained great reputation by his learning and virtue. Having read one of Melancthon's works at Bologna, he went to Wittenberg in 1549, where he contracted a strict friendship with him, and embraced the Protestant religion. In 1565 he was one of the first counsellors of Augustus elector of Saxony, who employed him in several important affairs and negociations. He was afterwards admitted to the confidence of William prince of Orange; and died at Antwerp, on the 30th of September 1581. Many of his letters in Latin to Sir P. Sidney, and Augustus elector of Saxony, have been repeatedly printed in three volumes. A famous treatise, entitled Vindiciæ contra Tyrannos, and other works, are also ascribed to him. His life is written by Philibert de la Mare.

LANGUET (John Baptist Joseph), the celebrated vicar of St. Sulpice at Paris, and a doctor of the Sorbonne, was born at Dijon in 1675. He was received into the Sorbonne in 1698; and attached himself to the community of St. Sulpice, where he continued nearly ten years; and in 1714 succeeded to the vicarage. The regent, duke of Orleans, granted him a lottery, and laid the first stone of a new church for him in 1718; and M. Languet spared neither labor nor expense to render it one of the finest in the world. He was also the founder of the Maison de l'enfant Jesus; an establishment for the support of about thirty-five poor ladies of good families, and of above 400 poor women and children of town and country. The order and economy of this house gave cardinal Fleury so high an opinion of Languet, that he offered to make him superintendant-general of all the hospitals in the kingdom, which, however, he declined. No man ever took more pains to procure charitable donations and legacies. He is said, from good authority, to have disbursed nearly 1,000,000 of livres annually to the poor. When there was a general dearth, in 1725, in order to relieve the poor, he sold his household goods, pictures, and furniture, and, when the plague raged at Mar-

seilles, he sent large sums into Provence for the relief of the distressed. M. Languet refused several bishoprics, and even resigned his vicarage in 1748; but continued to preach every Sunday at his own parish church, and to support the Maison de l' enfant Jesus, till his death, which happened in 1750.

LAN'GUID, *adj.* | LAN'GUIDLY, *adv.* | LAN'GUIDNESS, *n. s.* | LAN'GUISH, *v. n.* & *n. s.* | LAN'GUISHINGLY, *adv.* | LAN'GUISHMENT, *n. s.* | LAN'GUOR, | LAN'GUOROUS, *adj.* } Lat. *languidus* and *langueo*; Fr. and Span. *languir*; Ital. *languire*. Languid is feeble; faint; weak: senses which the adverb and noun follow: to languish, to grow or become feeble; to pine away; sink; exhibit decline, softness, or tenderness: languor and languishment mean faintness; feebleness; listlessness; laxity; state of decline; dulness: languorous (obsolete), faint; melancholy.

If any man techith othirwise and accordith not to the hoolsum wordis of our lord Iesus Crist, and to that techyng that is bi pitee, he is proud and can nothing, but *languischith* aboute questiouns and stryuyng of wordis. *Wicliffe*, 1 *Tym*. 6.

The land shall mourn, and every one that dwelleth therein *languish*. *Hosea* iv. 3.

We and our fathers do *languish* of such diseases. 2 *Esdras*.

By that count which lovers books invent,
The sphere of Cupid forty years contains;
Which I have wasted in long *languishment*,
That seemed the longer for my greater pains. *Spenser*.

Well hoped I, and fair beginnings had,
That he my captive *languor* should redeem. *Id.*

Dear lady, how shall I declare thy case,
Whom late I left in *languorous* constraint? *Id.*

Let her *languish*
A drop of blood a-day; and, being aged,
Die of this folly. *Shakspeare's Cymbeline.*

What man who knows
What woman is, yea, what she cannot chuse
But must be, will his free hours *languish* out
For assured bondage? *Id.*

For these, these tribunes, in the dust I write
My heart's deep *languor*, and my soul's sad tears. *Shakspeare.*

What can we expect, but that her *languishings* should end in death? *Decay of Piety.*

Alas! my Dorus, thou seest how long and *languishingly* the weeks have past over since our last talking. *Sidney.*

The menstruum worked as *languidly* upon the coral as it did before. *Boyle.*

His sorrows bore him off; and softly laid
His *languished* limbs upon his homely bed. *Dryden.*

What poems think you soft, and to be read,
With *languishing* regards, and bending head. *Id.*

Humility it expresses, by the stooping or bending of the head; *languishment*, when we hang it on one side. *Id.*

I'll hasten to my troops,
And fire their *languid* souls with Cato's virtue. *Addison.*

Let Leonora consider, that, at the very time in which she *languishes* for the loss of her deceased lover, there are persons just perishing in a shipwreck. *Id. Spectator.*

Languor and lassitude signifies a faintness, which may arise from want or decay of spirits, through indigestion, or too much exercise; or from an additional weight of fluids, from a diminution of secretion by the common discharges. *Quincy.*

Whatever renders the motion of the blood *languid*, disposeth to an acid acrimony; what accelerates the motion of the blood, disposeth to an alkaline acrimony. *Arbuthnot.*

No space can be assigned so vast, but still a larger may be imagined; no motion so swift or *languid*, but a greater velocity or slowness may still be conceived. *Bentley.*

And the blue *languish* of soft Allia's eye. *Pope.*

Leave such to tune their own dull rhimes, and know
What's roundly smooth, or *languishingly* slow. *Id.*

To isles of fragrance, lilly-silvered vales,
Diffusing *languor* in the panting gales. *Dunciad.*

Academical disputation gives vigour and briskness to the mind thus exercised, and relieves the *languor* of private study and meditation. *Watts's Improvement of the Mind.*

Then forth he walks,
Beneath the trembling *languish* of her beam,
With softened soul. *Thomson's Spring.*

A *languid*, leaden iteration reigns,
And ever must, o'er those whose joys are joys
Of sight, smell, taste. *Young.*

When by the bed of *languishment* we sit
(The seat of wisdom! if our choice, not fate),
Or o'er our dying friends in anguish hang,
Wipe the cold dew, or stay the sinking head,
Number their moments, and in every clock
Start at the voice of an eternity. *Id.*

They become, by degrees, fastidious in their choice of pleasure, *languid* in the enjoyment yet miserable under the want of it. *Paley.*

All love, half *languor*, and half fire,
Like saints that at the stake expire,
And lift their raptured looks on high,
As though it were a joy to die. *Byron.*

LANJANG, or LANTCHANG, the capital city of Laos, situated on the river Mecon. See LAOS. It is said to be a magnificent place; the palace of the sovereign itself resembling a city, while those of the grandees are proportionably large. The ordinary dwellings, however, are mere huts. Long. 101° 38' E., lat. 18° 30' N.

LANIARD. See LANYARD.

LAN'IFICE, *n. s.* | LAN'IGEROUS, *adj.* } Lat. *lanificium* and *laniger*. Woollen article: bearing wool.

The moth breedeth upon cloth and other *lanifices*, especially if they be laid up dankish and wet. *Bacon.*

LANISTA, in antiquity, is sometimes used to signify an executioner; but more frequently for a master gladiator, who taught the use of arms, and educated slaves, or children that had been exposed in that art. See GLADIATOR.

LANIUS, the shrike, or butcher-bird, in ornithology, a genus belonging to the order of accipitres, the characters of which are:—the beak is somewhat straight, with a tooth on each side towards the apex, and naked at the base; and the tongue is lacerated. There are above fifty species, besides many varieties.

L. albus, the white panyan shrike, is about double the size of a lark. Its bill is black: the head, neck, back, belly, and shoulders, are white: the rest of the wings and tail black; and across the greater quills there is a white

band; the legs are black. It inhabits the isle of Panay.

L. Antiguanus, the Antiguan shrike, or pie griesche d' Antigue of Sonnerat, is about the size of a lark. Its bill is large and black; the upper mandible very long, and the curvature so excessive, that one would rather take it for a monstrosity than a characteristic of a species; the irides are dusky; the head is black; the back of a yellowish rufous color: the throat and breast are white; the quills, and bastard wing-coverts, black; and the wings reach only to the beginning of the tail, which is very long and wedge-shaped; the two middle feathers are wholly black; the legs are dusky black. It inhabits Panay, one of the Philippines, but principally about Antigua.

L. cœrulescens, the fork-tailed Indian butcher-bird of Edwards, is about seven inches and a half long; the bill is blackish-brown, and bent; the upper mandible beset with black hairs turning forwards: the plumage on the upper parts of the body is a fine black, with a gloss of blue, and in some lights green; the under parts are white: the greater quills and tail are of a ferruginous black; the tail is pretty much forked, and the outer feather spotted with dirty white. It inhabits Bengal, where it is called fingah. It is called also by the Indians the king of the crows, from its pursuing these birds from place to place with a great noise, and pecking them on the back till they escape.

L. collurio, the less butcher-bird, is seven inches and a half long. The irides are hazel; the bill resembles that of the excubitor; the head and lower part of the back are of a fine light gray; across the eyes from the bill runs a broad black stroke; the upper part of the back, and coverts of the wings, are of a bright ferruginous color; the breast, belly, and sides, an elegant blossom-color: the two middle feathers of the tail are longest, and entirely black; the lower part of the other white, and the exterior webs of the outmost feather on each side wholly so. In the female, the stroke across the eyes is of a reddish brown; the head of a dull rust color mixed with gray; the breast, belly, and sides, are of a dirty white, marked with semicircular dusky lines; the tail is of a deep brown; the outward feather on each side excepted, whose exterior webs are white. It is rather larger than the male. This species is pretty common. Latham suspects it to be a bird of passage, having never seen it in winter. It lays six white eggs marked with a rufous brown circle towards the large end. The nest is generally in a hedge or low bush; near which, it is said, no small bird chooses to build: for it not only feeds on insects, but also on the young of other birds in the nest, taking hold of them by the neck, and strangling them, beginning to eat them first at the brain and eyes. It is called in the German language great head, or bull head, from the size of that part. It will feed on sheep's kidneys, if in a cage, eating a whole one every day. When sitting on the nest, the female is soon discovered; for on the approach of any one, she sets up a horrible outcry.

L. Dominicanus, the Dominican shrike, or pie-griesche Dominiquaine of Sonnerat, is bigger than a sparrow, and rather longer. The bill is grayish, conical, and strong; the base beset with bristles, pointing forwards; the head, neck, breast, back, wings, and tail, are black; the belly and rump white; the wings reach nearly an inch beyond the middle of the tail; the thighs are black. It inhabits the Philippines, and is a bold courageous bird; it flies very quick, and with great rapidity, frequently hovering in the air like a swallow. It is a great enemy to the raven.

L. excubitor, the great cinereous shrike, or greater butcher-bird, is ten inches long. The plumage on the upper parts is of a pale ash color; the under, white: through the eyes there is a black stripe: the scapulars are white: the base of the greater quills white, the rest black: the tail is somewhat cuneiform; the two middle feathers are black; the outermost on each side white; those between are black, with the ends more or less white: the legs are black. Its bill is black, one inch long, and hooked at the end; the upper mandible furnished with a sharp process; the nostrils are oval, covered with black bristles pointing downwards: the muscles that move the bill are very thick and strong; which makes the head very large. Its method of killing its prey and devouring it is extraordinary; small birds it seizes by the throat, and strangles; which is the reason why the Germans call it the wurchangl, or the suffocating angel. It feeds on small birds, young nestlings, beetles, and caterpillars. When it has killed the prey, it fixes them on some thorn, and when thus spitted pulls them to pieces with its bill: on this account the Germans call it thorntraer and thornfreker. When confined in a cage, it often treats its food in the same manner, sticking it against the wires before devouring it. This species inhabits many parts of Europe and North America. The female makes its nest with heath and moss, lining it with wool and gossamer; and lays six eggs, about as big as those of a thrush, of a dull olive-green, spotted at the thickest end with black. In spring and summer it imitates the voices of other birds, to decoy them within reach, that it may destroy them; but, excepting this, the natural note is the same in all seasons. If a trap-fall be baited with a small living bird, it may be taken in winter. It is mute when kept in a cage, though seemingly content. In countries where they are numerous, the husbandmen value them, on account of their destroying rats, mice, and other vermin. They live five or six years, and are often trained up for catching small birds in Russia. In Carolina they are migratory, coming in May, and departing in September, as the few which are met with in England also do.

L. faustus, the white-wreathed shrike, is about the size of a thrush. Its bill is pale: the upper parts of the body are gray: the under ferruginous: from the eyes to the hind head there passes a whitish line, composed of numerous white feathers, rendering it truly characteristic: the wings are rounded; the quills brownish, with gray edges, which are crossed with numerous slender brown lines: the tail is rounded, brown, and crossed with numerous bars of darker brown: the

legs are pale. This elegant species inhabits China, where it is known by the name of whomaj. It is often represented on Chinese paper hangings, where the white line encompasses the back of the head like a wreath.

L. infaustus, the rock-shrike, is seven inches and three-quarters long. The bill is about an inch long, and blackish: the head and neck are of a dark ash-color, marked with small rufous spots: the upper part of the back is a dark brown: the lower much paler, inclining to ash, especially towards the tail: the quills and wing-coverts are dusky, with pale margins: the breast and under parts of the body are orange, marked with small spots, some white and others brown: the tail is three inches long: the wings and tail are even. The male differs from the female only in being of a brighter color. This species is met with in many parts of Europe, from Italy to Russia, and is found in Germany, the Alps, the mountains of Tyrol, &c. Buffon says that it perches on a high stone, and, as soon as a marksman appears with his gun, removes to a greater distance, doing the same as often as he approaches; which renders it difficult to be come at. But Brunnich and Linnæus say, that it is a bold bird, attending the traveller while at his meal, on purpose to feed on his scraps. It has an agreeable note, approaching to that of the hedge-sparrow, and will imitate that of other birds. It makes its nest among the holes of the rocks, &c., hiding it with great art; and lays three or four eggs, feeding its young with worms and insects. If taken young it may be brought up as the nightingale.

L. jocosus, the jocose shrike, is seven inches and a half long. The bill is blackish, rather straighter than in most of the genus, and furnished only with a very fine notch near the tip: the crown of the head is black, except some long brown feathers, which form a kind of crest; the sides of the head, throat, and forepart of the neck are white: from each corner of the mouth there is a black line, continued backwards: and under each eye is a small spot of lively red: the upper parts of the body are brown: the under parts dirty white: the vent rose-color: on the lower part of the neck and breast there is a kind of brown band: the quills are brown: the tail is greatly wedge-shaped, and brown, except the four outer feathers on each side, which have white tips: the legs and claws are black. It is a bird of China, and called there kowkai-kon. It feeds upon rice and insects, particularly cockroaches.

L. nengeta, the guiraron of Buffon, is nine or ten inches long. Its bill is dusky, and beset with bristles at the base: the irides are sapphire-colored; and from the angles of the mouth, through the eyes, there runs a black streak: the upper parts of the body are of a dark brownish ash-color: the under parts cinereous white: in the middle of the wing are a few white feathers: the quills and tail are nearly black; and all the feathers of the last, except the two middle ones, are obliquely tipped with white: the legs are of a dark ash-color: the claws black. These birds are found at Surinam and Brasil. They are common likewise at Guiana, where they frequent watery places, and are found in great numbers together. They are observed, at frequent intervals, to set up a great cry all together; which affords a certain presage to the thirsty traveller, in the immense forests of Guiana, of water being at hand.

L. tyrannus, the tyrant shrike, is about the size of a thrush. Its bill is a blackish-brown, beset with bristles at the base: the irides are brown: the upper parts of the plumage gray-brown: the under white: the breast inclines to ash-color: the head is blackish on the upper part: the base of the feathers on that part in the male is orange, but seldom visible, unless it erects the feathers, when there appears a streak of orange down the middle of the crown: the tail is brown, marginated with rufous: the legs and claws are black-brown. The female scarcely differs, except in the head; the base of the crown feathers being yellow instead of orange; the colors are not quite so deep, and it is less in size. It inhabits Virginia. A variety inhabits St. Domingo and Jamaica, called titri, pipiri, or quiquiri, from their cry, which resembles these words. The first is called the black-headed, or great-billed pipiri; the second the yellow-headed pipiri, or pipiri of passage. The first, though numerous are seldom seen but in pairs; the second in great troops, about August, when they are very fat, and killed in great numbers for the table, as their flesh is accounted good eating. All authors agree that these birds are ferocious to a great degree while the hen is sitting, when no bird whatever dare approach their nest: they will attack the most ravenous without reserve, and usually come off conquerors; whence by some they are called king birds. Another variety, the Carolina tyrant of Catesby, is little, if at all, different from the preceding, in regard to specific character. But, he says, it makes its nest rather exposed, on trees and bushes, frequently on the sassafras; whereas the pipiri makes use of the hole of a tree, for the sake of concealing it. In Carolina it is a bird of passage, coming in spring, and making one nest annually in June; and, after bringing up its young, retiring in autumn. These birds frequent also the red cedars; are seldom found in woods, and often found in hedge-rows and fences of fields, and for the most part within 200 yards of each other. They do not molest their own species; but the moment a crow, or even an eagle, appears, all within reach join forces, and attack him in all parts of his body at once, never desisting till they have driven him off.

LANK, *adj.* } Sax. hlanc, læniȝ; Belg.
LANK'NESS, *n. s.* } *lenk* and *lenche*, of Lat. *longus*. Thin; slender; languid: hence not plump; not filled out; flaccid.

The commons hast thou racked; the clergy's bags
Are *lank* and lean with thy extortions. *Shakspeare.*

Name not Winterface, whose skin's slack,
Lank, as an unthrift's purse. *Donne.*

He, piteous of her woes, reared her *lank* head,
And gave her to his daughters to imbathe
In nectared labors strewed with asphodil. *Milton.*

We let down into a receiver a great bladder well tied at the neck, but very *lank*, as not containing above a pint of air, but capable of containing ten times as much. *Boyle.*

Moist earth produces corn and grass, but both
Too rank and too luxuriant in their growth,
Let not my land so large a promise boast,
Lest the *lank* ears in length of stem be lost.
Dryden.

Now, now my bearded harvest gilds the plain,
Thus dreams the wretch, and vainly thus dreams on,
Till his *lank* purse declares his money gone. *Id.*

Meagre and *lank* with fasting grown,
And nothing left but skin and bone;
hey just kept life and soul together. *Swift.*

Upon
Her right hand—her *lank*, bird-like right-hand—stood
A goblet, bubbling o'er with blood; and on
Her left, another, filled with—what I saw not,
But turned from it and her. *Byron.*

LANNES (John), marshal, duke of Montebello, grand cordon of the legion of honor, &c., was born in 1769 at Lectoure, in the department of Gers. He studied at the college there, but his father's misfortunes interrupted his education, and he was apprenticed to a dyer. He entered the army in 1792, and his zeal and intelligence gained him rapid promotion: in 1795 he had obtained the rank of chief of brigade. Displaced on the charge of incapacity, by the agent of the convention, Aubry, Lannes became a volunteer in the army of Italy; and for his conduct at the battle of Milessimo, in April 1796, was made colonel of the twenty-fifth regiment. At the passage of the Po, the bridge of Lodi, and especially at the battle of Bassano, he was distinguished; and, after the assault of Pavia, was promoted to be a general of brigade. Lannes was shortly after sent to Rome to arrange the conditions of peace with the pope. He returned to Paris in October 1797, and accompanied Buonaparte to Egypt, with whom also he returned, and was rewarded by him with a sabre of honor at the battle of Marengo. In 1801 he went as plenipotentiary to Lisbon. In May 1804 he was made a marshal and subsequently duke of Montebello. In 1805 he contributed to the victory of Austerlitz, on which occasion he commanded the right wing of the French, and in the Prussian campaign in 1807, signalised himself at Jena, Eylau, and Friedland. He then served in Spain, at the battle of Tudela; and, the siege of Sarragossa. At length he lost his life by a wound which he received at the battle of Essling, in March 1809, and died nine days after that engagement.

LANSDOWN, an extensive plain of England, in the county of Somerset. A battle was fought on this plain between the royal army of Charles I. under the marquis of Hertford, and the parliamentary army under Sir William Waller, in the year 1643. The former kept the field of battle, but their loss, especially in officers, was very considerable. A monument was erected on the spot, by lord Lansdown, grandson of Sir Bevil Grandville, who fell on that occasion. The plain, which is four miles north of Bath, is now enclosed.

LANSINBURGH, a town of New York, capital of Renssellaer county, seated on the east side of the Hudson, opposite the south branch of the Mohawk; 175 miles north of New York, and 270 N. N. E. of Philadelphia. Long. 73° 34′ W., lat. 42° 46′ N.

LANSQUENET, or LANSQUINET, the name of a game at cards of French origin. It may be played at by any number of people, though a single pack of cards is used during the deal. The dealer, who possesses an advantage, shuffles the cards, and, after they have been cut by another of the party, deals out two cards on his left hand, turning them up, then one for himself, and a fourth that he places on the table for the company, who is called the rejouissance. On this card any, or all of the company, the dealer excepted, may put their money, which the dealer is compelled to answer. The dealer continues turning the cards upwards, one by one, till two of a sort come up, that is to say, two aces, two deuces, &c., which, to prevent mistakes, or their being considered as single cards, he places on each side of his own card; and as often as two, three, or the fourth sort of a card come up, he invariably places, as before mentioned, on each side of his own card. The company has a right to take and put money upon any single card, unless the dealer's card should happen to be double, which is often the case, by his card being the same as one of the two hand-cards, which he first dealt out on his left hand: thus he continues dealing till he brings either their cards or his own. Whilst the dealer's own card remains undrawn, he wins: and whichever card is turned up first, loses. If he deals out the two cards on his left hand, which are styled the hand cards, before his own, he is entitled to deal again. This advantage amounts to no more than his being exempted from losing, when he turns up a similar card to his own, immediately after he has turned up one for himself. Lansquenet is often played without the rejouissance, the dealer giving every one of the party a card to put their money upon. It is also often played by dealing only two cards, one for the company and the other for the dealer. A limitation is generally fixed for the sum to be placed upon any card or number of cards, either in gold or silver, beyond which the dealer is not obliged to answer.

LANTANA, or Indian sage, in botany, a genus of the angiospermia order, and didynamia class of plants; natural order fortieth, personatæ: CAL. indistinctly quadridentated; the stigma as it were broken and turned back like a hoof; the fruit is a plum with a bilocular kernel. There are fifteen species, consisting of shrubby exotics from Africa and America for the greenhouse or stove; growing to the height of a yard or two, and adorned with oblong, oval, and roundish simple leaves, with monopetalous, tubular, quadripartite flowers of different colors. They may be propagated either by seeds or cuttings.

1. L. camara, or wild sage, is remarkable for the beauty of its flowers; which are yellow, tinged with red. It grows wild among bushes.

2. L. involucrata, or sea-side sage, has small ash-colored leaves and a most agreeable smell. It grows near the sea. Both these species are natives of the West Indies. Their leaves, particularly those of the sea-side sage, are used by the blacks in tea for colds, rheums, and weakness of the stomach.

LANTERN, *n. s.* }
LAN'TERN-JAW, } Fr. *lanterne*; Ital. Span. and Port. *lanterna*;
LAN'TERN-MAKER. } Lat. *laterna* (*à lateo*, because the light lies hid within it); written, corruptly, lanthorn and lenthorn. A case for exhibiting or concealing a light: lantern-jaws, such as if a candle were burning in the mouth might transmit the light; or as would serve for a lantern.

No man lightnith a *lanterne*: hilith it with a vessel or puttieth it under a bed, but on a candlestick that men that entren seen light.
Wicliffe, Luk 8.

God shall be my hope,
My stay, my guide, my *lanthorn* to my feet.
Shakspeare.

Thou art our admiral; thou bearest the *lanthorn* in the poop, but 'tis in the nose of thee; thou art the knight of the burning lamp. *Id. Henry IV.*

A candle lasteth longer in a *lanthorn* than at large.
Bacon.

Amongst the excellent acts of that king, one hath the pre-eminence, the erection and institution of a society, which we call Solomon's house; the noblest foundation that ever was, and the *lanthorn* of this kingdom. *Bacon's Atlantis.*

O thievish night,
Why should'st thou, but for some felonious end,
In thy dark *lanthorn* thus close up the stars
That nature hung in heaven, and filled their lamps
With everlasting oil? *Milton.*

Judge what a ridiculous thing it were, that the continued shadow of the earth should be broken by sudden miraculous eruptions of light, to prevent the art of the *lantern-maker*. *More's Div. Dial.*

Our ideas succeed one another in our minds, not much unlike the images in the inside of a *lanthorn*, turned round by the heat of a candle. *Locke.*

Caprea, where the *lanthorn* fixed on high
Shines like a moon through the benighted sky,
While by its beams the wary sailor steers. *Addison.*

Being very lucky in a pair of long *lanthorn-jaws*, he wrung his face into a hideous grimace.
Id. Spectator.

Vice is like a dark *lanthorn*, which turns its bright side only to him that bears it, but looks black and dismal in another's hand. *Government of the Tongue.*

Some men's wit is like a dark *lantern*, which serves their own turn, and guides them their own way. *Pope.*

The ignis fatuus or Jack a *lantern*, so frequently alluded to by poets, is supposed to originate from the inflammable air, or hydrogene, given up from morasses. *Darwin.*

A LANTERN, or LANTHORN, is usually made of white iron, with sashes of glass or horn, to transmit the light.

LANTERN, on ship-board, a well known machine, of which there are many in a ship, to direct the course of other ships in a fleet or convoy; such are the poop and top lanterns. A patent was granted to Mr. Brine, of Portsea, for the invention of a lantern, intended as a signal lantern and for top-lights; which is shaped like the middle frustum of two cones, abutting upon one common base, and conveys its light from six equidistant magnifying points as represented at *a a a*, in the diagram. Its properties are as follow:

No weather will affect its light; no attendance is necessary after it is once lighted; it will burn twelve successive hours; is not liable to entangle in the rigging; and its light always preserves its central position, let the lantern be in any direction whatever. It is not likely to want repair; the expense of burning is very trivial; and it is fully adequate to all the purposes of night signal. Several of our ships of war are furnished with these lanterns.

LANTERN, in architecture, is a little dome raised over the roof of a building to give light, and serve as a crowning to the fabric.

LANTERN, DARK, has only one opening which may be closed up when the light is to be entirely hid, or opened when there is occasion for the light to discover some object.

LANTERN FLY, in zoology. See ENTOMOLOGY.

LANTERN, MAGIC. See DIOPTRICS.

LANTERNS, FEAST OF, in China, is a celebrated festival held from the 13th to the 16th day of the first month; so called from the immense number of lanterns hung out of the houses and streets. On this day are exposed lanterns of all prices, whereof some are said to cost 2000 crowns. They are adorned with gilding, sculpture, painting, japanning, &c., and their size is extravagant; some being from twenty-five to thirty feet diameter, representing halls and chambers. Two or three such machines together would make handsome houses; so that in China they are able to eat, lodge, receive visits, hold balls, and act plays in a lantern. To illuminate them, they light up in them an incredible number of torches or lamps, which at a distance have a beautiful effect. In these they exhibit various kinds of shows, to divert the people. Besides these enormous lanterns, there are multitudes of smaller ones, each about four feet high, and one and a half broad. See CHINA.

LANTURELAS. In 1771 the marquis de Croismare, a man of wit and a friend of madame de la Ferté Imbault, founded a burlesque order of this name, of which he appointed that lady the grand mistress, he himself being the grand master. This institution gave rise to a great many lively productions, and attracted so much attention, that Catharine II. was accustomed to advise all the Russian nobles who visited Paris to become Lanturelas, an honor which was also sought by sovereign princes.

LANYARDS, in nautical affairs, a short piece of cord or line fastened to several machines in a ship, and serving to secure them in a particular place, or to manage them more conveniently Such are the lanyards of the gun-ports, the lanyard of the buoy, the lanyard of the cat-hook, &c. The principal lanyards used in a ship, however, are those employed to extend the shrouds and stays of the masts by their communication with the dead eyes, so as to form a sort of mechanical power resembling that of a tackle These lanyards are fixed in the dead-eyes, as follows: one end of the lanyard is thrust through one of the holes of the upper dead-eye, and then knotted, to prevent it from drawing out: the other is then passed through one of the holes in the lower dead-eye, whence, returning upwards

it is inserted through the second hole in the upper dead-eye, and next through the second in the lower dead eye, and finally through the third holes, in both dead-eyes. The end of the lanyard, being then directed upwards from the lowest dead-eye, is stretched as stiff as possible by the application of tackles; and, that the several parts of it may slide with more facility through the holes in the dead-eyes, it is well smeared with hog's lard or tallow, so that the strain is immediately communicated to all the turns at once.

LAOCOON, in fabulous history, a son of Priam and Hecuba, or, according to others, of Antenor or Capys. Being priest of Apollo and Neptune, he was commissioned by the Trojans to offer a bullock to Neptune to render him propitious. During the sacrifice two enormous serpents issued from the sea, and attacked Laocoon's two sons, who stood next to the altar. The father immediately attempted to defend his sons; but the serpents falling upon him enfolded him in their complicated wreaths, and he died in the greatest agonies. This punishment was said to have been inflicted upon him for dissuading the Trojans from bringing into the city the fatal wooden horse which the Greeks had consecrated to Minerva; as also for his impiety in hurling a javelin against the sides of the horse as it entered within the walls. But, according to Hyginus, he was thus punished for his marriage against the consent of Apollo, or, according to others, for polluting the temple, by his commerce with his wife Antiope, before the statue of the god.

Laocoon, in the history of the arts, is a celebrated monument of Greek sculpture, executed in marble by Polydorus, Athenodorus, and Agesander, the three famous artists of Rhodes. This relic of antiquity was found in Rome in the ruins of the palace of Titus, in the beginning of the sixteenth century, under the pontificate of Julius II., and was afterwards deposited in the Farnese palace. Laocoon is represented with his two sons, with two hideous serpents clinging round his body, gnawing it, and injecting their poison. Virgil has given us the following beautiful description of the fact:—

Illi agmine certo
Laocoonta petunt, et primum parva duorum
Corpora natorum serpens amplexus uterque
Implicat, et miseros morsu depascitur artus.
Post, ipsum auxilio subeúntem ac tela ferentem
Corripiunt, spirisque ligant ingentibus: et jam
Bis medium amplexi, bis collo squamea circum
Terga dati, superant capite et cervicibus altis.
Ille simul manibus tendit divellere nodos,
Perfusus sanie vittas atroque veneno:
Clamores simul horrendos ad sidera tollit.
Æneid, lib. ii. ver. 212, &c.

This statue exhibits the most astonishing dignity and tranquillity of mind in the midst of the most excruciating torments. Pliny says of it, that it is 'opus omnibus, picturæ et statuariæ artis, præferendum.' 'Laocoon,' Dr. Gillies observes, 'may be regarded as the triumph of Grecian sculpture; since bodily pain, the grossest and most ungovernable of all our passions, and that pain united with anguish and torture of mind, are yet expressed with such propriety and dignity, as afford lessons of fortitude superior to any taught in the schools of philosophy. The intolerable agony of suffering nature is represented in the lower part, and particularly in the extremities of the body; but the manly breast struggles against calamity. The contention is still more plainly perceived in his furrowed forehead; and his languishing paternal eye demands assistance, less for himself than for his miserable children, who look up to him for help.'

LAODAMIA, in fabulous history, a daughter of Acastus and Astydamia, who married Protesilaus, the son of Iphiclus, king of a part of Thessaly. The departure of her husband for the Trojan war, and his death from the hand of Hector, was the source of great grief to her. To keep alive the memory of her husband, she ordered a wooden statue to be made, and regularly placed in her bed. This was seen by one of her servants, who informed Iphiclus that his daughter's bed was daily defiled by an unknown stranger. Iphiclus watched his daughter, and, when he found that the intelligence was false, he ordered the wooden image to be burned, in hopes of dissipating his daughter's grief. He did not succeed. Laodamia threw herself into the flames with the image, and perished. This circumstance has given occasion to the fabulous tradition that Protesilaus was restored to life, and to Laodamia for three hours, and that, when he was obliged to return to the infernal regions, he persuaded his wife to accompany him.

LAODICÆA, or Laodicea, in ancient geography, a town of Phrygia, on the Lycus, first called Diospolis, then Rhoas. It was built by Antiochus Theos, and named, after his consort, Laodice. It increased in importance towards the time of Augustus, after having suffered in a siege from Mithridates. Hiero, who adorned it with many offerings, left the people more than 2000 talents. After that benefactor followed Zeno, the rhetorician; and his son Polemo, the renowned sophist, who flourished at Smyrna; but was buried here by the Syrian gate, near which were the sepulchres or coffins of his ancestors. This city was often damaged by earthquakes, and restored by its own opulence or by the munificence of the Roman emperors. About 1097 it was possessed by the Turks, and submitted to Ducas, general of the emperor Alexius. In 1120 the Turks sacked some of the cities of Phrygia by the Mæander, but were defeated by the emperor John Comnenus, who took Laodicæa, and repaired the walls. About 1161 it was again unfortified. Many of the inhabitants were then killed, with their bishop, or carried into captivity by the Turks. In 1190 the German emperor Frederic Barbarossa, going by Laodicea with his army toward Syria on a crusade, was received so kindly that he prayed on his knees for the prosperity of the people. About 1196 this region, with Caria, was dreadfully ravaged by the Turks. The sultan, on the invasion of the Tartars, in 1255, gave Laodicea to the Romans; but they were unable to defend it, and it soon returned to the Turks. It is now totally ruined and deserted. Several remains of its an-

cient grandeur are, however, still to be seen; particularly the ruins of two theatres and an amphitheatre. The memory of this place is consecrated in Scripture, being one of the seven churches to which St. John in the Apocalypse addressess himself.

LAODICEA, or LAODICÆA, in ancient geography, a town of Syria, on the sea-coast. According to Strabo, it was a town of Seleucis, extremely well built, with a commodious harbour. The country about it yielded great quantities of wine. The city was named from Laodice, mother of Seleucus, the founder of it. It is now called Ladikieh.

LAODICE, in fabulous history, a daughter of Priam and Hecuba, who became enamoured of Acamas, son of Theseus, when he came with Diomedes from the Greeks to Troy, with an embassy to demand the restoration of Helen. She had a son by Acamas, whom she called Munitus. She afterwards married Helicaon, son of Antenor, and Telephus, king of Mysia. Some call her Astyoche. When Troy was sacked by the Greeks, Laodice threw herself down from the top of a tower, and was killed.—Homer. Also the name of the mother of Seleucus. Nine months before she brought forth, she dreamt that Apollo had introduced himself into her bed, and had presented her with a precious stone, on which was engraved the figure of an anchor, commanding her to deliver it to her son as soon as born. This dream appeared the more wonderful, when in the morning she discovered in her bed a ring answering the same description. Not only the son that she brought forth called Seleucus, but also all his successors of the house of the Seleucidæ, had the mark of an anchor upon their thigh. —*Justin*.

LAO-KIUN, or LAO-TSE, a Chinese philosopher, who founded the sect of Tao-sse. He was born A. A. C. 603, and died in an advanced age, leaving to his disciples a book called Tao-te, being a collection of 5000 sentences. His morality resembles that of Epicurus. See CHINESE.

LAOMEDON, in fabulous history, king of Troy, was son of Ilus, and married Strymo, called by some Placia, or Leucippe, by whom he had Podarces, better known by the name of Priam and Hesione. He built the walls of Troy, and was assisted by Apollo and Neptune, whom Jupiter had banished from heaven, and condemned to be subservient to the will of Laomedon for one year. When the walls were finished, Laomedon refused to reward the gods for their labors: and soon after his territories were laid waste by Neptune, and his subjects were visited by a pestilence from Apollo. Sacrifices were offered to the offended divinities; but the calamities of the Trojans increased, and nothing could appease the gods, according to the words of the oracle, but annually to expose to a sea-monster a Trojan virgin. Whenever the monster appeared, the marriageable maidens were assembled, and the lot decided which of them was doomed to death for the good of her country. When this calamity had continued for five or six years, the lot fell upon Hesione, Laomedon's daughter. The king was unwilling to part with a daughter whom he loved with uncommon tenderness, but his refusal would irritate more strongly the wrath of the gods. In the midst of his fear and hesitation, Hercules came and offered to deliver the Trojans from this public calamity, if Laomedon would promise to reward him with a number of fine horses. The king consented; but, when the monster was destroyed, he refused to fulfil his engagements, and therefore Hercules besieged Troy and took it. Laomedon was put to death after a reign of nineteen years; his daughter Hesione was given in marriage to Telamon, one of Hercules's attendants; and Priam was ransomed by the Trojans, and placed upon his father's throne. According to Hyginus, the wrath of Neptune and Apollo was kindled against Laomedon, because he refused to offer on their altars, as a sacrifice, all the first-born of his cattle, according to a vow he had made.

LAON, a decayed town of France, on the Ardon, the capital of the department of the Aisne. The cathedral, built in 1115, is a fine building, with five lofty turrets: there are also a number of other churches and chapels; two hospitals, and a theatre. Its chief trade is in the wine of the vicinity, but there are some small manufactures of linen, stockings, hats, and nails. There was a sharp action here between the Prussians and the French in March, 1814. It is twenty miles north-east of Soissons, and seventy-seven north-east of Paris.

LAOS, a central kingdom of India, beyond the Ganges, extending from about 12° to 18° N. lat. To the north it is said to be bounded by Lactho and Tunquin; to the south by Cambodia; to the east by Tunquin and Cochin China; and to the west by Siam. The exact limits of this province, however, have never been ascertained, and little is known respecting it except through the report of the earlier Portuguese and Dutch writers, or from the accounts of Tunquinese and Chinese merchants, communicated to the missionaries. According to these, the province is thinly inhabited, and poorly cultivated, the largest collected population being at the village of Hanniah, and amounting only to about 4000 or 5000 persons, many of them strangers, settled there for the purposes of traffic. The inhabitants speak a dialect of the Siamese called the Laos language, and are said to have many books among them, especially translations from the Bali: the Siamese denominate the two principal tribes Chong-mai and Lanchang. According to Mr. Hamilton, some of the most celebrated founders of the Budhoo religion have left remarkable vestiges of themselves here, and devotees pretend to trace the sacred steps of Pra-ku-ku-son, Pra-kon-na-kon, Pra-putha-kat-sop, and Pra-sa-mutta-ko-dum. The people are warlike: great believers in magic; and under but a nominal subjection to Cochin China. Elephants, superior gum lac, rubies, topazes, pearls, and fancy gold articles; ivory, musk, bamboos, wax, and cotton, are the exports of this region; the imports fire-arms and gunpowder, silk stuffs, oil, salt, and salt fish.

LAP, *n. s.*, *v. a.* & *v. n.*
LAP'DOG,
LAP'FUL,
LAP'PET,
LAP'WING,
LAP'WORK.
Sax. læþþe; Goth. Teut. Belg. and Dan. *lap*; Swed. *lapp* (any thing broad and loose). See FLAP. The loose part of a garment; or

that which may be folded up at pleasure; the clothes spread over the knees, more generally applied to this part of female dress: to lap is to wrap or twist round, or to involve; also to be spread or turned over any thing: a lapdog is a dog nursed in the lap: lappet, a loose part of the head-dress: lapwing, a bird remarkable for its long wings: lapwork is work the parts of which are wrapped interchangeably over each other.

One found a wild vine, and gathered thereof wild gourds his *lapful*, and shred them into the pot of pottage. 2 *Kings.*

And bad this sergeant that he prively
Shulde this childe ful softe wind and wrappe,
With alle circumstances tendrely,
And carry it in a cofre or in a *lappe*. *Chaucer.*

It feeds each living plant with liquid sap,
And fills with flowers fair Flora's painted *lap*. *Spenser.*

Upon a day, as love lay sweetly slumbering
All in his mother's *lap*,
A gentle bee, with his loud trumpet murmuring,
About him flew by hap. *Id.*

As through the flowering forest rash she fled,
In her rude hairs sweet flowers themselves did *lap*,
And flourishing fresh leaves and blossoms did enwrap. *Id.*

I'll make my haven in a lady's *lap*. *Shakspeare.*

Our stirring
Can from the *lap* of Egypt's widow pluck
The ne'er-lust-wearied Antony. *Id.*

The Thane of Cawder 'gan a dismal conflict,
Till that Bellona's bridegroom, *lapt* in proof,
Confronted him. *Id. Macbeth.*

When we both lay in the field,
Frozen almost to death, how he did *lap* me,
Even in his garments, and did give himself,
All thin and naked, to the numb cold night. *Shakspeare.*

Ah! but I think him better than I say,
And yet, would herein others' eyes were worse:
Far from her nest the *lapwing* cries away;
My heart prays for him, though my tongue do curse. *Id.*

Heaven's almighty sire
Melts on the bosom of his love, and pours
Himself into her *lap* in fruitful showers. *Crashaw.*

Ever against eating cares,
Lap me in soft Lydian airs. *Milton.*

Men expect that religion should cost them no pains, and that happiness should drop into their *laps*. *Tillotson.*

He struggles into breath, and cries for aid;
Then, helpless, in his mother's *lap* is laid.
He creeps, he walks, and issuing into man,
Grudges their life from whence his own began:
Retchless of laws, affects to rule alone,
Anxious to reign, and restless on the throne. *Dryden.*

Indulgent fortune does her care employ,
And, smiling, broods upon the naked boy;
Her garments spreads, and *laps* him in the folds,
And covers with her wings from nightly colds. *Id.*

These, if the laws did that exchange afford,
Would save their *lap-dog* sooner than their lord. *Id.*

And how in fields the *lapwing* Tereus reigns,
The warbling nightingale in woods complains. *Id.*

Will four per cent. increase the number of lenders? if it will not, then all the plenty of money these conjurers bestow upon us, is but like the gold and silver which old women believe other conjurers bestow by whole *lapfulls* on poor credulous girls. *Locke.*

He hath a long tail, which, as he descends from a tree, he *laps* round about the boughs, to keep himself from falling. *Grew's Museum.*

A basket made of porcupine quills: the ground is a pack-thread caul woven, into which, by the Indian women, are wrought, by a kind of *lap-work*, the quills of porcupines, not split, but of the young ones intire; mixed with white and black in even and indented waves. *Id.*

The upper wings are opacous; at their hinder ends, where they *lap* over, transparent, like the wing of a fly. *Grew.*

One of them made his court to the *lap-dog*, to improve his interest with the lady. *Collier.*

About the paper whose two halves were painted with red and blue, and which was stiff like thin pasteboard, I *lapped* several times a slender thread of very black silk. *Newton.*

Lap-dogs give themselves the rousing shake;
And sleepless lovers just at twelve awake. *Pope.*

If a joint of meat falls on the ground, take it up gently, wipe it with the *lap* of your coat, and then put it into the dish. *Swift's Directions to a Footman.*

Here was the repository of all the wise contentions for power between the nobles and commons, *lapt* up safely in the bosom of a Nero and a Caligula. *Swift.*

They may be *lappers* of linen, and bailiffs of the manor. *Id.*

How naturally do you apply your hands to each other's *lappets*, and ruffles, and mantuas! *Id.*

Get thee to Lamia's *lap!* *Byron.*

LAP, *v. n.* & *v. a.* Sax. lappian; Belg. *lappen*; Dan. *labe*; Fr. *lamper*, *laper*; Arm. *lapa*; Lat. *lambo* (to lick). To feed by licking or lapping up; to lick up.

For all the rest
They'll take suggestion, as a cat *laps* milk. *Shakspeare.*

Upon a bull
Two horrid lions rampt, and seized, and tugged off, bellowing still,
Both men and dogs came; yet they tore the hide, and *lapt* their fill. *Chapman's Iliad.*

The dogs by the river Nilus' side being thirsty, *lap* hastily as they run along the shore. *Digby.*

They had soups served up in broad dishes, and so the fox fell to *lapping* himself, and bade his guest heartily welcome. *L'Estrange.*

The tongue serves not only for tasting, but for mastication and deglutition, in man, by licking; in the dog and cat kind by *lapping*. *Ray on Creation.*

LAPATHUS, LAPETHUS, or LEPITHUS, in ancient geography, a town on the north side of Cyprus, with a port or station for ships, and a cognominal river. It was built by a colony of Phœnicians, according to Scylax; by Belus, king of Tyre, according to Alexander Ephesius. According to Strabo, it was built by a colony of Spartans; and one of the nine kings resided here, the last of whom was Pisistratus, who commanded the fleet of Alexander the Great. It had a temple dedicated to Venus. It is now called Lapitha.

LAPHYSTIUM, a mountain of Bœotia, where Jupiter had a temple, and where Athamas was about to sacrifice Phryxus and Helle, when Jupiter saved them by sending a ram with a golden fleece.

LAPICIDE, *n. s.*
LAP'IDARY, *n. s.* & *adj.*
LAP'IDATE, *v. a.*
LAPIDA'TION, *n. s.*
LAPID'EOUS, *adj.*
LAPIDES'CENCE, *n. s.*
LAPIDES'CENT, *adj.*
LAPIDIF'IC, *adj.*
LAPIDIFICA'TION, *n. s.*
LAP'IDIST, *n. s.*

Lat. *lapicida*, *lapido*, from *lapis*, a stone. A stone-cutter: lapidary, and lapidist, a dealer in stones. For lapidary, as an adjective, see below. Lapidate, to stone, and to kill by stoning: lapideous, stony: lapidescence, a concretion of the nature of stone: lapidescent, turning or growing to stone: lapidific, forming stones.

Induration or *lapidification* of substances more soft is another degree of condensation. *Bacon.*

Of lapis ceratites, or cornu fossile, in subterraneous cavities, there are many to be found in Germany, which are but the *lapidescencies*, and petrefactive mutations, of hard bodies. *Browne.*

As a cock was turning up a dunghill, he espied a diamond: Well, says he, this sparkling foolery now to a *lapidary* would have been the making of him; but, as to any use of mine, a barley-corn had been worth forty on't. *L'Estrange.*

There might fall down into the *lapideous* matter, before it was concreted into a stone, some small toad, which might remain there imprisoned, till the matter about it were condensed. *Ray.*

Hardness, wherein some stones exceed all other bodies, being exalted to that degree, that art in vain endeavours to counterfeit it, the factitious stones of chymists in imitation being easily detected by an ordinary *lapidist*. *Id.*

The atoms of the *lapidific*, as well as saline principle, being regular, do concur in producing regular stones. *Grew.*

Of all the many sorts of the gem kind reckoned up by the *lapidaries*, there are not above three or four that are original. *Woodward's Natural History.*

Blank verse makes some approach to that which is called the *lapidary* style; has neither the easiness of prose, nor the melody of numbers, and therefore tires by long continuance. *Johnson.*

The *lapidaries* employ a considerable quantity of diamond in powder, which they use with steel instruments to divide pebbles and precious stones. *Parkes's Chemical Catechism.*

LAPIDARY is chiefly used for an artificer, who cuts precious stones. Dealers in precious stones are rather styled jewellers. The art of cutting these is of great antiquity. Various machines are employed in cutting precious stones, according to their quality. The diamond, which is extremely hard, is cut on a wheel of soft steel, turned by a mill, with diamond-dust, tempered with olive oil, which also serves to polish it. The oriental ruby, sapphire, and topaz, are cut on a copper wheel, with diamond-dust tempered with olive oil, and are polished on another copper wheel with tripoli and water. Hyacinths, emeralds, amethysts, garnets, agates, and other stones, not of inferior hardness, are cut on a leaden wheel with smalt and water, and polished on a tin wheel with tripoli. The turquois, girasol, and opal, are cut and polished on a wooden wheel with tripoli. Lapidary is also used for a virtuoso skilled in the nature, kinds, &c., of precious stones.

LAPIDARY STYLE denotes the style proper for monumental or other inscriptions. This is a kind of medium between prose and verse; the jejune and the brilliant are here equally to be avoided. Cicero has prescribed the rules of it: Accedat oportet oratio varia, vehemens, plena spiritus. Omnium sententiarum gravitate, omnium verborum ponderibus, est utendum.

LAPIS, in Roman antiquity, a geographical measure denoting a mile; because miles were distinguished by erecting a stone at the end of each; from the number marked on which the length of way from Rome might be known. The device is by Plutarch ascribed to Caius Gracchus. This was more accurately executed by Augustus, who erected a gilt pillar in the forum, at which all the public ways of Italy, distinguished by stones, were terminated. The same thing was done in the Roman provinces. Hence the phrases tertius lapis, centesimus lapis, &c., for three, 100, &c., miles; and sometimes the ordinal number without lapis, as ad duodecimum, &c., at the twelfth mile distant.

LAPIS AQUILÆ. See ÆTITES.

LAPIS ASSIUS, in the natural history of the ancients, the name of a stone, called also sarcophagus, from its power of consuming flesh. See SARCOPHAGUS.

LAPIS LAZULI. The lapis lazuli, or azure stone, is a copper ore, very compact and hard, so as to take a high polish, and is worked into a great variety of toys. It is found in detached lumps, of an elegant blue color, variegated with clouds of white, and veins of a shining gold color: to it the painters are indebted for their beautiful ultra-marine color, which is only a calcination of lapis lazuli. It is a combination of 46 silica, 28 lime, 14·5 alumina, 3 oxide of iron, 6·5 sulphate of lime, and 2 water, according to Klaproth. This blue does not suffer any alteration by the contact of air. The finest specimens come from China, Persia, and Great Bucharia. It was formerly exhibited as a purgative and vomit, and given in epilepsy.

LAPIS MUTABILIS, the changeable stone; called also hydrophanes, from Gr. ὕδωρ, water, and φαίνω, to shine, on account of its transparency in water. There are three of these stones in the British Museum, the largest of them about the size of a cherry-stone, but of an oval form. It is opaque and colored like a common yellow pea; it may be scratched, though not without difficulty, by a common knife, notwithstanding which it seems to leave a mark upon glass. It does not ferment with nitrous acid. When it has lain some hours in water, it becomes transparent, and of a yellow amber color. The change begins soon after the immersion, and at one end in form of a little spot; but in a small one of the same kind the transparency begins round the edges. By degrees the spot increases, until the whole stone becomes uniformly clear throughout: when out of the water it loses its transparency, first at one end, and then gradually over the remainder, until the whole has become opaque; which change happens in less time than it takes to become transparent. This change is not entirely peculiar to the hydrophanes. Bergman informs us, that some steatites produce the same effect; and M. Magellan, that the crust of chalcedonies

and agates frequently produce the same appearance. Messrs. Bruckman and Veltheim were the first who particularly enquired into the nature of this stone, and investigated its properties. Their account is as follows:—As soon as the stone is put into water, it exhales a musty smell, several air bubbles arise, and it becomes gradually transparent. Some of the stones become colorless as soon as they are thoroughly transparent; others have a more or less deep yellow color; some acquire a beautiful ruby color; and others again a fine color of mother-of-pearl, or of a bluish opal. Whatever be the color of the liquor in which the hydrophanes is immersed, it gains only its usual degree of transparency with the color peculiar to it. When we look at it in its moist state, we perceive a luminous point varying its situation as the position of the eye is altered. This luminous point is not, according to Mr. Bruckman, the immediate image of the sun, but a reflection of that image refracted in the substance of the stone itself, a phenomenon which probably gave rise to its name of oculus mundi. Bruckman left a piece of this stone, weighing thirty-five grains, seven hours in water, the space requisite to make it perfectly transparent; and in that time he found that it had gained three grains in weight. The hydrophanes becomes much sooner transparent when put into hot water; and the same happens if it be dipped in a very dilute acid, or rather a very dilute solution of alkali. When dipped in oil of vitriol, it becomes very quickly transparent, and will continue so on account of the strong attraction of that acid for moisture, which takes as much from the atmosphere as is necessary to keep the stone transparent; but its opacity will return if it be dipped in an alkaline liquor and afterwards dried.

Lapis Nephriticus, or jaspachates, the jade stone, a genus of siliceous earths. It gives fire with steel, and is semitransparent like flint. It does not harden in the fire, but melts in the focus of a burning glass into a transparent green glass with some bubbles. A species brought from the river of the Amazons in America, called circoncision stone, melts easier in the focus into a brown opaque glass far less hard than the stone itself. The jade-stone is unctuous to the touch; whence Kirwan thinks that it contains a portion of argillaceous earth, or rather magnesia. The specific gravity is from 2·970 to 3·389; the texture granular, with a greasy look, but exceedingly hard, being superior in this respect even to quartz. It is infusible in the fire, nor can it be dissolved in acids without a particular management; though M. Saussure extracted iron from it. Sometimes it is met with of a whitish milky color from China; but mostly of a deep or pale green from America. The common lapis nephriticus is of a gray, yellowish, or olive color. It is so named from its supposed quality of giving ease in nephritic pains, when applied externally to the loins. It may be distinguished from all other stones by its hardness, semipellucidity, and specific gravity.

Lapis Thyites, in the ancient materia medica, an indurated clay approaching to the nature of stone. [illegible] in Egypt, and used in diseases of the eyes. Chambers reckons it a species of morochthus; and says it is found at Gosselar, in Saxony. It is of a smooth and regular texture; very heavy; the surface shining, and the color a pale green.

LAPITHA, a village of Cyprus: according to the abbe Mariti, the longest and most extensive in the island. It was anciently called Lapithus. Besides the advantage of a fine situation, it furnishes the best productions in the country; and, though Cyprus is in general not very abundant in fruits, Lapitha seems a favored spot in this respect, and may be called the garden of the island.

LAPITHUS, in fabulous history, a son of Apollo, by Stilbe, and brother to Centaurus.

LAPLACE (Pierre Simon, marquis de), a celebrated mathematician and astronomer, born 1749, was the son of a farmer in Normandy. went to Paris, where he soon distinguished himself by his knowledge of analysis and the highest branches of geometry. Laplace was chosen a member of the academy of sciences, one of the forty of the French academy, and member of the *bureau des longitudes*. In 1796 appeared his famous work, Exposition du Systéme du Monde. Laplace did not remain a stranger to politics, and, after the 18th of Brumaire, was made minister of the interior by the first consul. In a report to the senate in 1805, Laplace proved the necessity of restoring the Gregorian calendar, and abolishing that of the republic. His principal works are his Traité de Mécanique céleste; his Théorie du Mouvement des Planètes; Essai sur les Probabilitiés; and Théorie analytique des Probabilités. In 1814, Laplace voted for the abdication of Napoleon, and the king created him a peer, with the title of marquis. During the hundred days, he did not appear at the Tuileries. He died March 5, 1827. His Mècanique cèleste has been translated, with a Commentary by doctor Bowditch, of Boston.

LAPLAND, a northern region of Europe, now possessed by Sweden and Russia, is bounded on the north by the Arctic Ocean, on the east by the White Sea, on the south by Sweden, and on the west by Norway and the Atlantic. Taking 64° of N. lat. for its southern limit, its breadth from north to south will be 500 miles, and its length, from Cape Orlov, on the White Sea, to the entrance of Saltersfiord on the Atlantic, about 700 miles. The superficial extent is computed at 150,000 square miles, of which the total population is supposed not to exceed 60,000.

Lapland was divided formerly into three parts, Russian, Swedish, and Danish or Norwegian Lapland; the first, the most dreary division of the whole, consisted of three districts, Bellamoreskoi, Maremanskoi, and Terskoi; but these are now all included in the general appellation of the circle of Kola, which includes also Kemi-Lapmark (or the tract to the east of the river Torneo), which was ceded by Sweden in 1809. Swedish Lapland, sometimes called Lapland Proper, is subdivided into the six provinces of Torneo-Lapmark, Lulea-Lapmark, Pithea-Lapmark, Umea-Lapmark, Jamtland-Lapmark, and

Asele-Lapmark; belonging at the present time to the lehn or government of Umea. Norwegian Lapland, or Finmark, now also belongs to Sweden. It is the most northerly of all.

Lapland is a huge congeries of stupendous rocks and mountains, interspersed with many pleasant valleys, watered by a vast number of rivulets that run into the rivers and lakes, which discharge their waters into the gulf of Bothnia. The natives consider it a terrestrial paradise; and indeed nothing could be more enchanting than its vast prospects of mountains, hills, forests, lakes, rivers, &c., if the climate were but moderate; though even here in summer, roses are seen blowing wild on the banks of the lakes and rivers. All the intervals between the mountains are not, however, thus engrossed; great part of the country being covered with brown dusky forests of fir and pine trees; often skirted by wide extended morasses, the stagnating waters of which in summer produce myriads of mischievous insects. The country, however, abounds with excellent springs, and is remarkable for some surprising cataracts, in which the water tumbles over frightful precipices, and dashes among the rocks with amazing impetuosity.

The mountains between the latitude of 67° and 69° rise to an elevation of upwards of 6000 feet: 2700 being the general line of perpetual congelation. The Torneo, Kemi, Lulea, and Pitea are its principal rivers. We may add the Yana and Altan to the north-east. Some of these rivers traverse considerable lakes; but all are in winter comparatively small streams. The principal lakes are the Great Uma, the Great Windel, the Oreavan, the Stor-avan, the Great Lula; the lakes of Kartom, Kali, Torneo, and Enara. Some of these extend forty or fifty leagues in length, and contain a great number of islands: Stor-avan is said to contain upwards of 300; and Enara, in latitude 69°, still more. The maritime districts are of uniform and rather mild temperature; the winters are not severe for the latitude, but the summers are raw and foggy: in the interior the winter is intensely cold, and the heat of summer in the valleys very acceptable and important for a few months. At North Cape, lat. 71° 11′ 30″, the mean annual temperature is 6° higher than at Enontekis in the interior, lat. 68° 30′. Yet, at the latter, the thermometer rises in July to 64°, while at the Cape it seldom reaches 50°. The summer may be said to begin in both regions in May, and end in September. Secondary rock formations are unknown here in the north; and the primitive (gneiss) is much more common than the transition. The quantity of iron ore in some places is immense. It generally lies in large strata, one of which, at Junossuvando, in lat. 67° 30′, is from fifteen to twenty feet thick in one mine, and from forty-two to forty-five in another. Another at Lussavara is 170 feet, and one at Suappavara, in lat. 67° 38′, 190 feet in thickness; while at Kirunavara, lat. 67° 58′, about ten miles from Juckasjaerfoi, the bed has been actually dug to a depth of 800 feet. The ore, almost always magnetic, is sent to the smelting forge of Torne-ofors, a distance of forty or fifty miles, on small sledges drawn by rein-deer, at an expense for which the produce scarcely pays. The iron has the defect also, it is said, of being brittle when cold, and of requiring a mixture with more tenacious metal. Copper mines are also found in Lapland; and lead, zinc, and arsenic are not uncommon. At Suappavara gold has been found. None of these mineral stores are, however, profitably managed: fuel being greatly wanted, particularly in the neighbourhood of the iron mines. In some districts the Swedes have tilled and manured pieces of ground that bear plentiful crops of wheat, barley, and rye. There is also great plenty of berries; such as black currants, the Norwegian mulberry, growing upon a creeping plant, and much esteemed as an antiscorbutie; rasp-berries, cran-berries, juniper-berries, and bilberries. The tops of the mountains are so much exposed to intense cold, and tempests of snow and hail, that no tree will grow near the summit; but, in parts more sheltered, fine woods of birch, pine and fir, grow naturally as if they had been planted by art in rows at regular distances, and without any undergrowth. Some parts of Lapland produce the service tree, the willow, the poplar, the elder, and the cornel. The angelica is greatly esteemed by the natives who use it in their food. The acetosa, or sorrel, also grows in great plenty, besides various kinds of grass, heath, fern, and moss, enumerated by Linnæus in his Flora Laponica. But the vegetable which is the most abundant, and of most extensive use, is the lichen rangiferus. The Laplanders boil it in broth as a cordial and restorative. They likewise use one species of it as a soft and wholesome bed for their new-born children. See LICHEN. The quantity of any grain raised here is insignificant: the most remarkable agriculturalists are the Finnish colonists, who have raised corn at Alten, in 70° lat., considered the farthest limit of its growth.

Lapland, as well as Norway, is infested with a great number of grey wolves and bears, with whom the inhabitants wage perpetual war. The most honorable exploit among the Laplanders is to kill a bear; and the heroes adorn their caps with a small plate of lead or pewter for every bear they have slain. The country abounds also with elks, beavers, and otters, which live here unmolested, and find plenty of fish for their subsistence. The forests furnish haunts to a great number of beautiful martens and squirrels; as well as to the zibeling or sable, whose skin is extremely valuable; together with ermines, weasels, hares, &c. Large black cats often attend the Laplanders in hunting, and curs are also trained to the game. But the most remarkable animal of Lapland is the rein-deer. See CERVUS. These animals, so useful in various respects to the natives, are kept at no expense. In summer they feed upon grasses and alpine plants; in winter upon the lichen rangiferus, or rein-deer litchen, and its varieties, which are so abundant as in many parts almost totally to cover the ground for several miles. This animal is in fact the chief wealth of the natives. The poorer classes have from fifty to 200 of them; the middle classes from 300 to 700; and the affluent often above 1000 head. The females are driven

home morning and evening to be milked; and the herds, when numerous, are unremittingly attended both by men and dogs day and night. Men and boys, wives and daughters, according to Dr. Clarke, take the post of watching by turns, twice or thrice a-day; and each goes out with several dogs, which belong in property to that individual whose commands alone they will obey. The former guards in the mean while return with their hungry dogs. Hence, it not unfrequently happens that eight or twelve dogs march over the heads of the persons sleeping in the gamme in quest of comfortable spots for themselves to rest in; and, when the Laplander returns wearied to his gamme, he always willingly shares his rein-deer flesh and his soup with his dog, which he would hardly do with either father or mother.

Here are found small breeds of oxen, cows, dogs, sheep, and goats: the last two uncommonly prolific. Birds are also numerous, and Lapland contains many peculiar to itself. The most remarkable is the bird of 'a hundred tongues,' or Swedish mocking bird, extolled for the beauty of its plumage and variety of its tones. The seas abound in fish, and the rivers and lakes in excellent salmon, pike, perch, trout, eels, and char. Against the insects, which in summer prove a great annoyance, the inhabitants defend themselves by keeping their tents and huts as full of smoke as possible. The Laplanders are low in stature, ill shaped; have remarkably large heads, and harsh features. They are, however, strong, hardy, and robust; can bear incredible fatigue; and the stoutest Norwegian, it is said, is not able to bend the bow of a Laplander. The women have a delicate and florid complexion. Both sexes are simple, honest, hospitable, and timorous; but their timidity, respects war alone; for to many other species of dangers they expose themselves with surprising intrepidity, whether in ascending and descending mountains and precipices with their snow shoes and in sledges, or in venturing amidst whirlpools and cataracts in slender boats made of thin fir boards, fastened together with thongs of leather, sinews of wild beasts, or tough and flexible twigs. These boats are of different sizes, from two to six yards in length, managed with oars, and caulked with moss so tight as to keep out the water.

The Laplanders are partly settled, and partly roving: the latter live in tents made with coarse cloth: the former are fixed in small villages near the lakes, and chiefly follow fishing. They build their cottages in the shape of a cone, by placing a circle of large trees or poles aslant in the earth, and close to each other, so that their tops meet, and form a small vent for the issue of the smoke: the ground within they cover with branches of trees. Their domestic utensils are nothing but a few boxes, baskets, some bowls of birch wood, with pots and kettles made of brass or copper, more frequently of stone, and spoons made of the horn of the rein-deer. The beds, or more properly the sleeping places, are on logs laid on each side of the fire-place. In spring their food consists principally of the eggs of water fowls, which are extremely plentiful; in summer and autumn, of the birds themselves: and in winter, of the milk and flesh of the rein-deer and dried fish. Not long since they had no bread, but used the inner rind of the pine-tree dried and ground, and dried fish reduced to powder. They make confections and decoctions of berries, angelica, and sorrel, which they use as preservatives against the scurvy.

The Laplander enjoys almost uninterrupted health by temperance and exercise; but is very subject to sore eyes, and even to blindness, from the smoke of his hut, and the fires to which they are almost continually exposed. Some waste away in consumptions; others are afflicted with rheumatic pains and the scurvy; and a few are subject to vertigo and apoplexy. For the cure of all their internal disorders, they use the decoction of a certain species of moss; and, when this cannot be procured, they boil the stalks of angelica in the milk of the rein-deer. To their wounds they apply the turpentine that drops from the fir-tree. When frost-bitten (though this seldom happens), they thrust a hot iron into a cheese made of rein-deer's milk, and, with the fat that drops from it, anoint the frozen member, which generally recovers. But they often live to the age of 100 without feeling any disease; and it is not uncommon to see a Laplander in old age hunting, fowling, skaiting, and performing, with agility, the severest exercises of his youth.

The summer garb of the men consists of a long coat of coarse cloth, reaching down to the middle of the leg, and girded round the waist by a belt or girdle; from which hang a Norway knife, and a pouch containing flints, matches, tobacco, and other necessaries; the girdle itself being decorated with brass rings and chains. Their caps are made of the skin of the northern diver, with the feathers on; and their shoes of the rein-deer skin, with the hair outwards. They wear no linen; but the garments of the superior ranks are of a finer cloth; and they delight in various colors, of which red is the most agreeable. In winter they are totally cased up in coats, caps, boots, and gloves, made of rein-deer skins. The women's apparel differs very little from that of the men; only their girdles are more ornamented with rings, chains, needle-cases, and toys, that sometimes weigh 20 lbs. In winter, both men and women lie in their furs; in summer they cover themselves entirely with coarse blankets, to defend themselves from the gnats.

The Laplanders make surprising excursions upon the snow in their hunting expeditions. They provide themselves with a pair of skates, or snow shoes, which are fir boards covered with the rough skin of the rein-deer, turned in such a manner that the hair rises against the snow. One of these shoes is usually as long as the person who wears it; the other is about a foot shorter. The feet stand in the middle, and to them the shoes are fastened by thongs or withes. The Laplander, thus equipped, wields a long pole in his hand, near the end of which there is a round ball of wood, to prevent its piercing too deep in the snow; and with this he stops himself occasionally. By means of these accoutrements he will travel at the rate of sixty miles a-day, without being fatigued; ascending steep mountains, and sliding down

again with amazing swiftness. The Laplander is also provided with a carriage drawn by the rein-deer, in which he journeys with still greater rapidity. The sledge, called pulka, is made in the form of a small boat, with a convex bottom, that it may slide the more easily over the snow: the prow is sharp and pointed; but the sledge is flat behind. The traveller is swathed in this carriage like an infant in a cradle, with a stick in his hand to steer the vessel, and disengage it from pieces of rock or stumps of trees that may chance to encounter it in the route. He must also balance the sledge with his body, otherwise he will be in danger of being overturned. The traces, by which this carriage is fastened to rein-deer, are fixed to a collar about the animal's neck, and run down over the breast between the fore and hind legs, to be connected with the prow of the sledge: the reins, managed by the traveller, are tied to the horns; and the trappings are furnished with little bells, the sound of which is agreeable to the animal. With this draught at his tail, the rein-deer, if pressed, will travel ten or twelve Swedish miles (seventy or eighty-four English miles) in a day; but by such hard driving he is generally destroyed. It, however, frequently happens, that he will persevere in his journey without intermission, and without refreshment, except occasionally moistening his mouth with the snow. Before he sets out, the Laplander whispers in his ear the way he is to go, and the place at which he is to halt, firmly persuaded that the beast understands his meaning. In the beginning of winter, the Laplanders mark the most frequented roads, by strewing them with fir boughs; which being frequently covered with new snow, and alternately beaten by the carriage, consolidates them into a kind of causeway; which is the harder if the surface has felt a partial thaw, and been crusted by a subsequent frost. It requires great caution to follow these tracts; for, if the carriage deviates to the right or left, the traveller is plunged into an abyss of snow. In less frequented parts, where there is no such beaten road, the Laplander directs his course by certain marks made on the trees. Hunting being the chief occupation of the Laplanders, they pursue it in winter by the tracks of the bear and other beasts upon the snow, and often run down their prey. They catch ermines in traps, and sometimes with dogs. Squirrels, martens, and sables, they kill with blunt darts, to avoid wounding the skin. Foxes and beavers are slain with sharp-pointed darts and arrows; in shooting which, they are accounted some of the best marksmen in the world. The larger beasts, such as bears, wolves, elks, and wild rein-deer, they either kill with fire-arms purchased in Sweden or Norway, or take in snares and pits. Their game laws are observed with great punctuality. The beast becomes the property of the man in whose snare or pit he is caught; and he who discovers a bear's den has the exclusive privilege of hunting him to death.

'The Lapps marry very early,' says Dr. Clarke, 'the men seldom later than the age of eighteen, or the women later than fifteen: but the Finns and the Swedes are prohibited from such early marriages. Very little previous ceremony is used upon these occasions; an interchange of presents, and copious libations of brandy, are all that take place before the solemnisation and consummation. The gifts consist of rings, spoons, cups of silver, or silver gilt, and rix-dollars in specie, according to the wealth of the parties. The richest make also other gifts; such as silver girdles, and silk or cotton handkerchiefs for the neck. When banns have been published in the church, which is very commonly the case, the marriage immediately succeeds their publication; and the nuptials are consummated in one of the log-houses near the church, in which the Lapps deposit their stores for the annual fair. Upon these occasions, the bridegroom treats his friends with brandy, dried rein-deer flesh cooked with broth, rein-deer cheese, and bread and butter. If he be of a wealthy family, beer is also brewed: or, wanting this, plenty of pima and curds and whey are provided. The luxury of smoking tobacco, so general among the Lapps, is of course largely indulged upon these occasions, and even takes place during the repast. Dancing, being unknown among them, forms no part of the merry-making. After the marriage-feast, a general collection is made in money for the married couple, when the distribution of brandy is renewed, and continued for two or three hours, according as the gifts are more or less liberal. Upon this occasion, gifts of rein-deer are promised to the bridegroom, which he is afterwards to go and demand; but, if he make the visit without carrying brandy to the owner of the rein-deer, the promise is never kept. The dowry of wealthy parents, among the Laplanders, to their children when they marry, consists of from thirty to fifty, and even eighty rein-deer, besides vessels of silver and other utensils.'

This intelligent traveller contends, that the Laplander is clearly of Asiatic origin. 'His features mark him at once as belonging to a distinct and peculiar race of men;—eyes half closed; mouth pinched close, but wide; ears full and large, projecting far from the head; complexion tawny and copper colored; hair dark, straight, and lank, none growing near the nape of the neck: add to this a small and stunted stature, with singular flexibility of limbs, easily falling into any posture, like the Oriental nations; looks regarding objects askance; hands constantly occupied in the beginning of conversation with filling a short tobacco-pipe; the head being turned over one shoulder to the person addressing, instead of fronting the speaker;—such is the characteristic portrait of one and every Laplander. The moment we saw any of them, we could immediately recognise those traits by which the whole tribe are distinguished from the other inhabitants of Europe, and in which they differ from the other natives of the land in which they live. Even the Finlander, who is supposed to be a sort of cousin-german, differs, in many respects, from the Laplander. The hair of the Finlander is of a fair color; either pale yellow, flaxen, or almost white: and the honest Swede, of nobler race than either, is a giant, in whose person and manner there is nothing of the cat-like flexibility of the Asiatic, nor any resem-

blance to that orient complexion, and form of the countenance which assimilates the Laplander to the natives of Japan.'

LAPLANDERS, the natives of Lapland. See LAPLAND. They call themselves Salme-Same, and Samen-Almatjeh. Their country they denominate Same Landa, or Same-aednam; the Swedes style it Lapland or Lappmarken, and the inhabitants Lappar. The natives of those districts under the dominion of Sweden are Lutherans; while many of those who are subject to Russia are still Pagans. The Laplanders, before their conversion to Christianity, which was not till lately introduced amongst them, possessed no books or MSS., though they knew many traditional histories and songs of ancient heroes and princes who once reigned over them; but involved in great uncertainty, and mixed with the most fabulous accounts. They have now a translation of the New Testament in their language; and many of the natives are able to read and write.

LAPLYSIA, the sea-hare, a genus of marine insects belonging to the order of vermes mollusca. The body is covered with membranes reflected. It has a shield-like membrane on the back, a lateral pore on the right side, the anus on the extremity of the back, with four feelers resembling ears. It grows to two inches and a half long, and to more than an inch in diameter; its body approaches to an oval figure, and is soft, punctuated, of a kind of gelatinous substance, and of a pale lead color; from the larger extremity there arise four oblong and thick protuberances; these are the tentacula; two of them stand nearly erect, two are thrown backward. It is common about our shores, especially off Anglesea. It causes, by its poisonous juice, the hair to fall off the hands of those that touch it; and is so extremely fetid as to occasion sickness.

LAPSANA, nipplewort, a genus of the polygamia æqualis order, and syngenesia class of plants: natural order forty-ninth, compositæ: receptacle naked: CAL. calyculated, with all the inferior scales canaliculated, or finely channelled. There are species, which grow commonly by the sides of ditches. The young leaves of the common kind, called dock-cresses, have the taste of radishes, and are eaten raw at Constantinople as a salad. In some parts of England the people boil them as greens, but they have a bitter and disagreeable taste.

LAPSE, *n. s.* & *v. n.* Fr. *laps;* Ital. *lapso;* Lat. *lapsus*. A fall; slip; flow; smooth course: metaphorically, apostasy; error; venial fault; mistake: transfer of legal right, by the party who possessed it having failed to exercise it in due time: to lapse is, to slip; fall; fail; glide away; lose the proper time or opportunity; fall legally from a negligent party to another; fall from truth or moral purity.

> I have ever verified my friends,
> Of whom he's chief, with all the size that verity
> Would without *lapsing* suffer. *Shakspeare.*

> To *lapse* in fulness,
> Is sorer than to lie for need; and falsehood
> Is worse in kings than beggars. *Id. Cymbeline.*

> Myself stood out:
> For which if I be *lapsed* in this place,
> I shall pay dear. *Id. Twelfth Night.*

A sprout of that fig-tree which was to hide the nakedness of *lapsed* Adam. *Decay of Piety.*

All public forms suppose it the most principal, universal, and daily requisite to the *lapsing* state of human corruption. *Id.*

> Round I saw
> Hill, dale, and shady woods, and sunny plains,
> And liquid *lapse* of murmuring streams. *Milton.*

> Once more I will renew
> His *lapsed* powers, though forfeit, and inthralled
> By sin to foul exorbitant desires. *Id.*

Notions of the mind are preserved in the memory, notwithstanding *lapse* of time. *Hale.*

As God did by the incomprehensible perfection of his nature from thence foresee our *lapse* and misery, so he did as soon determine our remedy and means of salvation. *Barrow.*

The weakness of human understanding all will confess; yet the confidence of most practically disowns it; and it is easier to persuade them of it from other *lapses* than their own. *Glanville.*

These are petty errors and minor *lapses*, not considerably injurious unto truth. *Browne's Vulgar Errours.*

These were looked on as *lapsed* persons, and great severities of penance were prescribed them, as appears by the canons of Ancyra. *Stillingfleet.*

Homer, in his characters of Vulcan and Thersites, has *lapsed* into the burlesque character, and departed from that serious air essential to an epick poem. *Addison.*

In a presentation to a vacant church, a layman ought to present within four months, and a clergyman within six, otherwise a devolution, or *lapse* of right, happens. *Ayliffe.*

As an appeal may be deserted by the appellant's *lapsing* the term of law, so it may also be deserted by a *lapse* of the term of a judge. *Id.*

If the archbishop shall not fill it up within six months ensuing, it *lapses* to the king. *Id.*

This scripture may be usefully applied as a caution to guard against those *lapses* and failings to which our infirmities daily expose us. *Rogers.*

It hath been my constant business to examine whether I could find the smallest *lapse* in stile or propriety through my whole collection, that I might send it abroad as the most finished piece. *Swift.*

This disposition to shorten our words, by retrenching the vowels, is nothing else but a tendency to *lapse* into the barbarity of those northern nations from whom we are descended, and whose languages labour all under the same defect. *Id.*

Let there be no wilful perversion of another's meaning; no sudden seizure of a *lapsed* syllable to play upon it. *Watts.*

> Wrapt in the thought of immortality,
> Wrapt in the single, the triumphant thought,
> Long life might *lapse*, age unperceived come on,
> And find the soul unsated with her theme. *Young.*

Those faults which we cannot conceal from our own notice, are considered, however frequent, not as habitual corruptions or settled practices, but as casual failures, and single *lapses*. *Johnson.*

Concerning *lapsed* Christians, Saint Paul gave instruction, that, 'if any man be overtaken in a fault, ye which are spiritual restore such a man in the spirit of meekness, considering lest ye also be tempted.' *Paley.*

LAPSE, in ecclesiastical law, an omission of a patron to present a clerk to a benefice within six

of its being void; in which case the e is said to be in lapse, or lapsed, and the f presentation devolved to the ordinary. ordinary neglect to present, during the me, the right of presentation accrues to tropolitad, and to the king by neglect metropolitan. This right of lapse was stablished in the reign of Henry II., the bishops first began to exercise uni- y the right of institution to churches: erefore, when there is no right of institu- here is no right of lapse; so that no dona- n lapse to the ordinary, unless it has been nted by the king's bounty; but no right of can accrue, when the original presentation he crown. In case the benefice becomes by death or cession, through plurality of ces, the patron is bound to take notice of acancy at his own peril: but in case of a cy by resignation or canonical deprivation, a clerk presented be refused for insufficiency, being matters of which the bishop alone is umed to be cognizant, here the law requires to give notice thereof to the patron, other- he can take no advantage by way of lapse; ier shall any lapse accrue thereby to the me- olitan or the king. If the bishop refuse or ect to examine and admit the patron's clerk out good reason assigned, or notice given, hall have no title to present by lapse: and if ight of presentation be litigious or contested, an action be brought against the bishop to the title, no lapse shall occur till the question ght be decided. If the bishop be both patron ordinary, he shall not have double time al- ed him to collate in: and if the bishop doth collate his own clerk immediately to the ng, and the patron presents, though after the months are lapsed, yet the presentation is d, and the bishop is bound to institute the ron's clerk. If the bishop suffer the presen- ion to lapse to the metropolitan, the patron o has the same advantage if he present before archbishop has filled up the benefice: yet the linary cannot, after lapse to the metropolitan, llate his own clerk to the prejudice of the arch- shop. But if the presentation lapses to the ng, the patron shall never recover his right, till e king has satisfied his turn by presentation; r nullum tempus occurrit regi.

LAPWING, in ornithology. See TRINGA.

LAQUEARIUS, a kind of athleta among the ncients, who in one hand held a laqueus, i. e. a ort of snare, wherewith to embarrass and entan- le his antagonist, and in the other a poniard to tab him.

LAQUEUS, in surgery, a ligature so contrived, hat, when stretched by any weight, it draws up close. Its use is to extend broken or disjointed bones, to keep them in their places while they are set, and to bind the parts closely together.

LAR, the capital of Laristan, a province of Persia, once a most magnificent city, but now in ruins, stands in an extensive plain of palm-trees. There are still found some fine public buildings, however, and the houses are said to be com- modious and well furnished: the bazaar is the noblest structure of the kind in Persia. The khan resides in a mansion in the middle of the city, surrounded with a strong wall, and flanked with towers. The castle is a ruin situated on the summit of a hill behind the town. It is cele- brated for its manufacture of fire-arms and cotton cloth. Population 12,000. Long. 42° 30′ E., lat. 27° 30′ N.

LARA, or LARANDA, in fabulous history, one of the Naiades, daughter of the river Almon in Latium, famed for her beauty and loquacity. She revealed to Juno the amours of Jupiter with Juturna, for which he cut out her tongue, and ordered Mercury to conduct her to Tartarus. But Mercury falling in love with her by the way, she became the mother of twins, who were after- wards worshipped by the Romans, under the name of Lares. *Ovid. Fast.*

LARARIUM was a chapel which the Romans frequently had in their houses for the household gods, called lares. Spartian says, that Alexan- der the son of Mammea kept in his lararium the figure of our Saviour, together with his other idols.

LAR'BOARD, Fr. *babord;* in all the Goth. dialects *bak bourd.* A name given by seamen to the left side of a ship, when looking forward from the stern, wherein the right and left are appa- rently determined by the analogy of a ship's position, on the water, to that of a fish.—Fal- coner. Opposed to the starboard.

> Or when Ulysses on the *larboard* shunned
> Charybdis, and by the other whirlpool steered.
> *Milton.*

> Tack to the *larboard*, and stand off to sea,
> Veer starboard sea and land. *Dryden.*

Suppose the ships were in the order of sailing with the wind on their *larboard* side, then the starboard or lee line of the order is to heave to. *Falconer.*

LAR'CENY, *n. s.* Fr. *larcin;* Lat. *latroci- nium.* Theft. See below.

Those laws would be very unjust, that should chastise murder and petty *larceny* with the same punishment. *Spectator.*

LARCENY, OR SIMPLE LARCENY, when it is the stealing of goods above the value of 1*s.* is called grand larceny; when of goods to that value, or under, is petit larceny: offences which are considerably distinguished in their punish- ment, but not otherwise. See THEFT.

LARCENY, MIXED, OR COMPOUND LARCENY, is such as has all the properties of the former (see THEFT); but is accompanied with either one or both of the aggravations of taking from one's house or person. See LAW.

LARCH, *n. s.* Lat. *larix.* A tree.

Some botanical criticks tell us, the poets have not rightly followed the traditions of antiquity, in meta- morphosing the sisters of Phaeton into poplars, who ought to have been turned into *larch* trees; for that it is this kind of tree which sheds a gum, and is commonly found on the banks of the Po. *Addison on Italy.*

LARCHER (Peter Henry), a modern French classical scholar, was born at Dijon, October 12th 1726. Related to Bossuet, it was the in- tention of his father to bring him up to the ma- gistracy. But he was attached too ardently to the belles lettres, and became an intense student of Greek. He gave the public as his first trans- lation the Electra of Euripides; then from the English Martinus Scriblerus, and Sir John

Pringle's Observations on the Diseases of the Army. This was followed by a translation of the Greek romance of Chereas and Callirhoe. In 1767 he published remarks, under the title of a Supplement, on Voltaire's Philosophy of History; to which the latter replied in his Defense de mon Oncle. Larcher rejoined in a Reponse à la Defense de mon Oncle. He now undertook his celebrated translation of Herodotus; and in 1774 published a Memoire sur Venus, to which the Academy of Inscriptions awarded their prize. He followed with a translation of Xenophon, which led to his being elected into the academy. During the revolution he lived very privately, and was subsequently decreed a sum of 3000 livres, and received into the Institute. He was also appointed professor of Greek in the Imperial university, but was too aged for service. Larcher died December 22d, 1812, universally regretted and esteemed. In 1814 his library was sold by auction.

LARD, *n. s.* & *v. a.* } French, *lard*, *larder*;
LAR'DER, *n. s.* } Span. and Ital. *lardo*; Lat. *lardum*, 'vel *laridum*; qu. large aridum?'—Ainsworth. Bacon; the fat of bacon; grease, or fat generally: to lard is to fatten; make like bacon; hence, metaphorically, to flatter; bedaub with praise; mix with something else by way of real or pretended improvement. A larder is an apartment where bacon or other meat is cured or salted; hence, where meat or victuals are kept.

This similitude is not borrowed of the *larder* house, but out of the school house. *Ascham.*

Now Falstaff sweats to death,
And *lards* the lean earth as he walks along.
Shakspeare.

Brave soldier, doth he lie
Larding the plain? *Id. Henry V.*

An exact command,
Larded with many several sorts of reasons.
Shakspeare.

Flesh is ill kept in a room that is not cool; whereas in a cool and wet *larder* it will keep longer. *Bacon.*

So may thy pastures with their flowery feasts,
As suddenly as *lard*, fat thy lean beasts. *Donne.*

A certain monk saw some souls roasted upon spits like pigs, and some devils basting them with scalding *lard*; but a while after they were carried to a cool place, and so proved purgatory. *Bp. Taylor.*

Who, forsooth, is the brave spark, the complete gentleman, the man of conversation and address, but he that hath the skill and confidence to *lard* every sentence with an oath or a curse? *Barrow.*

The sacrifice they sped;
Chopped off their nervous thighs, and next prepared
To' involve the lean in cauls, and mend with *lard*.
Dryden.

The *larded* thighs on loaded altars laid. *Id.*

He *lards* with flourishes his long harangue,
'Tis fine, sayest thou. *Id.*

So have I seen in *larder* dark,
Of veal a lucid loin. *Dorset.*

No man *lards* salt pork with orange peel,
Or garnishes his lamb with spitch-cockt eel.
King.

Old age,
Morose, perverse in humour, diffident
The more he still abounds, the less content:
His *larder* and his kitchen too observes,
And now, lest he should want hereafter, starves.
Id.

Swearing by heaven; the poets think this nothing, their plays are so much *larded* with it.
Collier's View of the Stage.

LARDNER (Nathaniel), an eminent English dissenting divine, born at Hawkhurst in Kent, June 6th 1684. After a grammatical education, he was sent first to a dissenting academy in London, under the care of the Rev. Dr. Joshua Oldfield; and thence, in his sixteenth year, to prosecute his studies at Utrecht, under the celebrated professors D'Uries, Gravius, and Burman. Here he remained above three years, and then removed for a short space to Leyden. In 1703 he returned to England, continuing at his father's house to prepare himself by close and diligent study for the sacred profession which he had in view. In 1709 he first entered the pulpit, and a few years after was received into lady Treby's family, as domestic chaplain and tutor to her son. He continued in this situation till her ladyship's death in 1721. This event threw him into circumstances of some perplexity, having preached to several congregations during his residence with lady Treby, without the approbation or choice of any one congregation; a circumstance which Dr. Kippis considers reproachful to the Dissenters. Mr. Lardner, it seems, was very deficient in elocution and delivery. He was engaged, however, with some of his dissenting brethren in preaching a Tuesday evening lecture at the Old Jewry. In February 1727 he published, in two volumes 8vo., the first part of The Credibility of the Gospel History, or the Facts occasionally mentioned in the New Testament confirmed by passages of ancient authors, who were contemporary with our Saviour or his apostles, or lived near their time. An appendix was subjoined, relating to the time of Herod's death. 'It is scarcely necessary to say,' observes Dr. Kippis, 'how well his work was received by the learned world. Not only was it highly approved by the Protestant Dissenters, with whom the author was more immediately connected, but by the clergy in general of the established church; and its reputation gradually extended into foreign countries. These two, with the subsequent fifteen, volumes octavo, and the four thin quartos, entitled Jewish and Heathen Testimonies, occupied him, with the interruption arising from some smaller productions, during the space of forty-three years. The Supplement to the Credibility was published separately, under the title of the History of the Gospels and Epistles. But applauded as Dr. Lardner's works were, he received little recompense for them. Some of the latter volumes of the Credibility were published at a loss; and at last he sold the copyright and all the remaining copies to the booksellers, for the trifling sum of £150. He just lived to see the last volume, the fourth of the Testimonies, published. This was in 1767. He was seized with a decline in the summer following; and was carried off in a few days at Hawkhurst, the place of his nativity, where he had a small paternal estate, in the eighty-fifth year of his age.

LARENTINALIA, in antiquity, a feast held among the Romans on the 23rd day of December, but ordered by Augustus to be observed twice

a year; by some supposed to have been in honor of the Lares, but by others, with more probability, in honor of Acca Laurentia; and to have been the same with the Laurentalia.

LARES, among the ancients, derived by Apuleius, in his tract De Deo Socratis, from lar, familiaris; a kind of domestic genii, or divinities, worshipped in houses, and esteemed the guardians and protectors of families. The Lares were distinguished from the Penates; as the former were supposed to preside over housekeeping, the servants in families, and domestic affairs; and the latter were the protectors of the masters of families, their wives and children. Accordingly the Lares were dressed in short succinct habits, to show their readiness to serve; and they held a sort of cornucopia in their hands, as a signal of hospitality. According to Ovid, there were generally two of them, who were sometimes represented with a dog at their feet. Plutarch distinguishes good and evil Lares, as he had before done good and evil Genii. There were also some public, and some private Lares. Apuleius tells us the domestic Lares were no more than the souls of departed persons, who had lived well, and discharged the duties of their station; whereas, those who had done otherwise were vagabonds, wandering about, called Larvæ and Lemures. The Lares were also called Penates, and were worshipped under the figures of little marmousets, or images of wax, silver, or earthen ware. The public Lares were also called Compitales, from compitum, a cross way; and Viales, from via, a way or public road; as being placed at the meeting of roads and in the high ways, and esteemed the patrons and protectors of travellers. The private Lares took care of particular houses and families: these they also called Præstites, from præsto:

Quod præstant oculis omnia tuta suis. *Ovid. Fast.*

They gave the name Urbani, i.e. Lares of Cities, to those who had cities under their care; and Hostilii to those who were to keep their enemies off. There were also Lares of the country, called Rurales, as appears by several antique inscriptions. The Lares were also genial gods, supposed to take care of children from their birth. The ancients differ extremely about the origin of the Lares. Varro and Macrobius say that they were the children of Mania; Ovid makes them the issue of Mercury and the Naiad Lara or Laranda: Apuleius assures us they were the posterity of the Lemures; Nigridus, according to Arnobius, made them sometimes the guardians and protectors of houses, and sometimes the same with the Curetes of Samothracia, whom the Greeks called Idæi dactyli. Nor was Varro more consistent in his opinion of these gods: sometimes making them the manes of heroes, and sometimes gods of the air. Titus Tatius, king of the Sabines, was the first who built a temple to the Lares. The chimney and fireplace in the house were particularly consecrated to them. Tertullian tells us the custom of worshipping the Lares arose from this, that they anciently interred their dead in their houses; whence the credulous imagined their souls continued there also, and proceeded to pay them divine honors. To this it may be added, that, the custom being afterwards introduced of burying in the highways, they might hence take occasion to regard them as gods of the highways. The victim offered to the Lares in the public sacrifices was a hog; in private, they offered them wine, incense, a crown of wool, and a little of what was left at the table. They also crowned them with flowers, particularly the violet, myrtle, and rosemary. Their symbol was a dog, which was usually represented by their side, on account of its fidelity and the service it does to man in watching his house. They were sometimes also represented as clothed in a dog's skin. The term Lares, according to Bryant, was formed from laren, an ancient word by which the ark was represented: and he supposes that the Lares and Manes were the same domestic deities under different names; and that by these terms the Hetrurians and Latins denoted the dii arkitæ, who were no other than their arkite ancestors, or the persons preserved in the laren or ark; the genius of which was Isis, the reputed parent of the world. He observes farther, that they are described as dæmons and genii, who once lived on earth, and were gifted with immortality. Arnobius styles them Lares quosdam genios et functorum animas; and he says, that, according to Varro, they were the children of Mania. Huetius adds, that Mania had also the name of Laranda; and she is styled the mother of the dæmons. By some she is called Lara, and was supposed to preside over families; and children were offered at her altar in order to procure her favor. In lieu of these they in after times offered the heads of poppies and pods of garlic.

LARGE, *adj.* & *adv.*
LARGE'LY, *adv.*
LARGE'NESS, *n. s.*
} Fr. *large*; Lat. *largus*. Wide, or broad; big; bulky; extensive; copious; abundant: hence liberal; diffusive; comprehensive: *at* large, free, or without restraint; also diffusely, to the full extent.

Let them dwell in the land, and trade therein; for it is *large* enough for them. *Gen.* xxxiv. 21.

Thou shalt drink of thy sister's cup deep and *large*. *Ezekiel.*

They which would file away most from the *largeness* of that offer, do in most sparing terms acknowledge little less. *Hooker.*

Discover more *at large* what cause that was,
For I am ignorant, and cannot guess. *Shakspeare.*

The ample proposition that hope makes,
In all designs begun on earth below,
Falls in the promised *largeness*. *Id.*

Plant fruit trees in *large* borders, and set therein fine flowers, but thin and sparingly, lest they deceive the trees. *Bacon.*

If you divide a cane into two, and one speak at the one end, and you lay your ear at the other, it will carry the voice further than in the air *at large*. *Id.*

Their former *large* peopling was an effect of the countries impoverishing. *Carew's Survey.*

There he conquered a thousand miles wide and *large*. *Abbot's Description of the World.*

Knowing best the *largeness* of my own heart toward my people's good and just contentment. *King Charles.*

Skippon gave a *large* testimony under his hand, that they had carried themselves with great civility. *Clarendon.*

They their fill of love, and love's disport,
Took *largely*; of their mutual guilt the seal.
Milton.

Thus incorporeal spirits to smallest forms
Reduced their shapes immense; and were *at large*,
Though without number still. *Milton.*

Man as far transcends the beasts in *largeness* of desire as dignity of nature and employment.
Glanville's Apology.

Shall grief contract the *largeness* of that heart,
In which nor fear nor anger has a part? *Waller.*

Charles II. asked me, What could be the reason, that in mountainous countries the men were commonly *larger*, and yet the cattle of all sorts smaller? *Temple.*

How he lives and eats:
How *largely* gives; how splendidly he treats.
Dryden.

Nor must Bumastus his old honours lose,
In length and *largeness* like the dugs of cows. *Id.*

Great Theron, *large* in limbs, of giant height. *Id.*

If the *largeness* of a man's heart carry him beyond prudence, we may reckon it illustrious weakness.
L'Estrange.

Warwick, Leicester, and Buckingham, bear a *large*-boned sheep of the best shape and deepest staple. *Mortimer.*

The children are bred up in their father's way; or so plentifully provided for, that they are left *at large*.
Swift.

Your zeal becomes importunate;
I've hitherto permitted it to rave
And talk *at large*; but learn to keep it in,
Lest it should take more freedom than I'll give it.
Addison.

There will be occasion for *largeness* of mind and agreeableness of temper. *Collier on Friendship.*

I might be very *large* upon the importance and advantages of education, and say a great many things which have been said before.
Felton on the Classics.

Supposing that the multitude and *largeness* of rivers ought to continue as great as now; we can easily prove, that the extent of the ocean could be no less.
Bentley.

The second natural division of power is of such men who have acquired *large* possessions, and consequently dependencies; or descend from ancestors who have left them great inheritances. *Swift.*

Those, who in warmer climes complain
From Phœbus' rays they suffer pain,
Must own, that pain is *largely* paid
By generous wines beneath the shade. *Id.*

It does not belong to this place to have that point debated *at large*. *Watts.*

Vernal suns and showers
Diffuse their warmest, *largest* influence. *Thomson.*

If you listen to the complaints of a forsaken lover, you observe that he insists *largely* on the pleasures which he enjoyed or hoped to enjoy.
Burke on the Sublime.

That *large* black prophet eye seemed to dilate
And follow far the disappearing sun
As if their last day of a happy date
With his broad, bright, and dropping orb were gone. *Byron.*

Large is also a sea term applied to the wind, when it crosses the line of a ship's course in a favorable direction, particularly on the beam or quarter. Thus, if a ship steer west, then the wind in any point of the compass to the eastward of the south or north may be called large, unless when it is directly east, and then it is said to be right aft. Sailing large is, therefore, advancing with a large wind, so as that the sheets are slackened and flowing, and the bowlines entirely disused. This phrase is generally opposed to sailing close-hauled.

LARGESS, *n. s.* } Fr. *largesse*; Lat. *largi-*
LARGI'TION, *n. s.* } *tas*, 'à largiendo, giving liberally.'—Minsheu. A gift or present. Still retained as a call or cry for bounty by heralds and harvest-men: largition is the act of giving; but we find no example of its use.

Our coffers with too great a court,
And liberal *largess*, are grown somewhat light.
Shakspeare.

He assigned two thousand ducats, for a bounty to me and my fellows: for they give great *largesses* where they come. *Bacon's New Atlantis.*

A pardon to the captain, and a *largess*
Among the soldiers had appeased their fury.
Denham.

Irus's condition will not admit of *largesses*.
Addison.

When the Portuguese suffered under the retreat of the French, every arm was stretched out, every hand was opened,—from the rich man's *largess* to the widow's mite, all was bestowed to enable them to rebuild their villages and replenish their granaries.
Byron.

LARGILLIERE (Nicholas de), a French painter, born at Paris, in 1656. He lived for some years in England, and was employed by Charles II. Louis XIV. also patronised him, and he became director of the French academy. His best work is a picture of the crucifixion. He also painted portraits admirably. He died in 1746, aged ninety.

LARGITIO, in Roman antiquity, was a distribution of corn, provisions, clothes, money, &c., to the people. Gracchus, when tribune, to make himself popular, passed a law for supplying the Roman citizens with corn at a very low rate, out of the public granaries. Claudius, another tribune, with the same view to popular applause, procured it to be distributed gratis. Cato, to win the common people from Cæsar, persuaded the senate to do the same, and 300,000 citizens shared in the distribution. Cæsar, after his triumph, extended his bounty to 150,000, giving them each a mina. The Roman emperors enlarged still further the list of those who were to partake of their distributions. Largitio is frequently taken to signify a masked bribery; whereby candidates purchased votes, when they stood for places of honor or trust in the state. The distribution of money was called congiarium, and the distributors divisores and sequestres.

LARGS, a village on the west coast of Scotland, opposite the island of Bute; rendered memorable by the defeat of the Norwegians in their last invasion of that country. This invasion was made in the year 1263, with a fleet of 160 sail, and an army of 20,000 men, commanded by Haquin king of Norway, whose ravages on the coast of Ayr, Bute, and Arran, reaching the Scottish court, an army was immediately assembled by Alexander III., and a bloody engagement ensued at this village, when 16,000 of the invaders were slain in the battle and flight, with 5000 Scots. Haquin escaped to the Orkneys, where he soon after died of grief. The entrenchments of the

Norwegian camp may still be traced along the coast of this place. The Scottish commanders who fell in battle were buried in a rising field near the village; three or four persons were interred in one grave, on each side of which was a large stone; a third was placed across the grave, supported at the extremities by the side stones, and in this rude manner the warriors lay entombed.

LARICAJA, a province of Peru, north of La Paz, celebrated for its gold mines of which few are worked. It is 240 miles from east to west, and seventy-five from north to south; very mountainous, but of temperate climate and capable of great improvement.

LARISSA, an ancient, rich, and celebrated town of Greece, in which there was a famous temple of Jupiter. Adjoining to it was a plain of very great fertility, called by Horace (Carm. lib. 1, Od. vii. 11.) Larissæ campus opimæ, and by Strabo, Campus Pelasgiotis, from the Pelasgi who inhabited it. This town continues to be called by the same name. It is a mean ill-built place, inhabited by a mixed race of Greeks, Turks, and Jews, to the amount of 20,000. It contains, however, several handsome mosques, and is the residence of a pacha, and of an archbishop of the Greek church. It stands on the Peneus, now called the Salembria, over which there is a bridge that connects the suburb with the town. The situation is pleasant, but unhealthy, owing to the neighbouring marshes. It is the capital of Thessaly. Seventy-five miles south by west of Salonica.

LARISSAN, one of the poorest and least productive provinces of Persia, is only rendered habitable by the periodical rains. The inhabitants cultivate a quantity of dates, wheat, and barley. The coast is in the possession of Arab pirates who live under their own sheiks, and reside in small towns defended by mud forts. Lar is the capital.

LARISSÆUS, a surname of Achilles, from his birth-place, Larissa; as well as of Jupiter, from his temple there.

LARISSUS, a river of the Peloponnesus, running between Elis and Achaia.

LARIUS, in ancient geography, an extensive lake of Gallia Cisalpina, through which the Addua (now the Adda) runs, in its way to the Po, above Cremona. It is by some reckoned eighty-eight miles, by others 100 in circumference. Oppenheim states its length to be thirty-six Italian miles, from north to south. It is now called Como (see Como), and is included in the department of the Lario, which is named from it.

LARIX, the larch tree. See Pinus.

LARK, *n. s.*, LAR'KER, LARK'LIKE, *adj.* } Sax. lapence, æнpack, an early riser; Belg. *lewerk, larc;* Teut. *lerch;* Dan. *lerke*. Minsheu gives us an amusing specimen of etymology under this word: 'which,' he says, 'after Geropius, is derived in the Belg. *leuwerk*, from *leaf-werk*, i. e. our lives' work, because this bird flies seven sundry times every day very high, and so sings hymns and songs to his Creator, in which consists our lives' work.' A species of Alauda, which see. A larker is an old name for a catcher of larks.

It was the *lark* the herald of the morn.
Shakspeare.

Look up a height, the shrill-gorged *lark* so far
Cannot be seen or heard. *Id. King Lear.*

The' example of the heavenly *lark*,
Thy fellow-poet, Cowley, mark. *Cowley*

Mark how the *lark* and linnet sing;
With rival notes
They strain their warbling throats,
To welcome in the spring. *Dryden.*

The sprightly *lark's* shrill matin wakes the morn.
Young.

Pride, like an eagle, builds among the stars;
But pleasure, *lark-like* nests upon the ground. *Id.*

The cheerful man hears the *lark* in the morning; the pensive man hears the nightingale in the evening.
Johnson.

He who sits from day to day
Where the prisoned *lark* is hung,
Heedless of his loudest lay,
Hardly knows that he has sung. *Cowper.*

Rise, sons of harmony, and hail the morn,
While warbling *larks* on russet pinions float,
Or seek at noon the woodland scene remote,
Where the grey linnets carol from the hill. *Beattie.*

'Tis the morn, but dim and dark.
Whither flies the silent *lark*? *Byron.*

Lark, in ornithology. See Alauda. The lark is not only a very agreeable bird for the cage, but will live upon almost any food, if it have once a week a fresh tuft of three-leaved grass. The proper method of keeping them in health is this: there must be two pans of food, the one containing meat, the other oatmeal and hempseed. A very good food is the following: boil an egg very hard, to which add the crumb of a halfpenny loaf, and as much hempseed; let the egg be chopped very small, and the hempseed bruised in a mortar; when these are mixed, the bread is to be crumbled in among the rest, and the whole to be rolled together with a common rolling-pin, and kept for use. There must be some fine small gravel strewed at the bottom of the cage, and renewed at farthest once in a week. This will prevent the bird's feet from getting hurt by being clogged with the dung; and his basking in this will keep him also from growing lousy. There must be a perch in the cage, and it must either be lined with green baize, or made of fine matting, which the lark is very fond of. When the bird is first taken, some food must be strewed upon the sand in the bottom of the cage; for it will be sometimes almost famished before it finds the meat in the pan. The cock bird is known from the hen by the loudness and length of his call, by his tallness as he walks about the cage, and by his doubling his notes in the evening, as if he was going with his mate to roost. Both the cock and hen of this kind are subject to many disorders; the principal of these are cramp, giddiness of the head, and breeding lice. Cleanliness is the best cure for the first and the last of these complaints; but we know of no cure for the other. A good strong bird, however, will often last very well five or six years, and improve all the time.

Larks, Daring, or Doring, a method of taking larks, by means of a clap-net and a looking glass. For this there must be provided four sticks very straight and light, about the bigness of

a pike; two of these are to be four feet nine inches long, and all notched at the edges or the ends. At one end of these sticks there is to be fastened another of about a foot long on one side; and on the other side a small wooden peg about three inches long. Then four or more sticks are to be prepared, each one foot long; and each of these must have a cord of nine feet long fastened to it at the end. Every one should have a buckle for the commodious fastening on the respective sticks when the net is to be spread. A cord must also be provided, which must have two branches. The one must have nine feet and a half, and the other ten feet long, with a buckle at the end of each; the rest, or body of the cord, must be twenty-four yards long. All these cords, as well the long ones as those about the sticks, must be well twisted, and of the bigness of one's little finger. The next thing is a staff of four feet long, pointed at one end, and with a ball of wood at the other, for the carrying these conveniences in a sack or wallet. There should also be carried a spade to level the ground where there may be any little irregularities; and two small rods, each eighteen inches long, having a small rod fixed with a pack-thread at the larger end of the other. To these are to be tied some pack-thread loops, which are to fasten in the legs of some larks; and there are to be reels to these, that the birds may fly a little way up and down. The looking-glass is to be prepared in the following manner: Take a piece of wood about an inch and a half thick, and cut it in form of a bow, so that there may be about nine inches space between the two ends; and let it have its full thickness at the bottom, that it may receive into it a false piece; in the five corners of which there are to be set in five pieces of looking-glass. These are so fixed, that they may dart their light upwards; and the whole machine is to be supported on a moveable pin with the end of a long line fixed to it; so that, the other end of the cord being carried through a hedge, the pulling it may set the whole machine of the glasses a turning. This and the other contrivances are to be placed in the middle between the two nets. The larks fixed to the place, termed calls, and the glittering of the looking-glasses as they twirl round in the sun, invite the other larks down; and the cord that communicates with the nets, and goes through the hedge, gives the person behind an opportunity of pulling up the nets, so as to meet over the whole, and take every bird that is between them. The places where this sort of sporting succeeds best are open fields, remote from any trees and hedges except one by way of shelter for the sportsman: and the wind should always be either in the front or back; for if it blows sideways, it prevents the playing of the net. See Bird-Catching.

LARMIER (from larme, French, a tear), in architecture, a flat square member of the cornice, below the cimasium, and jetting out farthest; so called from its use, which is to disperse the water, and cause it to fall at a distance from the wall, drop by drop, as it were by tears.

LARNICA, a considerable town of Cyprus, consisting of an Upper and Lower town of mean houses, but having a fine harbour, the emporium of the commerce of the island. The water is supplied by an aqueduct erected by the Turks. Its exports are corn, wine, silk, and drugs; the imports cloth, hardware, and colonial produce; and rue from Egypt. The ruins of the ancient Citium are near, and frequently yield medals and other relics of the former prosperity of the island. Population 5000.

LARREY (Isaac de), a French protestant historian, who fled from France on the revocation of the edict of Nantes, and took refuge in Holland, where he was made historiographer to the United Provinces. He wrote 1. The History of England; 4 vols. folio; 2. The History of Louis XIV., 3 vols. 4to.; 3. The History of Augustus 8vo.; 4. The History of the Seven Wise Men, 2 vols. 8vo. He died in 1719.

LARROGUE (Daniel de), was born at Vitre. He wrote a satire on Louis XIV., for which he suffered five years' imprisonment. He translated Prideaux's Life of Mahomet, and Echard's Roman history, into French. He died in 1731.

LARTIUS Florus (Titus), a Roman citizen and consul, who appeased a sedition of the people, and was the first dictator ever elected at Rome. He was appointed to this high office, endued with the most absolute power, and invested with every ensign of royalty except the name of king, A. U. C. 255, within ten years only after the abolition of the monarchy, the expulsion of the kings, and the erection of the republic. So rapidly did even the Roman democracy itself revert to a monarchy. But it was only temporary: Lartius, after defeating the enemies of his country, laid down his unlimited power within six months, and returned to the rank of a private citizen, with the glorious reputation of having exercised his power with blameless lenity. Had he attempted, like the first consul of a neighbouring republic, to prolong his dictatorship to ten or twenty years, the jealousy of the Roman citizens would have been justly alarmed.

LARVÆ, in antiquity, derived from the Etruscan word lar or lars, signifying prince or lord, denoted the ghosts of the deceased, considered as wicked and mischievous. Hence is formed the term larvatus, i. e. larva indutus or demoniac. The ingenious Mr. Farmer urges the etymology and use of this term to prove, that the heathen demons were human ghosts. The larvæ were also called lemures.

Larvæ, in entomology, a name given by Linnæus to insects in that state, called by other writers eruca or caterpillar. See Entomology.

LA'RUM, *n. s.* Johnson says from 'alarum or alarm.' But this word is just as probably the origin of that, as in the Goth. and Teut. dialects we have *lur* and *luidr;* Swed. *lur*, a trumpet, or a loud sound; Dan. and Swed. *larm*, a night-clock. Alarm; note or instrument announcing danger; a piece of clock-work to rouse a sleeper at a certain hour.

His *larum* bell might loud and wide be heard,
When cause required, but never out of time.

Spenser.

The peaking cornute, her husband, dwelling in a continual *larum* of jealousy, comes to me in the instant of our encounter. *Shakspeare.*

How far off lie these armies?
—Within a mile and half.
—Then shall we hear their *larum*, and they ours.
Id.

She is become formidable to all her neighbours, as she puts every one to stand upon his guard, and have a continual *larum* bell in his ears. *Howel.*

Of this nature was that *larum*, which, though it were but three inches big, yet would both wake a man, and of itself light a candle for him at any set hour. *Wilkins.*

I see men as lusty and strong that eat but two meals a day, as others, that have set their stomachs, like *larums*, to call on them for four or five. *Locke.*

The young Æneas, all at once let down,
Stunned with his giddy *larum* half the town.
Dunciad.

Nor far beneath her in renown is she
Who, through good breeding, is ill company;
Whose manners will not let her *larum* cease,
Who thinks you are unhappy when at peace.
Young.

LARUS, the gull, in ornithology, a genus belonging to the order of anseres, the characters of which are, the bill is straight, cultrated, a little crooked at the point, and without teeth; the inferior mandible is gibbous below the apex; the nostrils are linear, a little broader before, and situated in the middle of the beak. There are several different species, principally distinguished by their colors.

1. L. articilla, the laughing gull, is in length eighteen inches, breadth three feet. It resembles the pewit in every thing but in the legs, which are black instead of red. It is found in Russia, on the river Don, particulary about Tschercask. The note resembles a coarse laugh, whence the name. It is met with also in different parts of the continent of America; and is very numerous in the Bahama Islands.

2. L. canus, the common gull, is in length sixteen or seventeen inches; in breadth thirty-six; weight one pound. The bill is yellow: the irides are hazel, and the eye-lids brown: the head, neck, under parts of the body, and tail, are white; the back and wings pale gray: the outer edge of the first four quills, and tips of the first five, are black; but the fourth and fifth have a white spot at the tips; the rest, except the three nearest the body, have the ends white: the legs are of a dull greenish white. This seems to be the most common of all the gulls, being found in vast numbers on our shores and rivers contiguous to the sea. It is seen also very far north, as far as Iceland and the Russian lakes: it is met with in the neighbourhood of the Caspian Sea, in various shores of the Mediterranean, and as far south as Greece: and it is found also in America, on the coast of Newfoundland. It breeds on the rocks and cliffs, like others of the genus; and the eggs are two inches and a half in length, of a deep olive-brown, marked with irregular deep-reddish blotches. It is a tame species, and may be seen by hundreds on the shores of the Thames and other rivers, in the winter and spring, at low tides, picking up the various worms and small fish left by the tides; and will often follow the plough in the fields, for the sake of worms and insects which are turned up, particularly the cockchafer in its larva state, which it joins with the rooks in devouring most greedily.

3. L. cataractes, the skua gull, is in length two feet; the extent four feet and a half; the weight three pounds: the bill is two inches one-fourth long, very much hooked at the end, and very sharp; the upper mandible covered more than half-way with a black sere or skin, as in the hawk kind; the nostrils are placed near the bend, and are pervious. The feathers on the head, neck, back, scapulars, and coverts of the wings, are of a deep brown, marked with rusty color; brightest in the male. The breast, belly, and vent are ferruginous, tinged with ash color. The tail when spread is circular, of a deep brown, white at the root, and with shafts of the same color. The legs are covered with great black scalons: the talons, black, strong and crooked: the interior remarkably so. This species inhabits Norway, the Ferroe Isles, Shetland, and the noted rock Foula a little west of them. It is also a native of the South Sea. It is the most formidable of the gulls; its prey being not only fish, but all the smaller sorts of water-fowl, such as teal, &c. Mr. Schroter, a surgeon in the Ferroe Isles, relates that it likewise preys on ducks and poultry. It has all the fierceness of the eagle in defending its young; when the inhabitants of those islands visit the nest, they defend themselves from its attack by holding a knife erect over their heads, on which the skua will transfix itself when darting on the invaders. The natives are often very roughly treated by them while they are attending their sheep on the hills; and are obliged to guard their heads by holding up their sticks. In Foula it is a privileged bird, because it defends the flocks from the eagle, which it beats and pursues with great fury; so that even that rapacious bird seldom ventures near its quarters. The natives of Foula on this account lay a fine on any person who destroys one: they deny that it ever injures their flocks or poultry; but imagine it preys on the dung of the arctic and other larger gulls, which it persecutes till they moot for fear. These birds are also frequent in many high latitudes of the southern hemisphere; particularly about Port Egmont, whence they have been called Port Egmont hens. In this place, and at Terra del Fuego, they were observed to make their nests among the dry grass. After breeding-time they disperse over the ocean, and for the most part are seen in pairs. They are met with in Kerguelen's Land, and off the Cape of Good Hope, and other parts. In all places the habits of this species are the same with respect to ferocity; it is frequently seen to attack the largest albatross, beating it with great violence so long as it remains on the wing; and this cowardly giant finds no other resource than to settle on the water; upon which the skua flies away.

4. L. fuscus, the herring gull, weighs upwards of thirty ounces; the length twenty-three inches, its breadth fifty-two: the bill is yellow, and the lower mandible marked with an orange-colored spot; the back and coverts of the wings are ash-colored; the upper part of the first five quill feathers are black, marked with a white spot near their end; the legs of a pale flesh color. These

birds breed on the ledges of rocks that hang over the sea: they make a large nest of dead grass; and lay three eggs of a dirty white, spotted with black. The young are ash-colored, spotted with brown. This species is a great devourer of fish, especially of herrings; it is a constant attendant on the nets, and so bold as to seize its prey in presence of the fishermen. It is common in this kingdom, and frequents the same places as the black-backed gull. It is also found in most of the northern parts of Europe, as well as about the Caspian and Black Seas; the rivers which fall into them, and the great lakes of Siberia. It is seen also in Iceland, Greenland, and Hudson's Bay. In winter it migrates south, being found in Jamaica; and is said to breed on some of the islands on the coast of South Carolina.

5. L. hybernus, the winter gull, winter mew, or coddy moddy, weighs from fourteen to seventeen ounces; the length eighteen inches, the breadth three feet nine. The irides are hazel; the bill is two inches long, but the slenderest of any gull: black at the tip, and whitish towards the base. The crown of the head, and hindpart and sides of the neck, are white, marked with oblong dusky spots; the forehead, throat, middle of the breast, belly, and rump, white; the back and scapulars of a pale gray, the last spotted with brown: the coverts of the wings are of a pale brown, edged with white; the first quill-feather is black, the succeeding ones are tipt with white; the tail is white, crossed near the end with a black bar; the legs are of a dirty bluish-white. This kind frequents, during winter, the moist meadows in the inland parts of England, remote from the sea.

6. L. marinus, the black backed gull, is in length twenty-nine inches; in breadth five feet nine. The bill is very strong and thick, and almost four inches long; the color a pale yellow; but the lower mandible is marked with a red spot, with a black one in the middle. The head, neck, whole under side, tail, and lower part of the back, are white: the upper part of the back and wings are black; the quill-feathers tipt with white, the legs of a pale flesh-color. It inhabits several parts of England, and breeds on the highest cliffs. The egg is blunt at each end; of a dusky olive color; quite black at the greater end, and the rest of it thinly marked with dusky spots. It is also common on most of the northern coasts of Europe. It frequents Greenland; but chiefly inhabits the distant rocks. It lays three eggs in May, placing them on the heaps of dung which the birds leave there from time to time. It is said to attack other birds, and to be particularly an enemy to the eider duck. It very greedily devours carrion, though the most general food is fish. It is common also in America as low as South Carolina, where it is called the old wife.

7. L. nævius, the wagel, is a large species, being nearly two feet in length, and in breadth about five; weighs nearly three pounds. The bill is black; two inches and a half long: the irides are dusky: the whole plumage is composed of mixed brown, ash-color, and white; the middle of each feather brown: the under parts of the body are the same, but paler: the quills are black: the lower part of the tail is mottled black and white; near the end is a bar of black, and beyond this the end is white: the legs are of a dirty flesh-color, in some white. This species frequents the sea-coasts of many parts of England, though not in considerable numbers. At times it is seen on the banks of the Thames along with other gulls; and is there supposed to be the female of the black-backed.

8. L. ridibundus, the pewit, or black-headed gull, is in length fifteen inches, breadth three feet, and weight ten ounces. The bill is rather slender, and of a blood-red: the eye-lids are red and the irides hazel: the head and throat are dusky brown, in old birds black; and on each eye-lid is a small white spot; the back and wings are of an ash-color; the neck, all the under parts, and tail, are white: the first ten quills are white, margined, and more or less tipped with black; the others of an ash-color, with white ends: the legs are of the color of the bill, the claws black. This species breeds on the shores of some of our rivers; but full as often in the inland fens of Lincolnshire, Cambridgeshire, and other parts of England. They make their nest on the ground, with rushes, dead grass, &c., and lay three eggs of a greenish brown, marked with red-brown blotches. After the breeding season, they again disperse to the sea-coasts. They breed also in Northumberland, and are found throughout Russia and Siberia, as far as Kamtschatka, but no farther to the north. They are seen throughout the winter at Aleppo, in great numbers; and so tame, that the women are said to call them from the terraces of their houses, throwing up pieces of bread, which these birds catch in the air. They inhabit North America, coming into New England in May, and departing in August. The young birds in the neighbourhood of the Thames are thought good eating, and are called red legs. They were formerly more esteemed, and numbers were annually taken and fattened for the table.

9. L. tridactylus, the tarrock, is in length fourteen inches, breadth thirty-six; weight seven ounces. The bill is short, thick, and black: the head, neck, and under parts, are white: near each ear, and under the throat, there is a black spot; and at the hind part of the neck a crescent of black: the back and scapulars are bluish-gray; the wing-coverts dusky, edged with gray, some of the larger wholly gray; the exterior sides and ends of the first four quills are black, tips of the two next black, all the rest white: the ten middle feathers of the tail are white tipped with black, the two outermost wholly white: the legs are of a dusky ash-color; in lieu of the back toe, it has only a protuberance. This species breeds in Scotland with the kittiwake; and inhabits other parts of northern Europe; as Iceland and Spitzbergen, the Baltic, and White Seas, and Kamtschatka. It is common in Greenland in summer. It comes in spring, and frequents the sea-coasts; builds in the rocky crags of the bays; in June lays two eggs of a greenish-ash color spotted with brown; and retires from the shores in autumn. It is observed frequently to attend the whales and seals, for the sake of the fish which the last drive before them into the shallows, when these birds dart into the water

suddenly, and make them their prey. They are very noisy, especially during the time of incubation. They both swim and fly well, and for a long time together: they are often observed on portions of ice swimming in the sea. Both the flesh and eggs are esteemed by the Greenlanders, and the skins used as garments.

LARYBUNDER, a port of the province of Sinde, Hindostan, about twenty miles up the Pitty River. Owing to the mud-banks of the river, and the dangers of its navigation, the town of late years has much declined. In 1793 in the agreement between Nadir Shah and the emperor Mohammed it was stipulated that Larybunder should be the west boundary of Hindostan. Long. 57° 25′ E., lat. 24° 40′ N.

LARYNGOTOMY, *n. s.* } Fr. *laryngoto-*
LARNYX. } *mie*, of Gr. λαρυγξ, the throat; and τεμνω, to cut. Laryngotomy, says Quincy, is an operation where the fore-part of the larynx is divided to ass st respiration, during large tumors upon the upper parts; as in a quinsy. See BRONCHOTOMY. The larynx is the upper part of the trochea. See ANATOMY.

There are thirteen muscles for the motion of the five cartilages of the *larynx*. *Derham.*

Human voice is air sent through the lungs, and so agitated or modified in its passage through the windpipe and *larynx* as to become distinctly audible. *Murray.*

LARYNX. See ANATOMY.

LASCARIS (Andrew John), surnamed Ryndacenus, a learned writer of an ancient Greek family, which emigrated into Italy, after the taking of Constantinople by the Turks in 1453. He was well received by Laurence de Medicis; and was twice sent to Constantinople to collect the best Greek MSS., by which means numberless scarce and valuable treasures of literature were carried into Italy. On his return Louis XII., king of France, prevailed on him to settle in the university of Paris, and sent him twice ambassador to Venice. Ten years after cardinal John de Medicis being elected pope, under the name of Leo X., Lascaris, his old friend, went to Rome, and had the direction of a Greek college. He died in Rome in 1535, at about the ninetieth year of his age. He brought into the west most of the fine Greek MSS. that are now extant, and composed some epigrams in Greek and Latin.

LASCARIS (Constantine), one of the Greeks principally concerned in the revival of learning in the west. He retired into Italy in 1454, and taught polite literature at Milan, whither he was called by Francis Sforza; he afterwards went to Rome, where he was well received by cardinal Bessarion. He afterwards taught rhetoric and the Greek tongue at Naples; and ended his days at Messina, leaving the senate of that city many excellent MSS. which he had brought from Constantinople. He was interred at the public expense, and the senate of Messina erected a marble tomb to his memory. He wrote some grammatical works.

LASCARS, Indian seamen.

LASCENA (Peter), a learned Neapolitan, born 25th of September, 1590. His merits procured him the patronage of cardinal Barberini, with whom he resided at Rome, and to whom he dedicated his Latin discourses De Linguâ Hellenisticâ. Intense study, and too great abstinence, (for he took but one meal in twenty-four hours,) threw him into a fever, of which he died, 30th of September, 1636.

LASCIVIENT, *adj.* } Fr. *lasciv*; Ital.
LASCIV'IOUS, } *lascivo*; Lat. *lascivus*.
LASCIV'IOUSNESS, *n. s.* } Lewd; unchaste;
LASCIV'IOUSLY, *adv.* } wanton; soft.

In what habit will you go along?
—Not like a woman: for I would prevent
The loose encounters of *lascivious* men.
Shakspeare.

Grim visaged war hath smoothed his wrinkled front;
And now, instead of mounting barbed steeds
To fright the souls of fearful adversaries,
He capers nimbly in a lady's chamber,
To the *lascivious* pleasing of a lute. *Id.*

He on Eve
Began to cast *lascivious* eyes; she him
As wantonly repaid; in lust they burn.
Milton.

The reason pretended by Augustus was the *lasciviousness* of his Elegies, and his art of Love.
Dryden's Preface to Ovid.

Notwithstanding all their talk of reason and philosophy, and those unanswerable difficulties which, over their cups, they pretend to have against Christianity; persuade but the covetous man not to deify his money, the *lascivious* man to throw off his lewd amours, and all their giant-like objections against Christianity shall presently vanish. *South.*

Repel all impure and *lascivious* thoughts, which taint and pollute the mind; and, though hid from men, are known to God, in whose eye they are abominable. *Mason.*

LASERPTIUM, lazar-wort, a genus of the digynia order, and pentandria class of plants; natural order forty-fifth, umbellatæ. The fruit is oblong, with eight membranaceous angles; the petals inflexed, emarginated, and patent. There are several species, none of which are at all remarkable for their beauty, but are only preserved in botanic gardens for the sake of variety. They are natives of Germany, Italy, and the south of France. All of them abound with an acrid juice, which turns to an excessively acrimonious resin. This was used by the ancients to take away black and blue spots that came by bruises or blows; also to take away excrescences. It was likewise by some of the ancients used internally; but produced such violent effects, that the more prudent refrained from the use of it. It is generally supposed that the silphium of the ancients was procured from one of the species of this genus; but of this we are uncertain.

LASH, *n. s., v. a.* & *v. n.* } Fr. *laqs*; Ital.
LASHER, *n. s.* } *laciro*; Lat. *laqueus*, a net or cord. The thong of a whip; a cord or string of any kind: hence the stroke given with a whip or cord; any stroke; and, metaphorically, a satirical or sarcastic one: to lash follows these significations, and also means to tie or confine by a cord or rope. The eye-lash is the line of hair that laces or borders the eye-lid. See LACE and EYE.

The farmer they leave in the *lash*,
With losses on every side.
Tusser's Husband y.

Her whip of cricket's bone, her *lash* of film,
Her waggoner a small grey-coated gnat.
Shakspeare.

Let's whip these stragglers o'er the seas again,
Lash hence these over-weening rags of France.
Id.

In 1330 there was a sect of whippers in Germany, that, to the astonishment of the beholders, *lashed*, and cruelly tortured themselves.
Burton. Anatomy of Melancholy.

He that can bear a friendly touch, will not endure to be *lashed* with angry and reproachful words.
Barrow.

From hence are heard the groans of ghosts, the pains
Of sounding *lashes*, and of dragging chains.
Dryden.

Roused by the *lash* of his own stubborn tail,
Our lion now will foreign foes assail. *Id.*
And limping death, *lashed* on by fate,
Comes up to shorten half our date. *Id.*
The club hung round his ears, and battered brows;
He falls; and, *lashing* up his heels, his rider throws.
Id.

Gentle or sharp, according to their choice,
To laugh at follies, or to *lash* at vice. *Id*

Let men out of their way *lash* on ever so fast, they are not at all the nearer their journey's end.
South.

Leaning on his lance, he mounts his car,
His fiery coursers *lashing* through the air. *Garth.*
I observed that your whip wanted a *lash* to it.
Addison.

The winds grow high,
Impending tempests charge the sky;
The lightning flies, the thunder roars,
And big waves *lash* the frighted shores. *Prior.*
Wheels clash with wheels, and bar the narrow street;
The *lashing* whip resounds. *Gay's Trivia.*
Could pensioned Boileau *lash* in honest strain,
Flatt'rers and bigots even in Louis' reign. *Pope.*

Fame and honour were purchased at a better pennyworth by satire, rather than by any other productions of the brain; the world being soonest provoked to praise by *lashes*, as men are to love.
Swift.

They bound me on, that menial throng,
Upon his back with many a thong;
Then loosed him with a sudden *lash*—
Away!—away!—and on we dash!—
Torrents less rapid and less rash. *Byron.*

The tender blue of that large loving eye
Grew frozen with its gaze on vacancy,
Till—Oh how far! it caught a glimpse of him,
And then it flowed—and phrensied seemed to swim
Through those long, dark, and glistening *lashes* dewed
With drops of sadness oft to be renewed. *Id.*

LASKO, Lasco, or Laski (John de), a native of Poland, descended from a family of distinction. He travelled into Switzerland, where he became acquainted with Zuinglius, who made him a convert to the doctrines of the Reformation. Upon his return he was made provost of Gnesna, and bishop of Vesprim in Hungary, but these dignities did not prevent him from openly avowing his principles; upon which he was condemned for heresy, and obliged to fly to Embden, in East Friesland, where he became minister in 1542, and wherein he resided ten years. Being invited to England by archbishop Cranmer, he lived unmolested till the death of Edward VI.; but on the accession of Mary I., in 1553, he returned to Embden in 1554, where he and his companions in persecution were kindly treated. After an absence of twenty years he returned to Poland, where he was well received by king Sigismund, who employed him in some important affairs. He wrote several tracts; particularly De Cœnâ Domini: Epistola Continens Summum Controversiæ, &c. He died January 13th, 1560.

LASS, *n. s.* } Sax. leaſ, loose, i. e. free
Lass'lorn, *adj.* } or single; Swed. *laska*; Goth. *lathska*; Teut. *lassen* is to loose. See Lad. A girl; a young unmarried woman: lasslorn is forsaken of a lass or mistress.

Brown groves,
Whose shadow the dismissed bachelor loves,
Being *lasslorn*. *Shakspeare.*

Now was the time for vig'rous lads to show
What love or honour could invite them to;
A goodly theatre, where rocks are round
With reverend age, and lovely *lasses* crown'd.
Waller.

A girl was worth forty of our widows; and an honest, downright, plain dealing *lass* it was.
L'Estrange.

They sometimes an hasty kiss
Steal from unwary *lasses*; they with scorn
And neck reclined, resent. *Phillips.*

Her 'prentice han,' she tried on man,
An' then she made the *lasses* O. *Burns.*

LASSA, a city of Asia, the capital of Great Thibet, subject to the Chinese. It has only been visited by Romish missionaries, who have given very inaccurate accounts of it; but it appears not to be very extensive, and to be rather a great temple than a city. It is the residence of the Dalai Lama, or great head of the Shaman religion, who resides in a palace on the east of the city called Patala, or the Holy Mountain.

LAS'SITUDE. Fr. *lassitude*; Lat. *lassitudo*. Weariness; fatigue; laxity. See the citation from Quincy.

Lassitude is remedied by bathing, or anointing with oil and warm water; for all *lassitude* is a kind of contusion and compression of the parts; and bathing and anointing give a relaxation or emollition.
Bacon's Natural History.

Assiduity in cogitation is more than our embodied souls can bear without *lassitude* or distemper.
Glanville's Scepsis.

She lives and breeds in air; the largeness and lightness of her wings and tail sustain her without *lassitude*. *More's Antidote against Atheism.*

Lassitude generally expresses that weariness which proceeds from a distempered state, and not from exercise, which wants no remedy but rest: it proceeds from an increase of bulk, from a diminution of proper evacuation, or from too great a consumption of the fluid necessary to maintain the spring of the solids, as in fevers; or from a vitiated secretion of that juice, whereby the fibres are not supplied.
Quincy.

Do not over-fatigue the spirits, lest the mind be seized with a *lassitude*, and thereby be tempted to nauseate, and grow tired. *Watts.*

From mouth and nose the briny torrent ran,
And lost in *lassitude* lay all the man.
Pope's Odyssey.

LASSUS, or LASUS, a dithyrambic poet, born at Hermione in Peloponnesus, about A. A. C. 500. He is reckoned by some among the wise men of Greece. He is particularly known by the answer he gave to a man who asked him what could best render life pleasant? Experience, said Lassus. He was acquainted with music. Some fragments of his poetry are to be found in Athenæus. He wrote an ode upon the Centaurs, and a hymn to Ceres, avoiding the letter S in the composition.

LASSUS (Peter), professor of pathology at the school of medicine and surgery at Paris, and member of the French Institute, was born at Paris in 1741, and studied under his father; admitted a master of surgery in 1765. He obtained in 1771 the office of surgeon in ordinary to the daughters of Louis XV. He retired into Italy with those princesses at the Revolution, but returned to Paris on the re-organisation of the academical institutions, and became successively professor of the history of medicine and of pathology, which offices he held till his death in 1807. His professional works are valuable, and contain Essai ou Discours Historique et Critique sur les Découvertes faites en Anatomie par les Anciens et les Modernes, Paris, 1783, 8vo. Traité Elementaire de Medicine Operatoire, 1795, 8vo; Pathologie Chirurgicale, 1805, 1806, 2 vols. 8vo.

LAST, *n. s.*, *adv.*, *v. n.*
LAST'AGE, *n. s.*
LAST'ING, *part. adj.*
LAST'INGLY, *adv.*
LAST'INGNESS, *n. s.*
LAST'LY, *adv.*

Sax. læꞅꞇ, læꞇeꞅꞇ; Belg. *laetste*; Teut. *letzt*. Latest; hindmost; that which follows all the rest of a number; hence, utmost; lowest; meanest; *at* last is at the end or conclusion of a series: as an adverb of time, last signifies at the time next before the present, or at the conclusion of all the series of its divisions; in conclusion: to last is to endure; continue; persevere (i. e. to a supposed end). The last of shoe-makers (also known to our Anglo-Saxon ancestors by this name) is derived, perhaps, from its being the enduring or preserved mould on which shoes are constantly formed: but there is a Goth. læst, the foot. Last, a measure of weight or capacity, is also an old word in the language (probably from the last of a tale): lastage is a custom or duty paid on freights; also ballast.

Gad, a troop shall overcome him; but he shall overcome *at* the *last*. *Gen.* xlix. 19.

Why are ye the *last* to bring the king back? *Samuel.*

I will slay the *last* of them with the sword. *Amos.*

How long is't now since *last* yourself and I
Were in a mask? *Shakspeare.*

I thought it agreeable to my affection to your grace, to prefix your name before the essays: for the Latin volume of them, being in the universal language, may *last* as long as books *last*. *Bacon.*

I will justify the quarrel; secondly, balance the forces; and, *lastly*, propound variety of designs for choice, but not advise the choice. *Id.*

When *last* I died, and, dear! I die
As often as from thee I go,
I can remember yet that I
Something did say, and something did bestow. *Donne.*

Unhappy slave, and pupil to a bell,
Unhappy to the *last* the kind releasing knell. *Cowley.*

Nothing so inflameth the wrath of men, so provoketh their enmity, so breedeth their *lasting* hatred and spite, as do contumelious words. *Barrow.*

All the endeavours Achilles used to meet with Hector, and be the death of him, is the intrigue which comprehends the battle of the *last* day. *Browne's View of Epic Poetry.*

All more *lasting* than beautiful. *Sidney.*

All more *lasting* than beautiful, but that the consideration of the exceeding *lastingness* made the eye believe it was exceeding beautiful. *Id.*

White parents may have black children, as negroes sometimes have *lasting* white ones. *Boyle on Colors.*

In extremes, bold councils are the best;
Like empirick remedies, they *last* are tryed,
And by the event condemned or justified. *Dryden.*

Fools ambitiously contend
For wit and power; their *last* endeavours bend
To' outshine each other. *Id. Lucretius.*

Pleased with his idol, he commends, admires,
Adores; and *last*, the thing adored desires. *Dryden.*

The grateful work is done,
The seeds of discord sowed, the war begun:
Frauds, fears, and fury, have possessed the state,
And fixed the causes of a *lasting* hate. *Id.*

The several degrees of *lasting* ideas are imprinted on the memory. *Locke.*

Where there is something both *lasting* and scarce, and so valuable to be hoarded up, there men will not be apt to enlarge their possessions of land. *Id.*

To bodily punishment we are not to have recourse till all other means of reformation have been attempted in vain; and let this *last* remedy be applied, if at all applied, with temper and solemnity, that the child may see we are driven to it against our will, from a regard to our duty and his good. *Id.*

A sinew cracked seldom recovers its former strength, and the memory of it leaves a *lasting* caution in the man, not to put the part quickly again to any robust employment. *Id.*

Every violence offered weakens and impairs, and renders the body less durable and *lasting*. *Ray.*

The greatest schemes that human wit can forge,
Or bold ambition dares to put in practice,
Depend upon our husbanding a moment,
And the light *lasting* of a woman's will. *Rowe.*

The swans, that on Cayster often tryed
Their tuneful songs, now sung their *last*, and died. *Addison.*

O! may famed Brunswick be the *last*,
The *last*, the happiest British king,
Whom thou shalt paint or I shall sing. *Id.*

These are standing marks of facts delivered by those who were eye-witnesses to them, and which were contrived with great wisdom to *last* till time should be no more. *Id.*

Consider the *lastingness* of the motions excited in the bottom of the eye by light. *Newton's Opticks.*

Thus weather-cocks, that for a while
Have turned about with every blast,
Grown old, and destitute of oil,
Rust to a point, and fix *at last*. *Friend.*

O, may some spark of your celestial fire,
The *last*, the meanest, of your sons inspire! *Pope.*

Merion pursued at greater distance still,
Last came Admetus, thy unhappy son. *Id.*

Here, *last* of Britons, let your names be read. *Id.*

Wit not alone has shone on ages past,
But lights the present, and shall warm the *last*.
Id.

Antilochus
Takes the *last* prize, and takes it with a jest. *Id.*
All politicians chew on wisdom past,
And blunder on in business to *the last*. *Id.*
But, while I take my *last* adieu,
Heave thou no sigh, nor shed a tear. *Prior.*
O ye blest scenes of permanent delight!
Full above measure! *lasting* beyond bound!
A perpetuity of bliss is bliss. *Young.*
None sends his arrow to the mark in view,
Whose hand is feeble or his aim untrue,
For though, ere yet the shaft is on the wing,
Or when it first forsakes the' elastic string,
It err but little from the' intended line,
It falls at *last* far wide of his design. *Cowper.*
A *last* is twelve sacks or 4368 lbs.
Walkingham's Arithmetic.

Nothing is more common than for those who expressed the greatest signs of a *lasting* repentance upon a sick bed, to forget all their vows and promises of amendment as soon as God had removed the judgment and restored them to their former health.
Paley.

LAS'TERY, *n. s.* Goth. *litcer;* Swed. *lit*, a tinge. A red color.

The bashful blood her snowy cheeks did spread,
That her became as polished ivory,
Which cunning craftman's hand hath overlaid,
With fair vermilion, or pure *lastery*. *Spenser.*

LASWAREE, a town of Hindostan, in Delhi, where, 1st November 1803, the celebrated battle was fought between lord Lake and the Mahrattas under Dowlut Row Sindiah, in which the power of the latter was wholly broken.

LATAKIA, a sea-port of the pachalic of Tripoli, Syria, the ancient Laodicea. It contains not above 5000 inhabitants, but has supplanted Scanderoon as the port of Aleppo. Ten years ago, however, it is said to have been far more flourishing. Its commerce consists in sugar, salt, and rice from Egypt, wine from Cyprus, oranges from Tripoli, and woollen cloth from Smyrna. Here is a Roman triumphal arch, between thirty and forty feet high, enriched with a handsome entablature: it is supposed to have been erected in honor of Cæsar.

LATCH, *n. s.* & *v. a.* } Belgic, *letse, litse;*
LATCH'ES, } Ital. *laccio*, & Sax.
LATCH'ET. } leccan, to hinder.
See LET. Minsheu says, ingeniously enough, from Belg. *let, lid*, between the knots. A catch or fastening of a door, often moved by a string: latches, nautically, are defined by Harris in the extract: latchet of a shoe is the tie or fastening: to latch, to fasten with a latch or tie.

There cometh one mightier than I, the *latchet* of whose shoes I am not worthy to unloose.
Mark i. 7.

But hast thou yet *latched* the Athenian's eyes
With the love juice, as I did bid thee do?
Shakspeare.

He had strength to reach his father's house; the door was only *latched;* and, when he had the *latch* in his hand, he turned about his head to see his pursuer. *Locke.*

Latches or laskets, in a ship, are small lines like loops, fastened by sewing into the bonnets and drablers of a ship, in order to lace the bonnets to the courses, or the drablers to the bonnets. *Harris.*

The *latch* moved up. *Gay's Pastorals.*
Then comes rosy health from her cottage of thatch,
Where never physician had lifted the *latch*. *Smart.*

LATE, *adj.* & *adv.* } Sax. læt, læt; Goth.
LA'TED, *adj.* } *lat;* Belg. *laet*. The op-
LATE'LY, *adv.* } posite of soon and early.
LATE'NESS, *n. s.* } We seem to have no ex-
LAT'TER, *adj.* } act synonyme of this
LAT'TERLY, *adv.* } word. Slow; tardy; delayed; deceased: as an adverb, after long delay; soon in the day or night; not long since: of late seems synonymous with lately: lated is made late; overtaken by night: latter is the comparative of late, though written with tt, contrary to analogy in the superlative latest. 'When the thing of which the comparison is made is mentioned we use later; as, this fruit is later than the rest; but latter when no comparison is expressed, and the reference is merely to time.'

And he found a man a iew aquyla bi name of ponte bi kynde, that *late* cam fro italie.
Wiclif. Dedis. 18.

Paul found a certain Jew named Aquila, *lately* come from Italy. *Acts.* xviii. 1.

But for to tellin you of his array,
His hors wer good, but he was nothing gay;
Of fustian he werid a gipon,
Alle besmottrid with his haburgeon,
For he was *late* ycome from his viage,
And wentè for to do his pilgrimage. *Chaucer.*

That shortly from the shape of womanhed,
Such as she was when Pallas she attempted,
She grew to hideous shape of drearihead,
Pined with grief of folly *late* repented. *Spenser.*

They arrived in that pleasant isle,
Where sleeping *late* she left her other knight. *Id.*

Were it consonant unto reason to divorce these two sentences, the former of which doth show how the *latter* is restrained, and, not marking the former, to conclude by the *latter* of them? *Hooker.*

O boy! thy father gave thee life too soon,
And hath bereft thee of thy life *too late*.
Shakspeare.

Was it so *late*, friend, ere you went to bed,
That you do lie so *late?*
—Sir, we were carousing till the second cock.
Id.

The west glimmers with some streaks of day:
Now spurs the *lated* traveller apace
To gain the timely inn. *Id. Macbeth.*

To make roses, or other flowers, come *late*, is an experiment of pleasure; for the ancients esteemed much of the rosa sera. *Bacon's Natural History.*

My hasting days fly on with full career,
But my *late* spring no bud nor blossom sheweth.
Milton.

In reason's absence fancy wakes,
Ill-matching words and deeds long past or *late*.
Id.

Who but felt *of late?* *Id.*
I doubt there's deep resentment in his mind,
For the *late* slight his honour suffered there.
Otway.

Through all the air his sounding strings dilate
Sorrow, *like* that which touched our hearts of *late*.
Waller.

He laughs at all the giddy turns of state,
When mortals search too soon, and fear *too late*.
Dryden.

Late the nocturnal sacrifice begun,
Nor ended till the next returning sun. *Id.*

A second Silvius after these appears,
Silvius Æneas, for thy name he bears:
For arms and justice equally renowned,
Who *late* restored in Alba shall be crowned. *Id.*

The *later* it is before any one comes to have these ideas, the *later* also will it be before he comes to those maxims. *Locke.*

Men have *of late* made use of a pendulum, as a more steady regulator. *Id.*

Hath not navigation discovered, in these *latter* ages, whole nations at the bay of Soldania? *Id.*

I might have spared his life,
But now it is *too late.*
Phillips's Distressed Mother.

All the difference between the *late* servants and those who staid in the family, was, that those *latter* were finer gentlemen. *Addison's Spectator.*

Just was the vengeance, and to *latest* days
Shall long posterity resound thy praise.
Pope's Odyssey.

The goddess with indulgent cares,
And social joys, the *late* transformed repairs.
Pope.

Lateness in life might be improper to begin the world with. *Swift to Gay*

The difference between reason and revelation, and in what sense the *latter* is superior. *Watts.*

Latterly Milton was short and thick. *Richards.*

This pray I, Jove, and wyth this *latter* breath,
Vengeance I aske upon my cruell death. *Sackville.*

He turned not—spoke not—sunk not—fixed his look,
And set the anxious frame that *lately* shook:
He gazed—how long we gaze despite of pain,
And know, but dare not own, we gaze in vain!
Byron.

LATE WAKE, a ceremony used at funerals in some parts of the Highlands of Scotland. The evening after the death of any person the relations and friends of the deceased meet at the house, attended by a bagpipe or fiddle; the nearest of kin, be it wife, son, or daughter, opens a melancholy ball, dancing, and greeting (i.e. crying violently) at the same time, and this continues till daylight; but with gambols and frolics among the younger part of the company. If the corpse remains unburied for two nights, the same rites are renewed.

LATENT, *adj.* Lat. *latens.* Hidden; secret; reserved; concealed.

Who drinks, alas! but to forget; nor sees
That melancholy sloth, severe disease,
Memory confused, and interrupted thought,
Death's harbingers, lie *latent* in the draught.
Prior.

If we look into its retired movements, and more secret *latent* springs, we may there trace out a steady hand producing good out of evil. *Woodward.*

What were Wood's visible costs I know not, and what were his *latent* is variously conjectured. *Swift.*

Latent caloric is that portion of the matter of heat which makes no sensible addition to the temperature f the bodies in which it exists.—Caloric in a *latent* ate exists in all substances that we are acquainted with. *Parkes's Chemical Catechism.*

LAT'ERAL, *adj.*
LATERAL'ITY,
LAT'ERALLY.
Fr. *lateral;* Lat. *lateralis.* Growing out of, or belonging to the side: acting sideways.

Forth rush the Levant, and the ponent winds
Eurus and Zephyr, with their *lateral* noise,
Sirocco and Libecchio. *Milton.*

We may reasonably conclude a right and left *laterality* in the ark, or naval edifice of Noah. *Browne.*

The days are set *laterally* against the columns of the golden number. *Holder on Time.*

Why may they not spread their *lateral* branches till their distance from the centre of gravity depress them? *Ray.*

The smallest vessels, which carry the blood by *lateral* branches, separate the next thinner fluid or serum, the diameters of which *lateral* branches are less than the diameters of the blood-vessels.
Arbuthnot on Aliments.

LATERAN was originally the proper name of a man; whence it descended to an ancient palace in Rome, and to the buildings since erected in its place; particularly a church called St. John of Lateran, which is the principal see of the popedom.

The canons regular of the congregation of the lateran is a congregation of regular canons, of which that church is the principal place or seat. It is asserted there has been an uninterrupted succession of clerks, living in community, from the time of the apostles; and that a number of these were established in the Lateran in the time of Constantine.

LATERAN, COUNCILS OF THE, are those held in the basilica of the Lateran: of these there have been five, held in 1123, 1139, 1179, 1215, and 1513.

A LATERE, a term used to denote the qualifications of the cardinals whom the pope sends as legates into foreign countries. They are called legates à latere, as being his holiness's assistants and counsellors in ordinary. These are the most considerable of the three kinds of legates, being such as the pope commissions to take his place in councils; and so called in regard that he never gives this office to any but his favorites and confidants, who are always à latere, at his side. A legate à latere has the power of conferring benefices without a mandate, of legitimating bastards to hold offices, and has a cross carried before him as the ensign of his authority.

De LATERE, legates who are not cardinals, but yet are entrusted with an apostolical legation. See LEGATE.

LATH, *n. s.* Saxon læð. Part of a county (obsolete). Mr. Thomson says from Saxon leth, contracted from Goth. *lagthing*, or *lathing*, a judicial convocation. See LATHREVE.

If all that tything failed, then all that *lath* was charged for that tything; and if the *lath* failed, then all that hundred was demanded for them: and if the hundred, then the shire, who would not rest till they had found that undutiful fellow, which was not amenable to law. *Spenser's Ireland.*

The fee-farms reserved upon charters granted to cities and towns corporate, and the blanch rents and *lath* silver answered by the sheriffs. *Bacon.*

LATH, *n. s.* & *v. a.*
LATHE.
Sax. lætte; Fr. *latte, late;* Teut. *latte;* Belg. *lat;* Welch, *llath.* A long thin piece of wood: lathe is a turning machine, formerly set in motion by a string and lath. To lath is to fit up or cover with laths.

With dagger of *lath.* *Shakspeare.*

Penny-royal and orpin they use in the country to trim their houses; binding it with a *lath* or stick, and setting it against a wall.
Bacon's Natural History.

The god who frights away,
With his *lath* sword. the thieves and birds of prey.
Dryden.

Those black circular lines we see on turned vessels of wood, are the effects of ignition, caused by the pressure of an edged stick upon the vessel turned nimbly in the *lathe*. *Ray.*

A small kiln consists of an oaken frame, *lathed* on every side. *Mortimer's Husbandry.*

The plasterer's work is commonly done by the yard square for *lathing*. *Id.*

Laths are made of heart of oak, for outside work, as tiling and plastering; and of fir for inside plastering, and pantile *lathing*. *Moxon.*

For wheresoe'er the shrieking victim hath
Poured forth his blood beneath the assassin's knife,
Some hand erects a cross of mouldering *lath*;
And grove and glen with thousand such are rife
Throughout this purple land, where law secures not life. *Byron.*

The LATHE is a very useful engine for turning wood, ivory, metals, and other materials. See TURNING. The invention of it is very ancient: Diodorus Siculus says, the first who used it was a grandson of Dædalus, named Talus. Pliny ascribes it to Theodore of Samos; and mentions one Thericles who rendered himself very famous by his dexterity in managing the lathe. With this instrument the ancients turned all kinds of vases, many of which they enriched with figures and ornaments in basso relievo. Thus Virgil:—

Lenta quibus torno facili superaddita vitis.

The Greek and Latin authors make frequent mention of the lathe; and Cicero calls the workmen who used it vascularii. It was a proverb among the ancients to say a thing was formed in the lathe to express its delicacy and justness. As it is the use and application of this instrument that makes the greatest part of the art of turning, we refer the particular description of it, as well as the manner of applying it in various works, to that head. See TURNING.

To LATHER, *v. n.*, *v. a.* & *n. s.* Sax. leðpan. To form or cover with a foam: a foam made with soap and water.

Chuse water pure,
Such as will *lather* cold with soap. *Baynard.*

LATHRÆ, in botany, a genus of the angiospermia order, and didynamia class of plants; natural order fortieth, personatæ: CAL. quadrifid; there is a depressed glandule at the base of the suture of the germen: CAPS. unilocular. Species three, natives of the south of Europe.

LATHREVE, LEIDGREVE, or TRITHENGREVE, was an officer under the Saxon government, who had authority over a third part of the county; and whose territory was therefore called trithing, otherwise a leid lath or leithin; in which manner the county of Kent is still divided; and the rapes in Sussex seem to answer to the same. As to the jurisdiction of this officer, those matters that could not be determined by the hundred court were thence brought to the trithing; where all the principal men of the three or more hundreds being assembled by the lathreve, or trithingreve, did debate and decide it; or, if they could not, then the lathreve sent it up to the county court, to be there finally determined.

LATHYRUS, in botany, chickling, a genus of the decandria order, and diadelphia class of plants; natural order thirty-second, papilionaceæ. Stylus plain, villous above, towards the end broader: CAL. upper two segments shorter than the rest.

1. L. latifolius, the everlasting pea, has thick fibrous perennial roots; climbing, thick, branching annual stalks, having membranaceous [illegible] between the joints, rising upon support by their cirri six or eight feet high; diphyllous leaves, of two spear-shaped lobes, terminated by claspers, and numerous large red or purple flowers [illegible] long foot-stalks, appearing plentifully from June till October, succeeded by abundance of seed.

2. L. odoratus, the sweet-scented pea, has fibrous annual root; a climbing stalk, [illegible] upon support by its claspers three or four [illegible] high; diphyllous leaves of two oval lobes, terminated by climbing tendrils; and flowers by [illegible] on long flower stalks, of different colors [illegible] varieties.

3. L. Tangitanus, the Tangier pea, has [illegible] fibrous annual root, a climbing stalk rising [illegible] support for four or five feet high; diphyllous leaves, of two spear-shaped alternate lobes, terminated by tendrils; and from the joints of [illegible] stalks large reddish flowers by two's on [illegible] foot-stalks. All the species are of hardy growth, and may be propagated by seed in the [illegible] ground, in patches where it is designed [illegible] plants should flower, for they do not succeed well by transplantation. They may be sown [illegible] spring; though, if sowed in autumn, the [illegible] will flower earlier the following year.

LATIAR, in Roman antiquity, a feast or ceremony instituted by Tarquinius Superbus [illegible] honor of Jupiter Latiaris, or Latialis. [illegible] having made a treaty of alliance with the [illegible] proposed, in order to perpetuate it, to [illegible] common temple, where all the allies, the [illegible] mans, Latins, Hernici, Volsci, &c., [illegible] assemble themselves every year, hold a [illegible] fair, exchange merchandises, feast, and [illegible] Such was the instituting of the Latiar. [illegible] founder only appointed one day for this [illegible] the first consul added another to it, upon [illegible] cluding the peace with the Latins; a third [illegible] added, after the people, who had retired to M[illegible] Sacer, were returned to Rome; and a [illegible] after appeasing the sedition raised on [illegible] of the plebeians aspiring to the consulate. [illegible] four days were called Feriæ Latinæ; and [illegible] things done during the course of the [illegible] feasts, sacrifices, offerings, &c., were [illegible] Latiares.

LATICLAVE, LATICLAVIUM, in R[illegible] antiquity, was an honorable distinction, [illegible] liar in the times of the republic to the [illegible] but whether it was a particular kind of [illegible] or only an ornament upon it, the critics are [illegible] agreed. The most general opinion is, that [illegible] a broad stripe of purple sewed upon the [illegible] part of their tunic, and round the middle [illegible] breast. There were buttons set on the [illegible] vus, or laticlave, which appeared like the [illegible] of large nails, whence some think it der[illegible] name. The senators, prætors, and chief [illegible]

trates of colonies and municipal cities, had a right to wear it. The prætexta was always worn over it; but, when the prætor pronounced sentence of death, the prætexta was then put off, and the laticlave retained. The laticlavium differed from the angusticlavium, but authors do not agree in what this difference consisted; the most general opinion seems to be, that the slips or stripes of purple were narrower in the angusticlave.

LATIMER (Hugh), bishop of Worcester, an illustrious protestant martyr, born about the year 1480, at Thurcaston in Leicestershire, and the only son of a yeoman of that village. At the age of fourteen he was sent to Christ's College, Cambridge, where he applied himself to the study of divinity, and took the degree of B.D. At this time he was a zealous papist, and was honored with the office of keeper of the cross to the university: but when he was about thirty years of age he became a convert to the Protestant religion; and, being now one of the twelve licensed preachers from Cambridge, he promulgated his opinions with great freedom. It was not long before he was accused of heresy; and, being summoned before cardinal Wolsey, was obliged to subscribe certain articles of faith, which he certainly did not believe. About the year 1529 he was presented by Henry VIII. to the rectory of Westkinton in Wiltshire; to which place, after residing some time at court with his friend and patron Dr. Butts, he retired; but, resuming his former invectives against the popish doctrines, he was again summoned to answer certain interrogatories, and once more obliged to subscribe. In 1535 he was promoted to the bishopric of Worcester; in the possession of which dignity he continued till the year 1539, when, rather than assent to the act of the six articles, he resigned his mitre, and retired into the country; but was in a short time accused of speaking against the six articles, and committed to the tower, where he continued prisoner till the death of Henry VIII. in January 1547. On the accession of Edward VI. Latimer was released, but not restored to his bishopric, though he preached several times before the king, and continued to exercise his ministerial function with unremitting zeal and resolution. Young Edward, alas! finished his short reign in 1553; and Mary I., of bloody memory, ascending the throne, Latimer was immediately doomed to destruction, and, together with Cranmer and Ridley, confined in the tower. In April 1554 they were removed to Oxford, that they might dispute with the doctors of both universities. Latimer, declining the disputation on account of his great age and infirmities, delivered his opinion in writing; and, refusing to subscribe the popish creed, was condemned for heresy; and, in October following, was, together with bishop Ridley, burnt alive. He behaved with uncommon fortitude on the occasion, and died a real martyr to the Reformation. Of his plain dealing, even with crowned heads, the following circumstance is a celebrated proof:—It was the custom for bishops to make presents to the king on new-year's-day, and, among the rest, Latimer waited on Henry VIII. with his gift, which, instead of a purse of gold, was a New Testament, having the leaf turned down to this passage 'Whoremongers and adulterers God will judge.' When Mary ascended the throne, and he was cited to appear before the council, an opportunity, it is said, was afforded him to quit the kingdom. But, with a just anticipation of the consequences, he prepared himself to obey with alacrity the citation, and, as he passed Smithfield, exclaimed, 'This place has long groaned for me.' On reaching the place of execution at Oxford, and a faggot, ready kindled, being placed at Ridley's feet, Latimer exclaimed, 'Be of good comfort, master Ridley, and play the man; we shall this day light such a candle by God's grace in England, as I trust shall never be put out.' His works are, 1. Sermons, 1635, folio. 2. Letters, in Fox's Acts and Monum. vol. ii. folio, 1580. 3. An Injunction to the prior and Convent of St. Mary's in Worcestershire.

LATIN, *n. s.* & *adj.*
LAT'INISM, *n. s.*
LAT'INIST,
LATIN'ITY,
LAT'INIZE, *v. a.* & *v. n.*
} *Latinus.* The language of ancient Rome. It is most surprising that Dr. Johnson, though he frequently used this word in this sense in his Dictionary, has not defined it in this sense. He says only of the *n. s.* 'an exercise practised by school-boys, who turn English into Latin.' Written or spoken in the Latin language: Latinism is a Latin idiom or mode of speech or writing: Latinist, a person learned in Latin: Latinity, the purity of Latin phraseology or style: to Latinize, to use Latin words or phrases; to give Latin terminations; or to make Latin.

In learning farther his syntaxis, he shall not use the common order in schools for making of *Latins.* *Ascham.*

The Greek church did always dissent from the *Latins* in this particular, since they had forged this new doctrine in the laboratories of Rome. *Bishop Taylor.*

I am liable to be charged that I *latinize* too much. *Dryden.*

Augustus himself could not make a new *Latin* word. *Locke.*

Milton has made use of frequent transpositions, *Latinisms*, antiquated words and phrases, that he might the better deviate from vulgar and ordinary expressions. *Addison.*

If Shakspeare was able to read Plautus with ease, nothing in *Latinity* could be hard to him. *Dennis.*

He uses coarse and vulgar words, or terms and phrases that are *latinized*, scholastick, and hard to be understood. *Watts.*

Oldham was considered as a good *Latinist.* *Oldham's Life.*

In the beginning, being probably most in pain for his *Latinity*, he endeavours to defend the use of the word persona. *Johnson.*

LATIN LANGUAGE. See LANGUAGE.

LATINUS I., king of the Latins in Italy, was the son of Faunus and Marica; and, it is said, began to reign about A.A.C. 1216. Lavinia, his only daughter, married Æneas, after that Trojan prince had killed Turnus king of the Rutuli. See ROME.

LATIROSTROUS, *adj.* Lat. *latus* and *rostrum.* Broad-beaked.

In quadrupeds, in regard of the figure of their heads, the eyes are placed at some distance; in latirostrous and flat-billed birds, they are more laterally seated. *Browne.*

LATITANCY, *n. s.* } Lat. *latitans.* See
LAT'ITANT, *adj.* } LATENT. The state of
LATITA'TION, *n. s.* } lying hid.

In vipers she has abridged their malignity by their secession or *latitancy*. *Browne's Vulgar Errours.*

Snakes and lizards, *latitant* many months in the year, containing a weak heat in a copious humidity, do long subsist without nutrition. *Browne.*

It must be some other substance *latitant* in the fluid matter, and really distinguishable from it. *More.*

Force the small *latitant* bubbles of air to disclose themselves and break. *Boyle.*

LAT'ITUDE, *n. s.* } Fr. *latitude;*
LATITUDINA'RIAN, *adj.* & *n. s.* } Lat. *latitudo.*
Width; breadth; extent; freedom; in bodies of unequal dimensions the shorter axis; in equal bodies the line drawn from right to left; the space in the earth or heavens from the equator in either of the poles: a latitudinarian is a person unrestrained in his habits or opinions.

Whether the exact quadrat, or the long square be the better, I find not well determined; though I must prefer the latter, provided the length do not exceed the *latitude* above one third part. *Wotton.*

In such *latitudes* of sense, many that love me and the church well, may have taken the covenant. *King Charles.*

In human actions there are no degrees, and precise natural limits described, but a *latitude* is indulged. *Taylor.*

Among the southern constellations, two there are who bear the name of the dog; the one in sixteen degrees *latitude*, containing on the left thigh a star of the first magnitude, usually called Procyon, or Anticanus. *Browne's Vulgar Errours.*

Albertus, bishop of Ratisbon, for his great learning, and *latitude* of knowledge, sirnamed Magnus; besides divinity, hath written many tracts on philosophy. *Browne.*

I took this kind of verse, which allows more *latitude* than any other. *Dryden.*

There is a difference of degrees in men's understandings, to so great a *latitude*, that one may affirm, that there is a greater difference between some men and others, than between some men and beasts. *Locke.*

We found ourselves in the *latitude* of thirty degrees two minutes south. *South.*

Then, in comes the benign *latitude* of the doctrine of good-will, and cuts asunder all those hard pinching cords. *Id.*

Another effect the Alps have on Geneva is, that the sun here rises later and sets sooner than it does to other places of the same *latitude*. *Addison.*

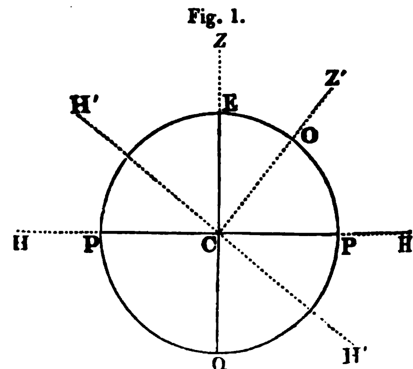
Latitudinarian love will be expensive, and therefore I would be informed what is to be gotten by it. *Collier on Kindness.*

Those places which lie on the equator have no *latitude*. *Guthrie.*

LATITUDE, in geography, is the distance of any place from the equator reckoned on a meridian, or great circle of the globe passing through the poles. The most simple method of finding the latitude of a place is by the meridian altitude of the sun, which may be obtained by direct observation, at the moment it passes the meridian of the place; or it may be found from several altitudes taken near the meridian, compared with the time. At the terrestrial equator, where the latitude is nothing, the celestial equator passes through the zenith; the poles of the world are consequently in the horizon: but, if we suppose ourselves advancing along any meridian into either hemisphere, the pole of that hemisphere appears to ascend above the horizon, and describe an arc of a vertical circle, equal to the arc of the meridian passed over. Hence, as the arc of the meridian measures the latitude of the place arrived at, it follows that this is always equal to the elevation of the pole at that place, and that the inclination of the celestial equator to the horizon is equal to the complement of the latitude. To ascertain the meridional altitude of the sun is, therefore, to ascertain this inclination; and, consequently, the latitude.

We copy from Mr. Miers the following problems in illustration of this method. Let PEP, fig. 1, be a terrestrial meridian, and EQ the equator.

Fig. 1.



When the observer is at E, the plane of the equator, supposed to be produced to the heavens, will pass through the zenith Z, and the poles will evidently be situated in the horizon HH. But, on proceeding from E to O, the horizon gradually recedes from HH to H'H', and the pole P appears to ascend through an equal arc, but in a contrary direction. Hence, as the sum of the two angles ECO and OCP is equal to a right angle, and the sum of the two OCP and PCH' also equal to a right angle, if the common angle OCP be taken from each of these sums, there will remain the angle ECO equal to the angle PCH'; that is, the altitude of the pole equal to the latitude of the place of observation. Again, the angle ECH', which is the complement of ECO, is evidently the inclination of the equator to the horizon of the observer at O; and consequently the altitude of the equator at any place is equal to the complement of the latitude of that place. All that is necessary, therefore, to find the latitude, is, to ascertain the height of the equator, and subtract it from 90°. The easiest method of accomplishing this is to observe the meridian altitude of a heavenly body, and reduce it to the true altitude by the corrections already explained; and then either by adding the declination to this altitude, or by subtracting it from it, as circumstances require, the height of the equator will be ob-

tained. That is, if the sun pass the meridian south of the observer's zenith, add the declination when it is south, and subtract it when north; but if he pass the meridian on the north of that zenith, subtract his declination when south, and add it when north.

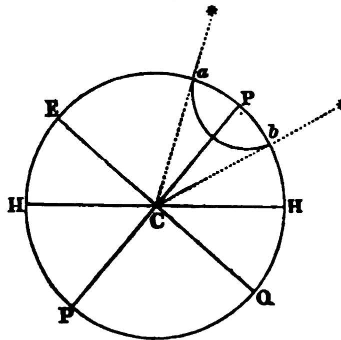
The following example will show the application of these precepts.—Suppose the altitude of the sun's lower limb, when he passed the meridian south of the observer, on the 9th of May 1818, was found to be 46° 32′; what was the latitude of the place?

	°	′	″
Observed altitude of Sun's lower limb	46	32	0
Sun's semidiameter, 9th May, add	0	15	51
Observed altitude of Sun's centre	46	47	51
Refraction, to be subtracted	0	0	54
	46	46	57
Parallax corresponding to this altitude, add . .	0	0	6
True altitude of the sun's centre	46	47	3
Declination north, 9th May, subtract . . .	17	16	18
Height of equator	29	30	45
Complement. LATITUDE NORTH	60	29	15

The latitude may also be found, as this writer observes, from the observed altitude of a star, the declination of which is known, as the corrections for semidiameter and parallax are then unnecessary. The meridional altitude of the moon will also afford the same result; but in this case the corrections are more tedious, and, from the irregularity in her motion, much greater attention is requisite to insure equal accuracy.

'Another easy method of obtaining the latitude of a place is by observing the greatest and least altitudes of a circumpolar star; half the sum of which is the height of the pole, or, as shown above, the latitude of the place. Let P, P, fig. 2, be the axis of the earth, H H the horizon, *a* and *b* the greatest and least heights of a circumpolar star; then, as this star describes a circle about P as a centre, the arcs P *a* and P *b* are equal to each other; H *a* and H *b* are its two altitudes in these positions: hence $HP = \frac{1}{2}(Ha + Hb)$. Now, when H *a* and H *b* are found by observation, the heights of the pole H P, and consequently the latitude of the place, is known. If half the difference of the two altitudes be added to the less, or subtracted from the greater altitude, the result will also be the same; for

Fig. 2.



$Hb + bP$ or $Ha - aP$ is evidently equal to H P. *Example.*—Suppose the greatest altitude of a circumpolar star was observed to be 66° 48′ 40″, and its least 36° 18′ 20″; required the latitude of the place of observation.

	°	′	″
Greatest observed altitude	66	48	40
Refraction to be subtracted	0	0	24
True altitude of the star	66	48	16
Least observed altitude	36	18	20
Refraction answering to this altitude . . .	0	1	18
True altitude of the star	36	17	2
Greatest altitude of the same star	66	48	16
Sum of their altitudes	103	5	18
LATITUDE of the place . . . . half sum	51	32	39

It is also evident that if half the difference of the two altitudes, which is 15° 15′ 37″, be added to the less altitude 36° 17′ 2″, or subtracted from the greater, 66° 48′ 16″, their sum or difference will be 51° 32′ 39″, which is the same as before.'—*Myers's Geography. Introduction.*

LATITUDES, INCREASING, is a name for the enlarged parts of the meridian in the construction of Mercator's Chart; and these are also frequently styled meridional parts. Tables of them are accurately calculated, and are of great utility in the construction and use of these maps. The following table shows the lengths which ought to be given to the degrees of latitude, in charts of this kind, answering to the corresponding increase in the longitude. It will be sufficient for

common purposes; but, when the length is required for every minute of the quadrant, Robertson's Navigation, or any of the published tables, may be consulted.

TABLE.

Deg.	Increasing Latitude.	Deg.	Increasing Latitude.	Deg.	Increasing Latitude.	Deg.	Increasing Latitude.
0	0	23	1419	46	3116	69	5794
1	60	24	1484	47	3203	70	5966
2	120	25	1550	48	3291	71	6146
3	180	26	1616	49	3382	72	6335
4	240	27	1684	50	3474	73	6534
5	300	28	1751	51	3569	74	6746
6	361	29	1819	52	3655	75	6970
7	421	30	1888	53	3764	76	7210
8	482	31	1958	54	3865	77	7467
9	542	32	2028	55	3967	78	7745
10	603	33	2099	56	4074	79	8046
11	664	34	2171	57	4183	80	8375
12	725	35	2244	58	4294	81	8739
13	787	36	2318	59	4409	82	9145
14	848	37	2393	60	4527	83	9606
15	910	38	2468	61	4649	84	10137
16	973	39	2545	62	4775	85	10765
17	1035	40	2623	63	4905	86	11533
18	1098	41	2702	64	5039	87	12522
19	1161	42	2782	65	5179	88	13917
20	1225	43	2863	66	5323	89	16300
21	1289	44	2946	67	5474		
22	1354	45	3030	68	5631		

LATIUM, in ancient geography, the country of the Latins, at first contained within very narrow bounds, but afterwards increased by the accession of various people. The appellation, according to Virgil, is derived from latendo, concealing, from Saturn's lying hid there from the hostile pursuits of his son Jupiter; and from Latium comes the name Latini, the people; though Dionysius Halicarnassæus derives it from king Latinus, who reigned about the time of the Trojan war. But, whatever be in this, it is certain that Latium, when under Æneas and his descendants, or the Alban kings, contained only the Latins, exclusive of the Æqui, Volsci, and Hernici; only that Æneas reckoned the Rutuli, after their conquest, among the Latins. And this constituted the ancient Latium confined to the Latins: but afterwards, under the kings, and after their time, it reached from the Tiber to Circeii. Under the consuls the country of the Æqui, Volsci, Hernici, &c., after long and bloody wars, was added to Latium, under the appellation adjectitious or superadded Latium, as far as the river Liris, the eastern boundary, and to the north as far as the Marsi and Sabines. The various people, which in succession occupied Latium, were the Aborigines, the Pelasgi, the Arcades, the Siculi, the Arunci, the Rutuli; and, beyond Circeii, the Volsci, the Osci, the Ausones: but the time and order in which they occupied the country are difficult to determine.

LATMUS, in ancient geography, a mountain of Ionia, or on the confines of Caria, famous for the fable of Endymion, of whom Diana was said to be enamoured: hence called Latmius Heros, and Latmius Venator. In the mountain was a cave in which Endymion dwelt. (Scholiast on Apollonius Rhodius). It is supposed by Hecatæus to be the Phtheiron Mons of Homer; but by Strabo to be Graius Mons.

LATOMIA properly signifies a stone quarry: but the places whence stones had been dug having been made use of sometimes for dungeons, jails, or places for criminals, it is often applied as a name for a prison. There was a place of confinement of this sort at Rome, near the Tullianum; another at Syracuse, in which, according to Cicero, Verres shut up Roman citizens.

LATONA, in mythology, a pagan goddess, whose history is very obscure. Hesiod makes her the daughter of the Titan Coëus, and Phœbe his sister. She was admired for her beauty, and beloved by Jupiter. Juno, always jealous of her husband's amours, made Latona the object of her vengeance, and sent the serpent Python to persecute her. Latona wandered from place to place in the time of her pregnancy, continually alarmed for fear of Python. She was driven from heaven; and Terra, influenced by Juno, refused to give her a place where she might rest and bring forth. Neptune, moved with compassion, struck with his trident, and made immoveable the island of Delos, which before wandered in the Ægean Sea, appearing sometimes above and sometimes below the surface. Latona, changed into a quail by Jupiter, came to Delos; where she resumed her original shape, and gave birth to Apollo and Diana, leaning against a palm tree or an olive. Her repose was of short duration; Juno discovered her retreat, and obliged her to fly from Delos. She wandered over the greatest part of the world; and in Caria, where her fatigue compelled her to stop, she was insulted and ridiculed by the peasants, of whom she asked for water while they were weeding a marsh. Their refusal and insolence provoked her, and she intreated Jupiter to punish their barbarity, who changed them all into frogs. She was also insulted by Niobe, who boasted herself greater than the mother of Apollo and Diana, and ridiculed the presents which the piety of her neighbours had offered to Latona. See NIOBE. At last Latona, though persecuted by Juno, became a powerful deity, and saw her children receive divine honors. Her worship was generally established where her children received adoration; particularly at Argos, Delos, &c., where she had temples. She had an oracle in Egypt, celebrated for the true and decisive answers which it gave. Latona, Venus and Diana, were the three goddesses most in veneration among the Roman women.

LATOPOLIS, an ancient town of Egypt, so called from the fish Latus, which Strabo tells us the inhabitants worshipped as well as Minerva.

LATRANT, *adj.* Lat. *latrans.* Barking.

> Thy care be first the various gifts to trace,
> The minds and genius of the *latrant* race.
>
> Tickell.

LATRIA. Fr. *latrie;* Gr. λατρεία; Lat. *latria.* The highest kind of worship; distinguished by the papists from dulia, or inferior worship.

The image of the cross they worship with divine honour.——For in the very pontifical, published by the authority of pope Clement VIII., these words are found, The legat's cross must be on the right hand, because *latria* or divine honour is due to it.
Bishop Taylor.

LATRIA, in theology, is that religious worship due only to God. The Romanists say, 'They honor God with the worship of latria, and the saints with the worship of dulia: but the terms, however distinct, are usually confounded. See however, on this point, the foregoing extract from Bishop Taylor. Mr. Daille seems to own that some of the fathers of the fourth century allowed the distinction between latria and dulia. See ADORATION.

LATRUNCULI, a game amongst the Romans, of much the same nature with our chess. The latrunculi were properly the chess-men, called also latrones and calculi. They were made of glass, and distinguished by black and white colors. Sometimes they were made of wax or other convenient substances. Some give the invention of this game to Palamædes when at the siege of Troy; Seneca attributes it to Chilon, one of the seven Grecian sages; others honor Pyrrhus with the invention; and others again contend that it is of Persian origin. Frequent allusions to this game are met with in the Roman classics, and a little poem was written upon it, addressed to Piso, which some say was the work of Ovid, others of Lucan, in the end of some editions of whose works it is to be found, and to which we refer for a fuller account of the game This game expresses so well the chance and order of war, that it is, with great appearance of probability, attributed to some military officer as the inventor. One Cnæus Julius was so exceedingly fond of chess, that after he was sentenced to death by Caligula, he was found playing, and, on being interrupted in his game by a call to execution, he obeyed the summons, but first desired the centurion who brought the fatal order, to bear witness that he had one man upon the board more than his antagonist, that he might not falsely brag of victory when he should be no more!

LATTALATTA, an island adjacent to Gilolo, in the Eastern seas, about twenty-five miles in circumference. It is divided from that of Tappa by a strait only about a mile and a half in length, and in some places not above forty yards broad. Between Lattalatta and Mandioly the strait is about eight miles across. Long. 126° 50′ E., lat. 0° 20′ S.

LATTEN, *n. s.* Fr. *leton;* Belg. *latoen;* Ital. *lattone;* Welsh, *lattwn.* Brass; a mixture of copper and calaminaris stone.

And hise feet lyk to *latoun* as in a brenynge chymney. *Wicliffe. Apoc.* 1.

To make lamp-black, take a torch or link, and hold it under the bottom of a *latten* bason, and, as it groweth black within, strike it with a feather into some shell. *Peacham.*

LATTEN, in the manufactures, is a term used for iron plates tinned over, of which cannisters, &c., are made. Plates of iron being prepared of a proper thinness are smoothed by rusting them in an acid, with which they fill certain troughs, and then put in the plates, which they turn once or twice a-day, that they may be equally rusted over. After this they are taken out, and well scoured with sand; and, to prevent their rusting again, are immediately plunged into pure water, in which they are to be left till the instant they are to be tinned or blanched; the manner of doing which is this: they flux the tin in a large iron crucible, which has the figure of an oblong pyramid with four faces. The crucible is heated only from below, its upper part being luted with the furnace all round. It is always deeper than the plates which are to be tinned are long; they plunge them in, and the tin ought to swim over them; for this purpose artificers of different trades prepare plates of different shapes, though M. Reaumur thinks them all exceptionable. But the Germans use no sort of preparation of the iron to make it receive the tin, more than the keeping it always steeped in water till the time; only, when the tin is melted in the crucible, they cover it with a layer of a sort of fryed suet, which is usually two inches thick, and the plate must pass through this before it can come to the melted tin. The first use of this covering is to keep the tin from burning; for, if any part should take fire, the suet would soon moisten it, and reduce it to its primitive state again. The blanchers say, this suet is a compounded matter. The melted tin must also have a certain degree of heat: for, if it is not hot enough, it will not stick to the iron; and, if it is too hot, it will cover it with too thin a coat, and the plates will have several colors, as red, blue, and purple, and upon the whole will have a cast of yellow. To prevent this, by knowing when the fire has a proper degree of heat, they might try with small pieces of iron; but, in general, habit teaches them to know the degree, and they put in the iron when the tin is at a different standard of heat, according as they would give it a thicker or thinner coat. Sometimes also they give the plates a double layer, as they would have them very thickly covered. This they do by dipping them into the tin when very hot the first time, and when less hot the second. The tin which is to give the second coat must be fresh covered with suet; and that with the common suet; not the prepared.

LATTICE, *n. s.* Fr. *lattis;* written by Junius lettice, and derived from lettiern, a hindring iron, or iron stop; but by Skinner more probably imagined to be derived from lath.

The mother of Sisera looked out at a window, and cried through the *lattice.* *Judges* v. 28.

My good window of *lattice,* fare thee well; thy casement I need not open, I look through thee.
Shakspeare.

Up into the watch-tower get,
And see all things despoil'd of fallacies:
Thou shalt not peep through *lattices* of eyes,
Nor hear through labyrinths of ears, nor learn
By circuit or collections to discern. *Donne.*

The trembling leaves through which he played,
Dappling the walk with light and shade,

Like *lattice* windows, give the spy
Room but to peep with half an eye. *Cleaveland.*

No bliss has life to boast, till death can give
Far greater. Life's a debtor to the grave;
Dark *lattice!* letting in eternal day. *Young.*

While her young hand,
Fair as the moonlight of which it seems part,
So delicately white, it trembles in
The act of opening the forbidden *lattice*,
To let in love through music, makes his heart
Thrill like his lyre-strings at the sight. *Byron.*

LATTIMO, in the glass trade, a name for a fine milk-white glass. There are several ways of making it, but the best of all is this: take 4 cwt. of crystal frit, and 60 lbs. of calcined tin, and 2½ lbs. of prepared manganese: mix these well with the frit, and set them in a pot in a furnace to melt and refine. At the end of eighteen hours this will be purified; then cast it into water, purify it again afterwards in the furnace, and make a proof of it. If it be too clear, add 15 lbs. more of calcined tin; mix it well with the metal, and let it stand one day to purify; it will then be of a whiteness surpassing even that of snow, and fit to work into vessels.

LATUS, in ichthyology, a fish of the coracinus or umbra kind, caught in the Nile, the Adriatic, and the Mediterranean. It resembles the coracinus, but is larger, wants the beard, and its body is rounder. It is esteemed very delicate.

LA'VA. Lat. *lavo.* See LAVE. The fused substance that flows from volcanoes.

Nymphs! your fine forms with steps impassive mock
Earth's vaulted roofs of adamantine rock;
Round her still centre tread the burning soil,
And watch the billowy *lavas*, as they boil. *Darwin.*

LAVA. See VOLCANO.

LAVAL, a considerable walled town in the north of France, the capital of the department of the Mayenne. It is situated on the river of that name. It has two castles, five churches, and three hospitals, with a modern monastery of the order of La Trappe. The linen manufacture is carried on to great extent; and that of serge, flannel, and cotton. Population 15,200. Fifteen miles south of Mayenne, and forty west of Le Mans.

LAVANDULA, lavender: a genus of the angiospermia order, and didynamia class of plants: natural order forty-second, verticillatæ: CAL. ovate, and a little dentated, supported by a bracten or floral leaf: COR. is resupinated; the stamina within the tube.

1. L. dentata, the dentate-leaved stæchas, hath a woody stalk, branching on every side three or four feet high; leaves deeply indented in a pinnated manner; and the branches terminated by scaly four-cornered spikes of flowers, appearing most part of summer.

2. L. spica, the lavender spike, hath a short shrubby stalk, rising two or three feet high; small spear-shaped entire leaves; and from the ends of the branches, numerous, long, erect, naked spikes of small ringent flowers, of different colors in the varieties. The varieties of this are common narrow-leaved lavender, with blue flowers, and with white flowers; broad-leaved lavender; dwarf lavender: all of them flowering in July. This species is the common lavender; but the narrow-leaved variety, with blue flowers, is the sort usually cultivated for its flowers, for medicine, &c.

3. L. stoechas, or French lavender, hath a shrubby very branchy stalk, rising two or three feet high; very narrow, spear-shaped, pointed, hoary leaves, opposite; and all the branches terminated by short bushy spikes of purple flowers in June and July; succeeded by seeds in August. There is a variety with white flowers. All the sorts are propagated plentifully by slips or cuttings of their young shoots in spring. In March or April take off a quantity of slips or cuttings, from three or four to six inches long; strip off the under leaves; then plant them in a shady border, four inches asunder; give a good watering, repeat it occasionally in dry weather, and the plants will be well rooted in summer, and each become a good plant, fit to be transplanted into any place early in autumn, that is, September or October; removing them, if possible, with balls of earth; and, if intended to plant them for use, set them in rows two or three feet asunder, and two feet distance in each row: if any are designed for the shrubbery they should be stationed singly at good distances near the front. The dentata species, being tender, should be potted to move to shelter in winter. The lavandula stoechas is also often raised from seed, sown in March or April, in a bed of light earth. The last two species are proper both for the kitchen-garden, for medicinal and other family uses, and to plant in the pleasure ground to adorn the front of small shrubbery compartments, where they will increase the variety very agreeably; and are finely scented aromatics, both when growing, and their flowers when gathered. The flowers of this species are gathered for use in July, which being the time of their perfection, cut off the spikes close in a dry day, and tie them in small bunches for use. These and the summits are in a very eminent degree cephalic and nervine. They are given in palsies, vertigos, lethargies, tremors, and suppression of the menstrual evacuation. The compound spirit distilled from them is famous in these and many similar cases. The distilled oil is particularly celebrated for destroying the pediculi inguinales, and other cutaneous insects.

LAVATER (John Caspar), the celebrated physiognomist, was born at Zurich, in 1740. He studied theology, but without making himself master of the learned languages, which he often afterwards regretted. He was first appointed preacher to the Orphan House, and afterwards, in 1778, deacon and pastor of the principal church of St. Peter at Zurich, in which office he continued till his death. His peculiar religious tenets are to be found in his various works: particularly in his View of Immortality; his Pocket Bible; his Messiah; his Pontius Pilate; his Treatise on Miracles; his Sermons on the Existence of the Devil; his Visions; and his Observations on important Passages in the Evangelists. For a long time he kept a journal of which above fifty copies were made out, and sent to his principal partisans abroad, who dispersed copies of them among their friends. The

evangelical doctrine and duty of brotherly love were always the chief subjects of these apostolical epistles. In the midst of these various labors, he found time to compose his Treatise on Physiognomy, a work which has rendered his name universally known throughout Europe and America. The opinions and theory which he published were a medley of judicious observations, ingenious conjectures, and fanciful reveries. The novelty as well as mystery of the subject greatly attracted at first the public attention, and every person was eager to learn to read his neighbour's heart in his face. In Switzerland, Germany, France, Britain, and North America, vast numbers became passionate admirers of his theory. His books were multiplied in many editions, and repeated translations: and the mania is to this day far from being extinct. While the Helvetians were trembling under the oppressions of the French pro-consuls, Rapinat, Schaumburg, and their associates, who tyrannised over the brave Swiss, Lavater wrote his celebrated Appeal to the French Government, and preached the rights of his countrymen, even while the sword of vengeance was hanging over him: nor did he desist, till he was torn from his congregation, as a preacher of sedition and anarchy. He was first sent to Schaffhausen as a hostage, but returned soon after, without any interruption, through the French army. His death happened in consequence of some wounds which he received from a Swiss soldier, when Zurich was taken from the Austrians and Russians, by general Massena, in autumn 1799.

LAVATERA, in botany, a genus of the polyandria order, and polydelphia class of plants: natural order thirty-seventh, columniferæ: exterior CAL. double and trifid; the arilli or seed-coats are very many and monospermous. There are several species, most of them herbaceous flowery annuals, or shrubby perennials, growing erect from two or three, to eight or ten feet high, garnished with large roundish, heart-shaped, and angular leaves, and quinquepetalous flowers of the mallow kind. They are easily propagated by seed in the open ground in the spring; and thrive best when they are sown where they are designed to remain. The lavatera tribe affect a warm sandy situation and soil, in which they will sometimes continue to exhibit their beauties for many years; but in general they are short-lived, continuing only two or three years; this renders them peculiarly eligible to be scattered plentifully in a newly made shrubbery; they will add warmth to young plants, and will die away themselves before the spaces they occupy will be required by the surrounding shrubs.

LAVATORY, or LAVADERO, a name given to certain places in Chili and Peru, where gold is obtained from the earth by washing.

LAUBAN, or LUBAN, a manufacturing town of Prussia, in Upper Lusatia, on the Queis. Of late its woollen manufactures are declined, and those of cotton and linen have the chief attention. Here is a central school, a house of correction, a foundling-hospital, and a convent. Across the river are dye-works and bleachfields. Inhabitants 5000. Sixty-two miles north of Dresden, and seventy-two N. N. E. of Prague.

LAUD, *n. s.* & *v. a.*
LAUD'ABLE, *adj.*
LAU'DABLENESS, *n. s.*
LAUD'ABLY, *adv.*
} Lat. *laus*, *laudo*, *laudabilis*. Praise to God or man: to laud is to praise or celebrate.

And the honour they did to the laurir
Is for by it they have ther *laud* wholly,
Ther triumph eke and martial glory,
Which unto them is more perfite richesse,
Than any wight man can or gesse. *Chaucer.*

I'm in this earthly world, where to do harm
Is often *laudable*; but to do good, sometime
Accounted dangerous folly. *Shakspeare. Macbeth.*

We have certain hymns and services, which we say daily of *laud* and thanks to God for his marvellous works. *Bacon.*

In the book of Psalms, the *lauds* make up a very great part of it. *Government of the Tongue.*

The holy Apostle doth recommend to us;—carefully to perform things good and *laudable*, eschewing whatever is bad or culpable. *Barrow.*

Obsolete words may be *laudably* revived when either they are sounding or significant. *Dryden.*

Affectation endeavours to correct natural defects, and has always the *laudable* aim of pleasing, though it always misses it. *Locke.*

Good blood, and a due projectile motion or circulation, are necessary to convert the aliment into *laudable* animal juices. *Arbuthnot.*

O thou almighty and eternal Creator, having considered the heavens the work of thy fingers, the moon and the stars which thou hast ordained, with all the company of heaven, we *laud* and magnify thy glorious name. *Bentley.*

Doubtless, O guest, great *laud* and praise were mine,
Replied the swain, for spotless faith divine:
If, after social rites, and gifts bestowed,
I stained my hospitable hearth with blood. *Pope.*

Their example will not only be your motive to *laudable* pursuits, but a mirror to your mind. *Mason.*

LAUD (William), archbishop of Canterbury, in the seventeenth century, was born at Reading in 1573, and educated at St. John's College, Oxford, of which he was afterwards a fellow. In 1610 he entered into orders. In 1611 he was elected president of St. John's College; and, his election being disputed, king James confirmed it. The same year he was sworn the king's chaplain. In 1621 he was nominated bishop of St. David's; and in 1628 bishop of London. In 1630 he was elected chancellor of the University of Oxford. In 1633 he attended the king into Scotland, and was sworn a privy counsellor of that kingdom. In the same year he succeeded archbishop Abbot in the see of Canterbury; and soon after came out the king's declaration concerning lawful sports on Sundays, which the archbishop was charged with having revived and enlarged, and also with the vexatious prosecutions of such clergymen as refused to read it in their churches. In 1634-5 he was in the committee of Trade and the King's Revenue; on the 4th of March following he was appointed one of the Commissioners of Treasury; and on the 6th of March, 1635-6, he received the staff of lord High Treasurer. To prevent the printing and publishing of what he thought improper books, he procured a decree to be passed in the star-chamber, on the 11th

of July, 1637, whereby it was enjoined that the master-printers should be reduced to a certain number, and that none of them should print any books till they were licensed, either by the archbishop, or the bishop of London, or some of their chaplains, or by the chancellors or vice-chancellors of the universities. A new parliament being summoned met on the 13th April, 1640; and the convocation on the day following; but the commons launching out into complaints against the archbishop, and insisting upon a redress of grievances before they granted any supply, the parliament was dissolved on the 7th of May. The convocation, however, continued sitting; and made seventeen cantons, which were supposed to be formed under the immediate direction of the archbishop. In the beginning of the long parliament he was attacked on account of those canons; and they being condemned by the house of commons on the 16th of December, 1640, 'as containing many things contrary to the king's prerogative, to the fundamental laws and statutes of this realm, to the rights of parliament, to the property and liberty of the subject, and tending to sedition, and of dangerous consequence;' he was, on the 18th of December, accused by the commons of high treason, and sent to the Tower. Being tried before the house of lords, for endeavouring to subvert the laws, and to overthrow the Protestant religion, he was found guilty, and beheaded on Tower Hill on January 10th following, in the seventy-second year of his age. This learned prelate, notwithstanding his being charged with a design to bring in popery, wrote an answer to Dr. Fisher, which is esteemed one of the best pieces that has been printed against that religion. When he was privately offered a cardinal's hat by the pope, he refused it, saying, that 'something dwelt within him which would not suffer his compliance, till Rome was other than it is.' He was temperate in his diet, and regular in his private life; but his fondness for introducing new ceremonies, in which he showed an indiscreet zeal, his encouraging various sports on Sundays, his illegal and cruel severity in the star-chamber and high commission courts, and the fury with which he persecuted the dissenters, and all who presumed to contradict his sentiments, exposed him to deserved popular hatred. Besides his Answer to Fisher, he published several Sermons, and other works.

LAUDANUM. See Opium.

LAUDATIO, in a legal sense, was anciently the testimony delivered in court of the accused person's good behaviour and integrity of life. It resembled the custom which prevails in our trials, of calling persons to speak to the character of the prisoner. The least number of the laudatores amongst the Romans was ten.

LAUDER, an ancient royal borough in a parish of the same name, lately much improved. In the reign of king James III. the nobility, whom he had summoned to meet him in this town, on public business, seized his favorite minister, Sir Robert Cochran, whom he had raised from the rank of a common mason to be earl of Mar, and hung him, with his associates, over Lauder Bridge, in sight of the king and his army. Lauder has five fairs, and joins with Jedburgh, Haddington, Dunbar, and North Berwick, in electing a representative in the imperial parliament. It is twenty-five miles south of Edinburgh, and twenty-four west of Berwick.

Lauder (William), a native of Scotland, educated at the university of Edinburgh, where he finished his studies with great reputation. In 1739 he published, at Edinburgh, an edition of Johnston's Psalms. In 1742 he was recommended by Messrs. Cuming and Maclaurin, professors of ecclesiastical history and mathematics, to the mastership of the grammar school at Dundee, then vacant. Whether he succeeded in the application or not is uncertain; but a few years afterwards he figured in London, where he endeavoured to ruin the reputation of Milton; an attempt which ended in the destruction of his own. His reasons for the attack probably sprung from the virulence of a violent party spirit, which triumphed over every principle of honor and honesty. He commenced his defamatory operations in The Gentleman's Magazine, 1747; and, finding that his forgeries were not detected, was encouraged in 1751 to collect them, with additions, into a volume, entitled, An Essay on Milton's Use and Imitation of the Moderns in his Paradise Lost, 8vo.; the object of which was to prove that our great bard had pirated in that work the thoughts and expressions of certain modern Latin poets. The fidelity of his quotations had been doubted by several people; and the falsehood of them was soon after exhibited by Dr. Douglas, bishop of Salisbury, in a pamphlet entitled Milton vindicated from the Charge of Plagiarism brought against him by Lauder, and Lauder himself convicted of several Forgeries and gross Impositions on the Public: in a Letter humbly addressed to the Right Honorable the Earl of Bath, 1751, 8vo. The appearance of this detection overwhelmed Lauder with confusion. It was demonstrated that this adventurer had thrust into his pretended extracts, from the works of Massenius, Taubmannus, &c., whole lines of a bad Latin translation of Milton's work; and then quoted them against the poet. He subscribed a confession, dictated by a learned friend, wherein he ingenuously acknowledged his offence. He afterwards imputed his conduct to various motives; abused the few friends who continued to countenance him; and, finding that his character was not to be retrieved, quitted the kingdom, and went to Barbadoes, where he some time kept a school. His behaviour there was mean and despicable; and he passed the remainder of his life in universal contempt. He died about the year 1771.

LAUDICŒNI, amongst the Romans, applauders who for reward entered the rehearsal rooms, attended the repetition of plays, and were in waiting when orations were pronounced, in order to raise or increase the acclamation and applause.

LAUDOHN (Gideon), baron de, a celebrated general in the imperial service, born in 171[illegible], was a native of Livonia. He made his first campaigns under marshal Munich, in the war of 1738, between the Russians and Turks; and was at the taking of Oczakow, Choczim, and

Stawutzchaue, where the Turks were entirely defeated. Frederick the Great refused, in 1741, to take young Laudohn into his service, saying he did not like his countenance: he afterwards was compelled to acknowledge that, though he often admired the position of other generals, he had ever dreaded the battles of Laudohn. In 1756 he entered into the service of the house of Austria, with the rank of lieutenant-colonel, and made such a rapid progress, that within less than a year he was a general of artillery, and, within three years, commander in chief of the whole army. He rescued Olmutz, when besieged by the Prussians; beat the king himself at Frankfort on the Oder; at Zorndorf, took general Fouquet prisoner; carried Glatz and Schweidnitz by assault, and stopped the progress of Frederick in a war which might otherwise have proved fatal to the house of Austria. In 1778, when elevated to the rank of marshal, at the head of 60,000 men he prevented Henry, brother to the king of Prussia, from joining his army to that of the king. At Dubicza, Novi, Gradisca, and Belgrade, in the war between the emperor and the Turks, he had but to present himself before the place, and say with Cæsar, Veni, vidi, vici. But at his head-quarters in Moravia he was seized with a fever, in consequence of an operation he underwent for an obstruction in the urethra. His impatience under the medical applications, the impetuous ardor of his character, and the knowledge, above all, of his importance in the war, contributed to irritate his mind, and promote the violence of the fever. He resisted the application of cataplasms, before and after the incisions were made, with a fatal obstinacy, which raised the inflammation to such a height, that he expired under the accession of the fever on the 14th of July, 1790, in the seventy-fourth year of his age.

LAVE, *v. a.* & *v. n.*, LAVA'TION, *n. s.*, LAVA'TORY, *n. s.*, LA'VER. Fr. *laver* and *lavoir*; Lat. *lavo*. To wash; bathe; lade or throw up water: a lavation is the act of washing: lavatory, a wash or a washing vessel: and laver is used wholly in the latter sense.

> Unsafe, that we must *lave* our honours
> In these so flatt'ring streams. *Shakspeare.*

> Though hills were set on hills,
> And seas met seas to guard thee, I would through:
> I'd plough up rocks, steep as the Alps in dust,
> And *lave* the Tyrrhene waters into clouds,
> But I would reach thy head. *Ben Jonson.*

Such filthy stuff was by loose lewd varlets sung before the chariot on the solemn day of her *lavation*. *Hakewill.*

Lavatories, to wash the temples, hands, wrists, and jugulars, do potently profligate, and keep off the venom. *Harvey.*

> But as I rose out of the *laving* stream,
> Heaven opened her eternal doors, from whence
> The spirit descended on me like a dove. *Milton.*

> Let us go find the body where it lies
> Soaked in his enemies' blood, and from the stream
> With *lavers* pure, and cleansing herbs, wash off
> The clodded gore. *Id. Agonistes.*

> With roomy decks, her guns of mighty strength,
> Whose low-laid mouths each mounting billow *laves*.
> Deep in her draught, and warlike in her length,
> She seems a sea-wasp flying on the waves. *Dryden.*

> Some stow their oars, or stop the leaky sides,
> Another bolder yet the yard bestrides,
> And folds the sails; a fourth with labour *laves*
> The intruding seas, and waves ejects on waves. *Id.*

> In her chaste current oft the goddess *laves*,
> And with celestial tears augments the waves. *Pope.*

> Young Aretus from forth his bridal bower
> Brought the full *laver* o'er their hands to pour. *Id. Odyssey.*

> Fill high the bowl with Samian wine,
> Our virgins dance beneath the shade—
> I see their glorious black eyes shine;
> But, gazing on each glowing maid,
> My own the burning tear-drop *laves*,
> To think such breasts must suckle slaves. *Byron.*

LAVEER', *v. n.* From VEER, which see. To change the direction often in a course.

> How easy 'tis, when destiny proves kind,
> With full-spread sails to run before the wind:
> But those that 'gainst stiff gales *laveering* go,
> Must be at once resolved, and skilful too. *Dryden.*

LAUENBURG, a duchy of north Germany, on the right bank of the Elbe; and, since 1815, belonging to Denmark. It has 425 square miles of undulating plain, and a soil, on the whole, well cultivated. It is watered by the Elbe, Steckenitz, and Trave; and has the two lakes of Schall and Ratzeburg, and the extensive forest of Sachsenwald. The inhabitants, who are in number 35,000, have a carrying trade in timber between the Elbe and the Baltic. This duchy was formerly independent; but on the extinction of the ducal family, in 1689, its possessions lapsed to the house of Hanover, and consisted, at that period, of the province just described, and a territory on the left bank of the Elbe. The latter, in 1815, was united with Luneburg; and the rest of the duchy ceded to Prussia, who soon after transferred it to Denmark. The inhabitants are Lutherans.

Lauenburg, the capital, stands on a rising ground, between the Elbe and the Steckenitz. Here is a toll on the Elbe, which produces an annual revenue of between £7000 and £8000; and the trade of the town is respectable. Population 2200. Thirty-five miles E. S. E. of Hamburgh.

LAV'ENDER, *n. s.* Lat. *lavandula*. A plant.

> And then again he turneth to his play,
> To spoil the pleasures of that paradise;
> The wholesome sage, and *lavender* still grey,
> Rank smelling rue, and cummin good for eyes. *Spenser.*

The whole *lavender* plant has a highly aromatick smell and taste, and is famous as a cephalick, nervous, and uterine medicine. *Hill.*

LAVENDER. See LAVANDULA.

LAVENDER COTTON. See SANTOLINA.

LAVENDER, SEA. See STATICE.

LAVERNA, in antiquity, the goddess of thieves and cheats among the Romans, who honored her with public worship, because she was supposed to favor those who wished that

their designs might not be discovered. Varro says that she had an altar near one of the gates of Rome; hence called porta lavernalis.

LAUGH, *v. n.*, *v. a.* & *n. s.*
LAUGH'ABLE, *adj.*
LAUGH'ER, *n. s.*
LAUGH'INGLY, *adv.*
LAUGH'INGSTOCK,
LAUGH'TER.

Sax. hlapan; Goth. *hlaja*, *hlæa* to rejoice; Teut. and Belg. *lachan*. Minsheu says with some probability from Heb. לעג. To make the noise of sudden merriment, or that sudden mirth excites; to appear gay: to laugh at is to treat as only fit for laughter, or contemptuously; as an active verb, to deride; scorn: laugh, as a noun, is the convulsion caused by mirth: laughable, causing or fit to excite laughter: laughing-stock, a butt for ridicule: laughter, convulsion or noisy mirth.

Woo to you that now *leyghen* for ye schulen mourne and wepe. *Wiclif. Luk* 6.

A wicked soul shall make him to be *laughed* to scorn of his enemies. *Ecclus.* vi. 4.

The forlorn maiden, whom your eyes have seen
The *laughing-stock* of fortune's mockerie. *Spenser.*

You saw my master wink and *laugh* upon you. *Shakspeare.*

There's one did *laugh* in's sleep, and one cried, Murther!
They waked each other. *Id.*

'Twere better for you, if 'twere not known in council; you'll be *laughed at*. *Shakspeare.*

Be bloody, bold, and resolute: *laugh* to scorn
The power of man. *Id. Macbeth.*

Nature hath framed strange fellows in her time:
Some that will ever more peep through their eye,
And *laugh* like parrots at a bagpiper;
And others of such vinegar aspect,
That they'll not show their teeth in way of smile,
Though Nestor swear the jest be *laughable*. *Shakspeare.*

I am a common *laugher*. *Id.*

Pray you, let us not be *laughing-stocks* to other men's humours. *Id.*

Laughing causeth a continued expulsion of the breath with the loud noise, which maketh the interjection of *laughing*, shaking of the breast and sides, running of the eyes with water, if it be violent. *Bacon's Natural History.*

Some say that *laughter* here
Keeps residence, but *laughter* fits not there,
Where darkness ever dwells, and melancholy fear. *Fletcher's Purple Island.*

Abraham heard this news from the angel, and *laughed*; Sarah heard it and *laughed*; Abraham *laughed* for joy; Sarah for distrust. *Bp. Hall.*

The act of *laughter*, which is a sweet contraction of the muscles of the face, and a pleasant agitation of the vocal organs, is not merely voluntary, or totally within the jurisdiction of ourselves. *Browne.*

We find not that the *laughter*-loving dame
Mourned for Anchises. *Waller.*

Then *laughs* the childish year with flowrets crowned. *Dryden.*

Casaubon confesses Persius was not good at turning things into a pleasant ridicule; or, in other words, that he was not a *laughable* writer. *Id.*

Supine credulous frailty exposes a man to be both a prey and *laughing-stock* at once. *L'Estrange.*

The dissolute and abandoned, before they are aware of it, are betrayed *to laugh at* themselves, and upon reflection find that they are merry at their own expence. *Addison.*

In order to look into any person's temper, I generally make my first observations upon his *laugh*, whether he is easily moved, and what are the passages which throw him into that agreeable kind of convulsion. *Steele.*

Pain or pleasure, grief or *laughter*. *Prior.*

That mind is dissolute and ungoverned, which must be hurried out of itself by loud *laughter* or sensual pleasure, or else be wholly inactive. *Steele.*

The plenteous board, high-heaped with cates divine,
And o'er the foaming bowl the *laughing* wine. *Pope.*

No wit to flatter left of all his store;
No fool *to laugh at*, which he valued more. *Id.*

Me gentle Delia beckons from the plain,
Then hid in shades, eludes her eager swain;
But feigns a *laugh*, to see me search around. *Id.*

Some sober men cannot be of the general opinion but the *laughers* are much the majority. *Id.*

A reserved man is in a continual conflict with the social part of his nature, and even grudges himself the *laugh* into which he is sometimes betrayed. *Shenstone.*

Democritus, who was always *laughing*, lived one hundred and nine years; Heraclitus, who never ceased crying, only sixty. *Laughing* then is best; and to *laugh* at one another is perfectly justifiable, since we are told that the gods themselves, though they made us as they pleased, cannot help *laughing* at us. *Steevens.*

Each dimpling cheek with warmer blushes dyes,
Laughs on the lips, and lightens in the eyes. *Darwin.*

Dainties he heeded not, nor gaude, nor toy
Save one short pipe of rudest minstrelsy:
Silent when glad; affectionate, though shy;
And now his look was most demurely sad;
And now he *laughed* aloud, yet none knew why. *Beattie.*

The last of human sounds which rose,
As I was darted from my foes,
Was the wild shout of savage *laughter*,
Which on the wind came roaring after. *Byron.*

LAUGHTER is an affection peculiar to mankind. In laughter the eye-brows are raised about the middle, and drawn down next the nose; the eyes are almost shut; the mouth opens and shows the teeth, the corners of the mouth being drawn back and raised up; the cheeks seem puffed up, and almost hide the eyes; the face is usually red; the nostrils are open; and the eyes wet.

Authors attribute laughter to the fifth pair of nerves, which sending branches to the eye, ear, lips, tongue, palate, and muscles of the cheek, parts of the mouth, præcordia, &c., there hence arises a sympathy, or consent, between all these parts; so that when one of them is acted upon the others are proportionally affected. Hence a thing seen or smelt affects the glands, and parts of the mouth; a thing seen or heard, that is shameful, affects the cheeks with blushes: on the contrary, if it please and tickle the fancy, it affects the præcordia, and muscles of the mouth and face with laughter; if it cause sadness and melancholy, it likewise affects the præcordia, and demonstrates itself by causing the glands of the eyes to emit tears. The affection of the mind by which laughter is produced is seemingly so very different from the other passions with which we are endowed, that it has engaged

the attention of very eminent persons. 1. Aristotle, in the fifth chapter of his Poetics, observes of comedy, that 'it imitates those vices or meannesses only which partake of the ridiculous:—now the ridiculous', adds he, 'consists of some fault or turpitude not attended with great pain, and not destructive.' 2. 'The passion of laughter,' says Hobbes, 'is nothing else but sudden glory arising from some conception of some eminency in ourselves, by comparison with the infirmity of others, or with our own formerly. For men,' continues he, 'laugh at the follies of themselves past, when they come suddenly to remembrance, except when they bring with them any sudden dishonor.' 3. Akenside, in the third book of his excellent poem, treats of ridicule at considerable length. He gives a detail of ridiculous characters; ignorant pretenders to learning, boastful soldiers, and lying travellers, hypocritical churchmen, conceited politicians, &c. Having finished the detail of characters, he makes some general remarks on the cause of ridicule; and explains himself more fully in a prose definition, illustrated by examples, in these words: 'That which makes objects ridiculous is some ground of admiration or esteem connected with other more general circumstances comparatively worthless or deformed: or it is some circumstance of turpitude or deformity connected with what is in general excellent or beautiful; the inconsistent properties existing either in the objects themselves, or in the apprehension of the person to whom they relate; belonging always to the same order or class of beings; implying sentiment and design, and exciting no acute or vehement commotion of the heart.' 4. Hutcheson has given another account of this ludicrous quality, and seems to think that it is the contrast or opposition of dignity and meanness which occasions laughter.

LAUGIER (Mark Antony), an ingenious French author of the eighteenth century. He wrote, 1. An Essay on Architecture; 2. A History of Venice; 3. A History of the Peace of Belgrade. He died in 1769.

LAUGIERIA, in botany, a genus of the monogynia order, and pentandria class of plants: COR. is quinquefid: FRUIT, a plum, with a quinquelocular kernel. Species five, all natives of the south of Europe.

LAVINIUM, or LAVINUM, in ancient geography, a town of Latium, six miles east of Laurentum, so named from Lavinia, and built by the Trojans: the first town of Roman original in Latium, and the seat of the Dii Penates (Livy), situated near the river Numicus, between which and the Tiber Æneas landed, according to Virgil. Holstenius supposes the town to have stood on an eminence, now called Mount Levano.

LAV'ISH, *adj.* & *v.a.*
LAV'ISHER, *n.s.*
LAV'ISHLY, *adv.*
LAV'ISHMENT, *n.s.*
LAV'ISHNESS.
} Old Fr. *laver*, to dabble, throw about: or from lave as Dr. Johnson suggests. Wasteful; profligate; profuse, liberal to excess; unrestrained: to lavish is to scatter with profusion, squander.

First got with guile, and then preserved with dread,
And after spent with pride and *lavishness*.
Faerie Queene.

Bellona's bridegroom, lapt in proof,
Confronted him, curbing his *lavish* spirit.
Shakspeare.

My father's purposes have been mistook;
And some about him have too *lavishly*
Wrested his meaning and authority. *Id.*

His jolly brother, opposite in sense,
Laughs at his thrift; and, *lavish* of expence,
Quaffs, crams, and guttles, in his own defence.
Dryden.

Then laughs the childish year with flowrets crowned,
And *lavishly* perfumes the fields around. *Id.*

If we consider *lavish* men carefully, we shall find it always proceeds from a certain incapacity of possessing themselves, and finding enjoyment in their own minds. *Spectator.*

Should we thus lead them to a field of slaughter,
Might not the impartial world with reason say,
We *lavished* at our deaths the blood of thousands?
Addison.

The dame has been too *lavish* of her feast,
And fed him till he loaths. *Rowe's Jane Shore.*

Praise to a wit is like rain to a tender flower; if it be moderately bestowed, it cheers and revives; but, if too *lavishly*, overcharges and depresses him.
Pope.

But has the cause been truly stated? Have not lamentation and wonder been *lavished* on an evil that was never felt. *Johnson.*

Let us not then be so *lavish*, so unjust, as not to pay this debt; by spending some part, at least, if we cannot all or most, of our time and care upon that which has not the most indefeasible claim to it.
Mason.

Yes—from afar a landscape seems to rise,
Deckt gorgeous by the *lavish* hand of Spring:
Thin gilded clouds float light along the skies,
And laughing loves disport on fluttering wing.
Beattie.

There youth, which needed not, nor thought of such
Vain adjuncts, *lavished* its true bloom, and health,
And bridal beauty, in the unwholesome press
Of flushed and crowded wassailers, and wasted
Its hours of rest in dreaming this was pleasure.
Byron.

LAUNCESTON, the capital of Cornwall, called also Dunhivid, from its situation on a down. King Henry III. made it a free borough. It was formerly composed of two other boroughs, viz. Dunhivid and Newport. It was incorporated by queen Mary I. in 1555. It is governed by a mayor, recorder, and eight aldermen; has a free-school, founded by queen Elizabeth, and now returns one member. Its markets are on Thursday and Saturday, and it has four fairs. The chapel, which was enlarged in the reign of Henry VI., and converted into a parish church, was rebuilt in the time of Henry VIII. It is a handsome Gothic building, with a lofty tower, and stands near the centre of the town. On the side of one of the walls is a fine figure of St. Mary Magdalen, in a recumbent position. Here is a handsome meeting-house of the Methodists. It had a monastery and a noble castle, which, because of its strength, was called Castle Terrible, and was given by king Richard I. to his brother, afterwards king John. The lower part of its ancient castle is used for the gaol. It is seated on the Tamar, twenty-eight miles north of Plymouth, and 214 west by south of London.

LAUNCH, *v.n.* & *v.a.* Skinner says from *lance*, because a ship is pushed into water with great force. To cast a ship into water; to push to sea: hence to expatiate; rove; cast from the hand.

Launch out into the deep, and let down your nets for a draught. *Luke* v. 4.

From hence that general care and study springs,
That *launching* and progression of the mind.
Davideis.

All art is used to sink episcopacy, and *launch* presbytery in England. *King Charles.*

So short a stay prevails;
He soon equips the ship, supplies the sails,
And gives the word to *launch*. *Dryden.*
The King of Heaven, obscure on high,
Bared his red arm, and *launching* from the sky
His writhen bolt, not shaking empty smoke,
Down to the deep abyss the flaming fellow strook.
Id.

For general history, Raleigh and Howel are to be had. He who would *launch* further into the ocean, may consult Whear. *Locke.*

Spenser has not contented himself with submissive imitation: he *launches* out into very flowery paths, which still conduct him into one great road, *Prior.*

I have *launched* out of my subject on this article.
Arbuthnot.

With stays and cordage last he rigged the ship,
And rolled on leavers, *launched* her in the deep.
Pope.

He had not acted in the character of a suppliant, if he had *launched* out into a long oration.
Broome.

They little thought, that day of pain,
When *launched*, as on the lightning's flash,
They bade me to destruction dash,
That one day I should come again,
With twice five thousand horse, to thank
The count for his uncourteous ride. *Byron.*

LAUND, *n. s.* Fr. *lande;* Welsh *lawn*. Lawn; a plain extended between woods.

Under this thick-grown brake we'll shroud ourselves,
For through this *laund* anon the deer will come.
Shakspeare.

LAUNDER, in mineralogy, a name given in Devonshire, and other places, to a long and shallow trough, which receives the powdered ore after it comes out of the box or coffer, which is a sort of mortar, in which it is powdered with iron pestles. The powdered ore, which is washed into the launder by the water from the coffer, is always finest nearest the grate, and coarser all the way down.

LAUN'DRESS, *n. s.* } Fr. *lavandiere;* Ital. LAUN'DRY. } *lavandera*. Skinner thinks that *lavandaresse* may have been the old word. A woman whose employment is to wash clothes: laundry, a room for washing clothes.

Take up these clothes here quickly; carry them to the *laundress* in Datchet Mead. *Shakspeare.*

The countess of Richmond would often say, On condition the princes of Christendom would march against the Turks, she would willingly attend them, and be their *laundress*. *Camden.*

Chalky water is too fretting, as appeareth in *laundry* of cloaths, which wear out apace. *Bacon.*

The *laundress* must be sure to tear her smocks in the washing, and yet wash them but half. *Swift.*

The affairs of the family ought to be consulted, whether they concern the stable, dairy, the pantry, or *laundry*. *Id.*

LAUNOI, DE, or LAUNOIUS (John), D. D., a learned French divine, born in 1691. Instead of seeking ecclesiastical preferment, he refused several good benefices, and devoted his time chiefly to church history. In pursuit of this study he visited Rome, where he acquired the esteem and friendship of Leo Allatius and Holstenius. He was a zealous defender of the liberties of the Gallican church; and wrote against legends and canonisations. His works make several large folio volumes. He lived in primitive simplicity, and died in 1678.

LAVOISIER (Anthony Laurence), the celebrated chemist, and one of the most eminent men of the eighteenth century, was born at Paris August 16th, 1743. Being of a noble family, he received a very liberal education, which he improved by the most unremitted industry. In his twenty-third year, on the 9th of April, 1766, the Academy of Sciences presented him with a gold medal, for his Dissertation on the best mode of enlightening the streets of a great city during the night. In 1768 he was admitted a member of that learned society, to whose service he chiefly devoted his scientific labors, and became one of its most active and useful associates. In these exertions his attention was successfully occupied with every branch of physical and mathematical science. The analysis of gypsum, the crystallisation of salts, the supposed conversion of water into earth, the effects produced by the grande deloupe of the garden of the infanta, the congelation of water, the project of bringing water from the Yvette to Paris, the phenomena of thunder and lightning, of the aurora borealis, of electricity, mineralogy, and various other important objects of experimental science, gave constant employment to the genius and talents of this great chemist. Journeys, in concert with M. Guettard, through every province of France, enabled him to procure numerous materials for a proper description and arrangement of the various genera and species in the mineral kingdom. These he arranged into a kind of chart, which served as a ground-work for a more laborious work on the Revolutions of the Globe, and the formation of Couches de la Terre; a work of which two beautiful sketches are to be seen in the Memoirs of the French Academy for 1772 and 1787. All his time and fortune were devoted to the culture of the sciences in general, nor did he seem to have an attachment to one science more than to another, till the investigations of Black, Priestley, and Cavendish, into the nature and properties of the gases, opened a new sphere for the exertions of genus; and, when Mr. Cavendish arrived in France, Lavoisier repeated and varied their experiments in every possible manner. In the end of 1755 he presented to the Academy his first chemical work, entitled New Experiments relative to the Existence of a fixed elastic fluid in certain substances, and to the phenomena which result from its fixation or disengagement. This came out in Paris just about the same time that Dr. Priestley's treatise on the different species of air appeared at London; and, though it may be considered rather as a syllabus or outline than a complete treatise, yet it was executed with so much perspicuity, and

his processes were described in it with so much exactness and accuracy, that it surpassed every former publication of the kind. Lavoisier now began to hold in his house philosophical assemblies, to which he invited every literary character celebrated in geometrical, chemical, or physical investigations. In these instructive conversations, discussions were regularly held, similar to those that preceded the first establishment of academies; the opinions of the most eminent literati in Europe were canvassed, the most new and striking passages in the works of foreign authors were quoted and discussed, and modern theories were investigated and tried by the touchstone of experiment. To these assemblies the literati of all nations found a ready admission; and Priestley, Watt, Bolton, Blagden, Fontana, Jacquin, Ingenhousz, Landriani, and other illustrious physiologists of Great Britain, Germany, and Italy, mingled in company with Berthollet, Monge, Borda, Cousin, Laplace, Lagrange, Guyton, Meunier, and Vandermonde. Thus Lavoisier became the founder of the French chemical school. This school, in which every individual was both tutor and pupil, lasted from 1776 to 1792; but the period when it flourished in its greatest vigor was between 1780 and 1788. Ancient and baseless theories were exploded, and the ideal doctrine of phlogiston vanished before the decisive proofs of experiment. In the twenty volumes published by the Academy of Sciences, between 1773 and 1793, there are forty memoirs by Lavoisier, replete with all the most important phenomena of the science. At last, in 1789, he published his Elements of Chemistry, which presented the science in a form entirely new, and completely distinguished the discoveries and improvements of Lavoisier from those of Dr. Priestley, and former chemists. This virtuous and truly great man could not, however, escape the bloody fangs of revolutionary violence. After having been repeatedly elected by his fellow-citizens a member of the national Assembly and National Convention, and a commissioner of the National Treasury, &c., he was falsely accused of being an accomplice in a plot to favor the success of the enemies of the republic; and, being brought before the revolutionary tribunal, was condemned to be guillotined. The bloody sentence was executed on the 9th of May 1794, to the regret of every friend to virtue, science, and humanity: his prosecutors, with barbarity worse than Gothic, refusing to allow him the respite of fourteen days to finish some important experiments in chemistry. See CHEMISTRY.

LAVOLTA. Fr. *lavolt*. An old dance.

I cannot sing,
Nor heel the high *lavolt*; nor sweeten talk;
Nor play at subtle games. *Shakspeare.*

LAVORO, TERRA DI, a considerable province of the north-west part of Naples, bordered by the Tuscan Sea on the south-west, the Campagna di Roma on the north-west, and on the east and south by other provinces of the Neapolitan territory; about 1720 square miles in superficial extent. It has a rich soil; towards the coast the country is level; but in the interior it is penetrated by various branches of the Appenines. Its rivers are the Gangliano, the Volturno, and the Clanio. It contains also the lakes Fondi, Argano, Lucrino, Fusano, and Licalo. Here is made the famous lachrymæ Christi wine.

LAURA, in church history, a collection of small cells at some distance from each other, in which the hermits in ancient times lived together in a wilderness. These hermits did not live in community, but each monk provided for himself in his distinct cell. The most celebrated lauras mentioned in ecclesiastical history were in Palestine: as the laura of St. Euthymus, at four or five leagues distance from Jerusalem; the laura of St. Saba, near the brook Cedron; the laura of the Towers, near the river Jordan, &c.

LAURA, the celebrated mistress of Petrarch was born in 1310, at Avignon, and married to Hugh de Sades. See PETRARCH. She died of the plague in 1348, aged thirty-eight.

LAUREATE, or POET LAUREATE, an officer of the household of the kings of Britain.—Of the first institution of poets laureate, Wharton in his History of English Poetry has given the following account: 'Great confusion has entered into this subject, on account of the degrees in grammar, which included rhetoric and versification, anciently taken in our universities, particularly at Oxford: on which occasion, a wreath of laurel was presented to the new graduate, who was afterwards usually styled Poeta laureatus. These scholastic laureations, however, seem to have given rise to the appellation in question. I will give some instances at Oxford, which at the same time will explain the nature of the studies for which our academical philologists received their rewards. About the year 1470 one John Watson, a student in grammar, obtained a concession to be graduated and laureated in that science; on condition that he composed 100 Latin verses in praise of the university, and a Latin comedy. Another grammarian was distinguished with the same badge, after having stipulated, that, at the next public act, he would affix the same number of hexameters on the great gates of St. Mary's church, that they might be seen by the whole university. This was at that period the most convenient mode of publication. About the same time one Maurice Byrchensaw, a scholar in rhetoric, supplicated to be admitted to read lectures, that is, to take a degree in that faculty; and his petition was granted, with a provision, that he should write 100 verses on the glory of the university, and not suffer Ovid's Art of Love, and the Elegies of Pamphilius, to be studied in auditory. Not long afterwards, one John Balman, another rhetorician, having complied with the terms imposed, of explaining the first book of Tully's Offices, and likewise the first of his Epistles, without any pecuniary emolument, was graduated in rhetoric; and a crown of laurel was publicly placed on his head by the chancellor of the university. About the year 1489, Skelton was laureated at Oxford, and in the year 1493 was permitted to wear his laurel at Cambridge. Robert Whittington affords the last instance of a rhetorical degree at Oxford. He was a secular priest, and eminent for his various treatises in grammar, and for his facility in Latin poetry; having exercised his art many years, and submitting to the customary demand

of 100 verses, he was honored with the laurel in the year 1512. With regard to the poet laureate of the kings of England, he is undoubtedly the same that is styled the king's versifier, and to whom 100 shillings were paid as his annual stipend in the year 1251. But when or how that title commenced, and whether this officer was ever solemnly crowned with laurel at his first investiture, I will not pretend to determine, after the researches of the learned Selden on this question nave proved unsuccessful. It seems most probable, that the barbarous and inglorious name of versifier gradually gave way to an appellation of more elegance and dignity: or rather, that at length those only were in general invited to this appointment who had received academical sanction, and had merited a crown of laurel in the universities for their abilities in Latin composition, particularly Latin versification. Thus the king's laureate was nothing more than 'a graduated rhetorician employed in the service of the king.' That he originally wrote in Latin, appears from the ancient title versificator: and may be moreover collected from the two Latin poems, which Baston and Gulielmus, who appear to have respectively acted in the capacity of royal poets to Richard I. and Edward II., officially composed on Richard's crusade, and Edward's siege of Striveling Castle. And Bernard, successively poet-laureate of Henry VII. and VIII. affords a still stronger proof that this officer was a Latin scholar. Bernard was a native of Thoulouse and an Augustine monk. He was not only the king's poet laureate, as is supposed, but his historiographer, and preceptor in grammar to prince Arthur. He obtained many ecclesiastical preferments in England. All the pieces now to be found in character of poet laureate are in Latin. These are, An Address to Henry VIII., for the most auspicious beginning of the tenth year of his reign, with an Epithalamium on the marriage of Francis the dauphin of France with the king's daughter; A New Year's Gift for the year 1515; and, Verses wishing prosperity to his majesty's thirteenth year. He has left some Latin hymns; and many of his prose pieces, which he wrote in tne quality of historiographer to both monarchs, are remaining. I am of opinion that it was not customary for the royal laureate to write in English till the reformation of religion had begun to diminish the veneration for the Latin language; or, rather, till the love of novelty, and a better sense of things, had banished the narrow pedantries of monastic erudition, and taught us to cultivate our native language.'

LAU'REL, *n. s.*, LAU'REATE, *adj.*, LAUREA'TION, *n. s.*, LAU'REATED, *adj.* } Fr. *laurier*; Ital. *lauro*; Span. *lauriero*; Port. *laurero*, a tree. See LAURUS. Laureate is decked with laurel, or pertaining to the poet so decked, or styled poet laureate: laureation, the act or state of taking degrees in a Scottish university: laurelled, crowned with laurels.

And whanne this worthy duc had thus ydon,
He toke his host, and home he rit anon,
With *laurer* crouned as a conquerour,
And ther he liveth in joye and in honour
Terme of his lif. *Chaucer. Cant. Tales.*

The *laurel*, meed of mighty conquerors,
And poets sage. *Faerie Queen.*

Hearest thou the news? my friend! the express is come
With *laurelled* letters from the camp to Rome. *Dryden.*

Bid Amaranthus all his beauty shed,
And daffodillies fill their caps with tears,
To strew the *laureate* hearse where Lycid lies. *Milton.*

The *laurel* or cherry-bay, by cutting away the side branches, will rise to a large tree. *Mortimer.*

The *laurels* or *laurel* of the ancients is affirmed by naturalists to be what we call the bay tree. *Ainsworth.*

Then future ages with delight shall see
How Plato's, Bacon's, Newton's, looks agree;
Or in fair series *laurelled* bards be shown,
A Virgil there, and here an Addison. *Pope.*

Soft on her lap her *laureate* son reclines. *Id.*

If endless ages can outweigh an hour,
Let not the *laurel*, but the palm inspire. *Young.*

The beacons of surrounding foes—
A king must lay his limbs at length,
Are these the *laurels* and repose,
For which the nations strain their strength? *Byron.*

And being fluent—save indeed when fed ill—
He lied with such a fervour of invention—
There was no doubt he earned his *laureat* pension. *Id.*

LAUREL, See LAURUS, and PRUNUS.

LAUREL, ALEXANDRIAN. See RUSCUS.

LAUREL, SEA SIDE. See PHYLLANTHUS.

LAUREL MOUNTAINS, a ridge of mountains in the United States, extending from North Carolina to Pennsylvania, and forming part of the great range called the Alleghany Mountains. They lie west of the Alleghany ridge, and several head-waters of the Ohio rise among them. In one of them, about lat. 36°, there is a spring of water remarkably cold, and as blue as indigo. The Great Kanhaway breaks through them in its way to the Ohio, in long. 81° 19′ W., lat. 38° 30′ N.

LAURELS, pieces of gold coined in the year 1619, with the king's head laureated, which gave them the name of laurels; the 20*s*. pieces whereof were marked with XX., the 10*s*. X: and 5*s*. pieces with V.

LAURENCE (St.), a river of North America. See LAWRENCE (St.).

LAURENS CASTRA. See LAURENTUM.

LAURENT, or ST. LAURENT, an island of South America, near the coast of Peru, at the entrance of the harbour of Callao.

LAURENTALES, LAURENTALIA, or LARENTALIA, called also Larentinalia, and Larentales, feasts celebrated among the Romans on the tenth of the kalends of January or 23d of December, in memory of Acca Laurentia, wife of the shepherd Faustulus, and nurse of Romulus and Remus. Acca Laurentia, from whom the solemnity took its name, is represented as no less remarkable for the beauty of her person, than her lasciviousness; on account of which she was nicknamed by her neighbours lupa, the she wolf; which has given rise to the tradition of Romulus and Remus being suckled by a wolf. She afterwards married a very rich man, who brought her great wealth, which, at her death, she left to the Roman people; in consideration whereof

they performed these honors to her memory, though others represent the feast as held in honor of Jupiter Latiaris. See LARENTINALIA and LARES.

LAURENTIUS, (Koster), one of the first printers, and, according to some, the inventor of the art, was born at Haerlem about 1370, and held several offices in the magistracy of that city. His first work was an Horarium containing the letters of the alphabet, the Lord's prayer, the apostles' creed, and two or three short prayers; the next was the Speculum salutis, in which he introduced pictures on wooden blocks; then Donatus, the larger size; and afterwards the same work in a less size. All these were printed on separate moveable wooden types fastened together by threads. It has been very erroneously supposed, that he quitted the profession, and died broken-hearted: but it is certain that he did not live to see the art brought to perfection. He died in 1440, aged seventy. His grandsons took his business and printed new editions of Donatus and the speculum. They afterwards reprinted the latter, with a Latin translation, in which they used their grandfather's wooden pictures; and printed the book partly on wooden blocks, partly on wooden separate types, according to Mr. Meerman, who has given an exact engraving of each kind, taken from different parts of the same book, which was published between the years 1442 and 1450. Nor did they stop here: they continued to print several editions of the Speculum, both in Latin and in Dutch; and many other works, particularly Historia Alexandri Magni: Flavii Vedatii (for Vegetii) Renati Epitome de Re Militàri; and Opera varia à Thomas à Kempis. Of each of them Meerman has given an engraved specimen. They were all printed with separate wooden types; and, by their great neatness, are a proof that the descendants of Laurentius were industrious in improving his invention. Kempis was printed at Haerlem in 1472, and was the last known work of Laurentius's descendants, who soon after disposed of all their materials, and probably quitted their employment; as the use of fusile types was about that time universally diffused through Holland, by the settling of Martens at Alost, where he pursued the art with reputation for upwards of sixty years. See PRINTING.

LAURENTUM, or LAURENS CASTRA, in ancient geography, a town of Latium, supposed to be the royal residence of those most ancient kings, Latinus, Picus, and Faunus. (Virgil.) Hither the emperor Commodus retired during a pestilence. Its name was from an adjoining grove of bay trees, midway between Ostia and Antium.

LAURICOCHA, Tunguragua, or False Maranon, a river of South America, which has its rise in a lake of the same name near Guanuco, in 11° S. lat. It sweeps with a circular course towards Xauxa; when, rising over the east side of the Andes, it flows northwards through Chachapoyas, to Jean de Bracamoros, and the Ucayale or Amazons, into which it falls, in lat. 4° 55′ S. Its course is about 1000 miles.

LAURO (Philip), a celebrated painter, born in Rome in 1623. He learned the first rudiments of the art from his father, Balthasar, who was himself a good painter. He afterwards studied under Angelo Carosello, his brother-in-law; and proved so great a proficient, that in a short time he far surpassed his tutor in design, coloring, and elegance of taste. He applied himself to painting historical subjects in a small size, enriching the back grounds with lively landscapes; but though his small paintings are most esteemed he finished several grand compositions for altar-pieces. He died in 1694; and his works are eagerly purchased at high prices all over Europe.

LAURO, or LAURON, in ancient geography, a town of Hispania Citra, where Cneius Pompeius, son of Pompey the Great, was defeated and slain. It is now called Lorigne, and lies fifteen miles north of Lliria in Valencia.

LAURUS, the bay tree, a genus of the monogynia order, and enneandria class of plants; natural order twelfth, holoraceæ: CAL. none: COR. calycine, or serving in place of the calyx, and sexpartite; the nectarium with three glandules, each terminated by two bristles surrounding the germen. The interior filaments furnished with glandules at the base: the fruit a monospermous plum. There are several species; the following are the most remarkable:—

1. L. æstivalis, the deciduous bay, growing naturally in North America. It rises with an upright stem, covered with a purplish bark, having oblong, oval, acuminated, veined, deciduous leaves, two or three inches long, and half as broad, growing opposite; with small white flowers succeeded by red berries. The deciduous bay, in a moist rich soil, in which it principally delights, will grow to be about sixteen feet high; but in some soils, that are possessed of the opposite qualities, it will hardly arrive at half that height. The flowers are succeeded in May by large red berries, which never ripen in England: so that, notwithstanding the leaves in summer are very handsome, and the color of the bark makes a variety in winter, it is principally the scarcity of this plant which makes it valuable.

2. L. benzoina, the benzoin, or Benjamin tree, is also a native of North America; grows fifteen or twenty feet high, divided into a very branchy head; with oval, acute, deciduous leaves, three or four inches long, and half as broad; and small yellowish flowers, not succeeded by berries in this country. This tree will grow to a much larger size than the preceding, and its branches are more numerous. The leaves on their upper surface are venose, and of a whitish cast. When bruised, they emit a fine fragrant smell. This tree was formerly mistaken for that which produces the drug called benzoin; which is now known to be obtained from a species of styrax.

3. L. camphora, the camphor tree, grows naturally in the woods of the western parts of Japan, and in the adjacent islands. The root smells stronger of camphor than any of the other parts, and yields it in greater plenty. The bark of the stalk is outwardly somewhat rough; but in the inner surface smooth and mucous, and therefore easily separated from the wood, which is dry and of a white color. The leaves

stand upon slender foot-stalks, have an entire undulated margin, running out into a point; have the upper surface of a lively and shining green, the lower herbaceous and silky; and are furnished with a few lateral nerves, which stretch archwise to the circumference, and frequently terminate in small warts; a circumstance peculiar to this species of laurus. The flowers are produced on the tops of foot-stalks, which proceed from the arm-pits of the leaves; but not till the tree has attained considerable age and size. The flower-stalks are slender, branched at the top, and divided into very short pedicles, each supporting a single flower. These flowers are white, and consist of six petals, which are succeeded by a purple and shining berry of the size of a pea, and in figure somewhat top-shaped. It is composed of a soft pulpy substance that is purple, and has the taste of cloves and camphor; and of a nucleus or kernel of the size of a pepper, that is covered with a black, shining, oily corticle, of an insipid taste. The medicine called camphor, though solid, is the essential oil of the laurus camphora; and is obtained from it by distillation in the East Indies. The abbè Grosier informs us, that in China some of these trees are above 100 cubits in height, and so thick that twenty persons cannot enclose them. Common camphor costs only a penny the ounce at Peking; but it is inferior to that of Borneo, in the judgment even of the Chinese. The manner in which some authors have spoken of camphor, the abbè observes, gives us reason to conclude, that they have been entirely ignorant of the process employed to obtain this salutary gum. The camphor does not drop to the earth like the gums of certain resinous trees, which are preserved by discharging that part of their substance which is too oily; neither does it distil from the bottom to the top of the tree through an incision made in it. The Chinese would practise this method could it be employed with success; for it is very common in China to make such kind of incisions in resinous trees; but the camphor is obtained by boiling the branches of the tree, and then purifying the juice so extracted. See CHEMISTRY and PHARMACY.

4. L. cassia, the base cinnamon, has lanceolated leaves, triple nerved. The bark of this species is known in the shops by the name of cassia lignea. This bark, which is imported from China and different parts of the East Indies, has a very near resemblance to the cinnamon; though distinguishable from it by being of a thicker and coarser appearance, and by its breaking short and smooth, while the cinnamon breaks fibrous and shivery. It resembles cinnamon still more exactly in its aromatic flavor, than in its external appearance: and seems only to differ from it in being somewhat weaker, in abounding more with a viscous mucilaginous matter, and in being less astringent. Accordingly, it has not only a place in the Edinburgh pharmocopœia, but is also the basis of a distilled water.

5. L. cinnamomum, the cinnamon tree, is a native of Ceylon. It has a large root, and divides into several branches, covered with a bark, which on the outer side is of a grayish-brown, and on the inside has a reddish cast The wood of the root is hard, white, and has no smell. The body of the tree, which grows to the height of twenty or thirty feet, is covered, as well as its numerous branches, with a bark which at first is green, and afterwards red. The leaf is longer and narrower than the common bay tree: and it is three-nerved, the nerves vanishing towards the top. The flowers are small and white, and grow in large bunches at the extremity of the branches; they have an agreeable smell, something like that of the lily of the valley. The fruit is shaped like an acorn, but is not so large. This species may be treated like the green-house plants, but it is rather a stove plant in this country. As the tree puts out numerous side branches, with a dense foliage, from the very bottom of the trunk; this furnishes an opportunity of obtaining plenty of layers, and facilitates the propagation of the tree, as it does not perfect its seeds in any quantity under six or seven years; when it becomes so plentifully loaded, that a single tree is sufficient almost for a colony. It seems to delight in a loose moist soil, and to require a southern aspect; the trees, thus planted, flourishing better than others growing in loam, and not so well exposed to the sun. When healthy, it is (from layers) of a pretty quick growth, reaching in eight years, the height of fifteen or twenty feet, is very spreading, and furnished with numerous branches, of a size fit for decortication. The seeds, however, are a long time in coming up, and the plants make small progress for the first year or two. 'The birds appear to be very fond of the berries, and will probably propagate this tree in the same way they do many others every where over the island; so that in a short time it will grow spontaneously, or without cultivation.' Cinnamon is the under bark of the cinnamomum. The best season for separating it from the outer bark, which is gray and rugged, is the spring, when the sap flows in the greatest abundance. It is cut into thin slices, and exposed to the sun, and curls up in drying. The old trees produce a coarse kind of cinnamon; the spice is in perfection in the island of Ceylon, when the trees are not older than three or four years. When the trunk has been stripped of its bark, it receives no further nourishment; but the root is still alive, and continues to throw out fresh shoots. The fruit of the tree is shaped like an acorn, but is not so large. Its seed, when boiled in water, yields an oil which swims at top, and takes fire. If left to cool, it hardens into a white substance, of which candles are made, which have an agreeable smell. The cinnamon is not reckoned excellent, unless it be fine, smooth, brittle, thin, and of a yellow color inclining to red; fragrant, aromatic, and of a poignant, yet agreeable taste. The connoisseurs give the preference to that of which the pieces are long, but slender. That which comes to us is generally mixed with the cassia bark; but this last is easily distinguished. Cinnamon splinters in breaking, and has a roughness with its aromatic flavor; while the cassia breaks smooth, and has a mucilaginous taste. Cinna-

mon is a very elegant and useful aromatic, more grateful both to the palate and stomach than most other substances of this class. By its astringent quality it likewise corroborates the viscera, and proves of great service in several kinds of alvine fluxes, and immoderate discharges from the uterus. 'The best cinnamon bark is taken from the small branches, of about an inch diameter, the larger limbs not being so easily decorticated, and not yielding so good or so strong a cinnamon. The smaller twigs, or those that have not acquired a cineritious bark, are too full of sap and mucilage, and have little aroma. It is the liber, or inner bark, that constitutes the cinnamon; from which the two external barks must be carefully and entirely separated, or they vitiate the flavor of the cinnamon; to do which with dexterity, and to raise the bark from the wood, requires some practice. The bark being separated, the smaller pieces are to be placed within the larger; which, by exposure to the sun or the air, presently coil up, and require no further preparation. A dry season is the proper one for taking the bark; as it is found to be weakened after long or heavy rains. Cinnamon, though more retentive of its virtues than any of the other spices, yet requires to be protected, when taken, from the air and moisture, by close packing in cedar chests. The leaves of this tree, whether recent or dried, are so strongly impregnated with an aroma, as to afford a good succedaneum for the bark, both in cookery and medicine. Distilled, they give an excellent simple and spirituous water, and an essential oil. Powdered, they are a good aromatic spice, or mareschal perfume.'

L. nobilis, the evergreen bay tree, is a native of Italy, and has an upright trunk, branching on every side from the bottom upward; with spear-shaped, nervous, stiff, evergreen leaves, three inches long, and two broad; and small, yellowish, quadrifid, diœcious flowers, succeeded by red berries in autumn and winter. Of this species there are varieties, with broad, narrow, striped, or waved leaves. They are propagated by layers, or by the berries. Evelyn says, he has seen bay trees nearly thirty feet high, and almost two feet in diameter; and enumerates the bay amongst useful trees. Hanbury tells us, that 'it will grow to thirty feet in height, with a trunk of two feet in diameter;' and accordingly he arranges it amongst his forest trees: he acknowledges, however, at the same time, that the wood is of little value. The bay is nevertheless a fine aromatic, and a beautiful evergreen. It is said to be the true laurus of the ancients, with which they adorned the brows of their successful generals. Like the holly, box, and laurel, the bay will bear the shade and drip of taller trees; and it is upon the whole a very desirable evergreen, being extremely ornamental. The leaves and berries have a moderately strong aromatic smell, and a warm, bitterish, pungent taste; the berries are stronger in both respects than the leaves, and afford in distillation a larger quantity of essential aromatic oil; they yield also an almost insipid oil to the press, in consequence of which they prove unctuous in the mouth. They are warm carminatives, and sometimes prescribed with this intention against flatulent cholics, and in hysterical disorders. Their principal use in the present practice is in glysters, and some external applications.

L. persea, the avocado pear tree, or alligator pear, rises to a considerable height, with a straight trunk, of which the bark and wood are of a grayish color. The leaves are long, oval, pointed, of a substance like leather, and of a beautiful green color. The flowers are produced in large knots or clusters at the extremities of the branches, and consist each of six petals disposed in the form of a star, and of a dirty white or yellow color, with an agreeable odor, which diffuses itself to a considerable distance It is a native of the West Indies. It begins to bear two years and a half, or at most three years, after being planted; and, like most of the trees in warm climates, bears twice a year. This species, with the camphor and cinnamon require the treatment common to greenhouse plants. The persea is cultivated universally in the West Indies by all ranks of people. The fruit is pear-shaped, and from one to two pounds in weight. On removing a green skin or covering, a yellow butyraceous substance appears; and in the heart a large round seed or stone, which is unequal in the surface, and exceedingly hard and woody. This fruit is ripe in August and September, and constitutes one of the most agreeable articles of diet for six or eight weeks to the negroes. These pears, with a little salt and a plantain or two, afford a hearty meal. They are also served up at the tables of the planters as choice fruit. When the pear is ripe, the yellow or eatable substance is firmer than butter, and tastes somewhat like butter or marrow: hence it is called by some the vegetable marrow. But, however excellent this fruit is when ripe, it is very dangerous when pulled and eaten before maturity. The leaves of this tree and those of the bead vine or wild liquorice are made into pectoral decoctions by the common people. The large stone is used for marking linen. The cloth is tied or held over the stone, and the letters are pricked out by a needle through the cloth and into the seed. The stain is a reddish brown, which never washes out.

L. sassafras, is a native of North America. It has a shrub-like straight stem, garnished with both oval and three-lobed, shining, deciduous leaves, of different sizes, from three to six inches long, and nearly as broad, with small yellowish flowers, succeeded by blackish berries; but not in this country. This species, as well as the æstivalis and benzoin, may be propagated—1. By the seeds; 2. By layers; but by this method they will be two, three, or even four years, before they have struck out good roots; though the Benjamin tree is propagated fastest by this method; 3. By suckers, which they will at all times throw out, and which may be often taken off with pretty good roots; 4. Cuttings, when planted in a good bark bed, and duly watered, will also often grow. When this method is practised, and plants obtained, they must be inured by degrees to the open air, till they are hardy enough to be finally planted out. The sassafras will grow to nearly the height of the

deciduous bay and benzoin, though the branches are not so numerous. Its bark is smooth, and of a red color, which beautifully distinguishes it in winter: whilst the fine shining green of its leaves constitutes its greatest beauty in summer. In these, indeed, there is a variety, and a very extraordinary one. Some are large, and of an oval figure; others are smaller, and of the same shape; whilst others again are so divided into three lobes as to resemble the leaves of some sorts of the fig-tree. In America, the sassafras generally stands single in the woods, and along the fences round the fields. It flowers in May before the leaves come out; and, being entirely covered with them, it is distinguished at a great distance by their beautiful yellow color. The root has a fragrant smell, and a sweetish, aromatic, subacrid taste; the bark tastes much stronger than any other part, and the small twigs stronger than the large pieces. It is a warm aperient and corroborant, and frequently employed with success for purifying and sweetening the blood and juices. Sassafras yields in distillation an extremely fragrant oil of a penetrating pungent taste, so ponderous notwithstanding the lightness of the drug itself as to sink in water. Rectified spirit extracts the whole taste and smell of sassafras, and elevates nothing in evaporation: hence the spirituous extract proves the most elegant and efficacious preparation, as containing the virtue of the root entire. The bark is used in Pennsylvania and other parts of North America for dyeing worsted a fine lasting orange color, which does not fade in the sun. They use urine instead of alum in dyeing; and boil the dye in a brass boiler, because in an iron vessel it does not yield so fine a color. The wood is made use of for posts belonging to enclosures, for it is said to last a long time in the ground: but it is likewise said, that there is hardly any kind of wood which is more attacked by worms than this, when it is exposed to the air without cover; and that in a short time it is quite worm-eaten through and through. On cutting some part of the sassafras tree, or its shoots, and holding it to the nose, it has a strong but pleasant smell. Some people peel the root, and boil the peel with their beer while brewing. Others put the peel into brandy, either whilst it is distilling or after it is made.

LAUS, or LAOS, in ancient geography, a river of Italy, separating Lucania from the Bruttii, and running from east to west into the Tuscan Sea; with a cognominal bay, and a town, the last of Lucania, a little above the sea; a colony from Sybaris, according to Strabo, Pliny, and Stephanus. Both town and river are now called Laino, in Calabria Citra; and the bay, Golfo della Scalea.

LAUS POMPEIA, in ancient geography, a town of Insubria, situated to the east of Milan, between the rivers Addua and Lamber. It was built by the Boii after they passed the Alps: its ancient Gallic name is unknown. Strabo Pompeius, father of Pompey, leading thither a colony, gave it a new name, and conferred the Jus Latii on the ancient inhabitants who remained there. The modern Lodi is built from its ruins, at some distance.

LAUSANNE, a beautiful town of Switzerland, the capital of the canton of the Pays de Vaud, is situated on three eminences, about a mile north of the lake of Geneva. The streets of course are steep and irregular; but the Gothic cathedral crowning one of the eminences has been much admired. Little trade is carried on, and the only manufactures are jewellery and silversmiths' work. Other objects deserving attention are the chateau, an old edifice, the arsenal, the town house, the hospital, the charity school, and the riding and drawing schools. Here are also some good libraries and cabinets. Lausanne has long had claims to literary distinction. Since 1536 its academy has boasted various distinguished scholars, as Beza and Barbeyrac. Classics and divinity are the chief objects of study: there is also a professorship of law, and of natural and moral philosophy. In 1808 an improved form was given to this institution. Exclusive of the academy there also existed at Lausanne, after the revocation of the edict of Nantes, a seminary for the education of the French Protestant clergy, but since 1809 this has been discontinued. The French language is very well spoken here. Haller and Voltaire passed some years at Lausanne; and Gibbon, from 1783 to 1793, composed the chief part of his history here. Since 1814 it has been much visited by our countrymen. Strangers are still generally accommodated at pensions or boarding houses, in the manner described by Gibbon. The climate, though cold in winter, is thought healthy; and nothing can exceed in richness the prospect from the high tower of the cathedral. About a mile to the westward of Lausanne was a Roman station, Lausonium, of which fragments of buildings, bricks, coins, &c., have been at different times discovered. There are also the remains of a Roman road to the east, in the Chemin d'Estras, Via strata. Lausanne was long an appendage to the canton of Bern, but always had a separate constitution: the French in 1798 first incorporated it with the new canton of Vaud. It is forty-one miles south-west of Bern.

LAW (Edmund), D. D., bishop of Carlisle, was born in the parish of Cartmel in Lancashire A. D. 1703. His father, who was a clergyman, held a chapel in Cartmel. He was educated first at Cartmel, afterwards at Kendal, and completed his studies at St. John's College, Cambridge. Soon after taking his first degree he was elected fellow of Christ's College. During his residence there he published a translation of archbishop King's Essay upon the Origin of Evil, with copious notes; in which many metaphysical subjects are treated with great ingenuity and learning. To this work was prefixed, as a preliminary dissertation, a valuable piece, by the Rev. Mr. Gay of Sidney College, of whom Dr. Law had a high opinion. At this time he also prepared for the press an edition of Stephens's Thesaurus. In the year 1737 he was presented to the rectory of Graystock in Cumberland, worth £300 a-year. Soon after this he married Mary the daughter of John Christian, Esq. of Unerigg in Cumberland; and was promoted by the bishop of Carlisle to the archdeaconry of that diocese: in 1746 he went to reside at Sal-

keld, on the Eden, where he published Considerations on the Theory of Religion, to which were subjoined Reflections on the Life and Character of Christ; and an appendix concerning the use of the words Soul and Spirit in Holy Scripture, and the state of the dead there described. In 1754 he took his degree of D. D., and in his thesis defended the doctrine of the natural mortality of the soul. In 1756 he succeeded Dr. Keene, bishop of Chester, as master of Peterhouse in Cambridge. About 1760 he was appointed head librarian of the university; a situation peculiarly suited to his taste. Some time after this he was also appointed casuistical professor. In 1762 he suffered an irreparable affliction by the death of his lady, who left him eleven children, many of them very young. Some years afterwards, he received several other preferments. In 1768 the duke of Grafton recommended him to his majesty for the bishopric of Carlisle, not only without solicitation, but without his knowledge About 1777 our bishop gave to the public a handsome edition, in 3 vols. 4to., of Mr. Locke's Works, with the author's life, and a preface. About this time too he published Considerations on the Propriety of Requiring Subscriptions to Articles of Faith, and new editions of his two principal works, considerably enlarged. He held the see of Carlisle nearly nineteen years, generally spending the summer in his diocese at Rose Castle, where he died August 14th, 1787, aged eighty-four. His life was almost entirely devoted to metaphysical and religious enquiries. Beside the above works, he published in 1734 or 1735 a very ingenious Enquiry into the Ideas of Space, Time, &c., in which he combats the opinions of Dr. Clarke and his adherents. He was interred in his cathedral church, in which a handsome monument is erected to his memory, with a suitable inscription.

Law (Edward), lord Ellenborough, fourth son of Dr. Law, bishop of Carlisle, was born at Great Salkeld in Cumberland, in 1749, and educated at Cambridge. There he obtained a prize medal, given by the chancellor in 1771; and, after taking his first degree, became a student at Lincoln's Inn. Having been called to the bar, he established his reputation as leading counsel for Mr. Hastings. He was made attorney-general in 1801; and the following year he succeeded to the station of chief-justice, on which he was also made a baron. In 1806 he was a member of the whig cabinet, and held his post of chief-justice till 1818, when he resigned, and died December 13th of that year. Lord Ellenborough was an able judge, but of an ardent temperament, and well inclined to support all the measures of ministers.

Law (John), the celebrated projector, was the eldest son of a goldsmith in Edinburgh, and was born about 1681. He was educated for business; but possessed great abilities, and a very fertile invention. He had the address, when but a very young man, to recommend himself to the king's ministers in Scotland to arrange the revenue accounts, which were in great disorder at the time of the union. He also laid a proposal before the Scottish parliament, for supplying the kingdom with money, by establishing a bank, which should issue paper to the value of the whole landed property in the kingdom; but his plan, being thought wild, was rejected. His father dying, about 1704, Law succeeded to the small estate of Laurieston; and became a gamester and a man of fashion. He was tall and graceful in his person, and commonly went by the name of Beau Law., He was forced to fly his country, however, in the midst of his career, in consequence of having fought a duel and killed his antagonist. He escaped to Holland; thence proceeded to Venice, and wandered over Italy, studying the nature of banks, and making himself an adept in the mysteries of exchanges and re-exchanges. At the close of the reign of Louis XIV., when the French finances were in great disorder, Law having obtained an audience, the bankrupt king was delighted by his projects; but the minister Desmarest, menacing him with the Bastile, obliged him to fly from Paris. He next applied to Victor Amadeus, duke of Savoy, who informed him he was not rich enough to ruin himself. At the death of Louis XIV. the regent duke of Orleans, in despair, called in our numerical quack. By an arret of the 2d March, 1716, a bank was established by authority, in favor of Law and his associates; 200,000 shares were instituted, of 1000 livres each; and Law deposited in it to the value of 2000 or 3000 crowns, which he had accumulated in Italy by gaming. Many people had at first little confidence in this bank; but, when it was found that the payments were made with quickness and punctuality, they began to prefer its notes to ready money; in consequence of which, shares rose to more than twenty times their original value; and in 1719 their nominal value was more than eighty times the amount of all the current specie of France. Law was now created count Tankerville, Europe rang with his praise, even his calculating countrymen were beguiled into admiration of him, and his native city, humbly presenting him with her freedom, used these remarkable expressions: 'The city of Edinburgh presents its freedom to John Law, count of Tankerville, &c., &c., a most accomplished gentleman, the first of all bankers in Europe, the fortunate inventor of sources of commerce, in all parts of the remote world, and who has so well deserved of his nation.' Law was in fact adored; the proudest courtiers were reptiles before this mighty man, and dukes and duchesses patiently waited in his antichamber. But in 1720 this commercial bubble burst, and in its explosion almost overthrew the French government: it is remarkable that the same desperate game was played by the South Sea directors in England, in the same fatal year, 1720. Law being exiled as soon as the credit of his projects began to fail, retired to Venice, where he died in 1729. Montesquieu who saw him there, says, 'He is still the same man; his mind ever busied in financial schemes; his head is full of figures, of agios, and of banks. Of all his more than princely revenues, he has only saved a large white diamond, which, when he has no money, he pawns.' The principles upon which Law's original scheme was founded, are explained by himself in a Discourse concerning Money and Trade, which he published in Scotland.

LAW, *n. s.*
LAW'FUL, *adj.*
LAW'FULLY, *adv.*
LAW'FULNESS, *n. s.*
LAW'GIVER,
LAW'GIVING,
LAW'LESS, *adj.*
LAW'LESSLY, *adv.*
LAW'MAKER, *n. s.*
LAW'SUIT,
LAW'YER.

Sax. laga; Goth. *lalag*; Swed. *lag*; French *loi*; Span. and Port. *ley*; It. *legge*. Rule; decree; edict; statute: hence judicial process; established rule of any kind; the science of jurisprudence; theologically, the Mosaic, as distinct from the Christian institution: lawgiver and lawmaker are synonymous; lawsuit is a process in the law; a lawyer the professional conductor of it, or any professor of, or practitioner in the law. The other derivations do not seem to require explanation.

But the *lawe* is not of bileue, but he that doith the thingis of the *lawe* schal lyue in hem. *Wiclif. Gal.* 3.

And lo a man that hadde a drie hond, and thei axieden him and seiden, wher it be *leeful* to heele in the sabot, that thei shulden accuse him. *Id. Matt.* 12.

It is not *lawful* for thee to have her. *Matth.* xiv. 4.

That which doth assign unto each thing the kind, that which doth moderate the force and power, that which doth appoint the form and measure of working, the same we term a *law*. *Hooker.*

Their judgment is, that the church of Christ should admit no *lawmakers* but the evangelists. *Id.*

Is the *law* evil, because some *lawyers* in their office swerve from it? *Whitgifte.*

He hath resisted *law*,
And therefore *law* shall scorn him further trial
Than the severity of publick power. *Shakspeare.*

I dyed, whilst in the womb he stayed,
Attending Nature's *law*. *Id. Cymbeline.*

This bond is forfeit;
And *lawfully* by this the Jew may claim
A pound of flesh. *Id. Merchant of Venice.*

Take not the quarrel from his powerful arms,
He needs no indirect nor *lawless* course
To cut off those that have offended him. *Shakspeare.*

Fear not, he bears an honourable mind,
And will not use a woman *lawlessly*. *Id.*

It is like the breath of an unfee'd *lawyer*, you gave me nothing for it. *Id. King Lear.*

The necessity of war, which among human actions is the most *lawless*, hath some kind of affinity with the necessity of *law*. *Raleigh's Essays.*

It were an error to speak further, till I may see some sound foundation laid of the *lawfulness* of the action. *Bacon.*

Solomon we esteem as the *lawgiver* of our nation. *Id.*

I have entered into a work touching *laws*, in a middle term, between the speculative and reverend discourses of philosophers, and the writings of *lawyers*. *Id. Holy War.*

Our nation would not give *laws* to the Irish, therefore now the Irish gave *laws* to them. *Davies.*

So many *laws* argue so many sins. *Milton.*

Law can discover sin, but not remove,
Save by these shadowy expiations. *Id.*

The *lawless* tyrant, who denies
To know their God, or message to regard,
Must be compelled. *Id.*

Laws, if convenient and useful, are never the worse though they be desumed and taken from the laws of other countries. *Hale.*

Law does not put the least restraint
Upon our freedom, but maintain 't;
Or, if it does, 'tis for our good,
To give us freer latitude;
For wholesome *laws* preserve us free,
By stinting of our liberty. *Butler.*

Orpheus did not, as poets feign, tame savage beasts,
But men as *lawless*, and as wild as they. *Roscommon.*

Lawgiving heroes, famed for taming brutes,
And raising cities with their charming lutes. *Waller.*

Not *lawyers* at the bar play more with sense,
When brought to their last trope of eloquence,
Than they on every subject, great or small,
At clubs or councils, at a church or ball;
Then cry we rob them of their tribute due:
Alas! how can we laugh and pity too? *Stillingfleet's Essay on Conversation.*

Unhappy man! to break the pious *laws*
Of nature, pleading in his children's cause. *Dryden.*

I may be allowed to tell your lordship, the king of poets, what an extent of power you have, and how *lawfully* you may exercise it. *Id.*

Not the gods, nor angry Jove, will bear
Thy *lawless* wandering walks in open air. *Id.*

This is an inconvenience, I confess, that attends all governments whatsoever, when the governors have brought it to this pass, to be generally suspected of their people; the most dangerous state which they can possibly put themselves in; wherein they are the less to be pitied, because it is so easy to be avoided; it being as impossible for a governor, if he really means the good of his people, and the preservation of them, and their *laws* together, not to make them see and feel it, as it is for the father of a family not to let his children see he loves, and takes care of them. *Locke.*

Though it be not against strict justice for a man to do those things which he might otherwise *lawfully* do, albeit his neighbour doth take occasion from thence to conceive in his mind a false belief, yet Christian charity will, in many cases, restrain a man. *South.*

Tom Touchy is a fellow famous for taking the law of every body; there is not one in the town where he lives that he has not sued at a quarter-sessions. *Addison's Spectator.*

He, meteor-like, flames *lawless* through the void,
Destroying others, by himself destroyed. *Pope.*

A *law* may be very reasonable in itself, although one does not know the reason of the *lawgivers*. *Swift.*

Thy nymphs with scorn beheld their foes,
When the defendant's council rose;
And, what no *lawyer* ever lacked,
With impudence owned all the fact. *Id.*

The giving the priest a right to the tithe would produce *lawsuits* and wrangles; his attendance on the courts of justice would leave his people without a spiritual guide. *Id.*

Laws are like cobwebs, which may catch small flies, but let wasps and hornets break through. *Id.*

What is a *law*, if those who make it
Become the forwardest to break it? *Beattie.*

Children ought, as far as it is necessary and they are able, to support their parents, and to bear with their infirmities, do every thing in their power to make their lives comfortable, receive their advice with respectful attention, and obey all their *lawful* commands. *Beattie.*

The language of the Christian *lawgiver* is different. The world is not worthy of the ambition of an immortal being. Its honours and pleasures have a tendency to debase the mind, and disqualify it for future happiness. *Id.*

And here it must be remembered, that he distribute every thing according to the exact rules of justice, and with such a due care as to prevent all *lawsuits* and contentions for the future. *Paley.*

The framers of such a bill must be content to inherit the honours of that Athenian *lawgiver*, whose edicts were said to be written not in ink but in blood. *Byron.*

I am not speaking here of the reviled and discredited statute *law* only, but of that venerable common *law* to which our reformers are so fond of appealing on all occasions, as well as of the statute *law* by which it is modified, explained, or enforced. *Canning.*

LAW. Upon a subject of this magnitude and importance, our first duty, perhaps, is the lucid arrangement of what we have to offer the reader. He will find, therefore, the following treatise divided into four principal parts:—I. Of the Nature of Laws in general. II. Of the Laws of the United Kingdom, England. III. Of the Laws of Scotland. IV. Of the Laws of Ireland.

PART I.

OF THE NATURE OF LAWS IN GENERAL.

SECT. I—DEFINITIONS OF LAW.

Law, in its most general signification, is the rule or principle by which all things are regulated according to their nature and constitution. In this sense, all substances and beings have their laws. *The material world* has its laws; as the laws of motion and gravitation: thus, in bodies moved, the motion is received, increased, diminished, lost, according to the relations of the quantity of matter and velocity. The world itself, subsisting through so long a succession of ages, is directed by invariable laws, and without their constant operation it would inevitably perish. *The brute creation* has its laws: by which the individual is preserved, and the species continued. But, although brutes have their natural laws, they do not invariably conform to them. In this respect the *vegetable* world acts in stricter adherence to its innate principles; and indeed the whole intelligent world is far from being so well governed by its laws as the physical; for, though the laws of the former are equally invariable, it does not in the same degree obey them. This is because, on the one hand, man, though an intelligent being, is of a finite nature, and liable to error; and, on the other, his nature requires him to be a free agent. As a physical being he is, like all other bodies, governed by invariable laws; but as an intelligent being he frequently transgresses the primitive laws established by the Author of his nature, and even those of his own instituting he frequently alters and infringes

Law, in its more confined sense, and in which it is our present business to consider it, denotes the rules, not of action in general, but of human action or conduct; that is, the precepts by which man is commanded to regulate his behaviour. In this sense 'Law' is synonymous with one of the significations of right; for the law is that which is right, as that is right which is the law. Thus, according to Grotius, right signifies nothing more than what is just, and that more in a negative than a positive sense; so that right is that which is not unjust. For instance, to deprive another of what belongs to him, merely for one's own advantage, is repugnant to the law of nature, as Cicero observes in his third book of Offices; and, by way of proof, says, that, if the practice were general, all society and intercourse among men must be overturned. Florentinus, the lawyer, maintains that it is impious for one man to form designs against another, as nature has established a degree of kindness amongst us. Seneca remarks that, as all the members of the human body agree among themselves, because the preservation of each conduces to the welfare of the whole, so men should forbear from mutual injuries, as they were born for society, which cannot subsist unless all the parts of it are defended by mutual forbearance and good will.

Following the etymology of the term, as defined by Horne Tooke, right is that which is ordered, as wrong is that which is wrested from the right or ordered course. The next step in the definition is to determine by whom it has been ordered, so as to ascertain the sufficiency of the authority, and then to learn how the rule on any particular occasion is to be applied. The answer is, that the Author of nature has made the law, and reason must judge of its application, by comparing its consistency with other rules of the moral system, and observing its adaptation to the end designed, namely, the general happiness of the human race.

SECT. II.—OF THE ORIGIN OF PROPERTY AND CIVIL GOVERNMENT.

According to divine revelation, God gave to mankind in general dominion over the earth and all its creatures, from the first creation of the world. Even those who dispute this original title to property, must acknowledge the fact, that such dominion has actually existed from the earliest periods of society. All things, as Justin says, formed a common stock for all mankind, as the inheritors of one great patrimony. That is to say, the existing race were entitled to the earth, in the same manner that the immediate heir of an entailed estate is entitled to all its productions during the period of his natural life. In a rude state of society it naturally happened that every man seized to his own use or consumption whatever he met with; a general exercise of right which supplied the place of private property. So that to deprive any one of what he had thus seized, became an act of injustice. Yet this natural right of appropriation must be exercised under the restraint imposed by the law of benevolence, which is as innate a principle as the feeling of self-love, and the conse-

quent law of self-preservation. Though we are entitled to benefit ourselves as much as possible, we are not at liberty to injure others; still less to injure them needlessly. And it follows that no one could be entitled to take possession of a larger portion of unoccupied land than he really needed, or to retain so much of it as would deprive other human beings of a reasonable share in the common patrimony of mankind. If, indeed, that which was unoccupied were no more than sufficient for the use of a single family, but which could not be the case in the commencement of society, those who first took possession would have an absolute right to retain it, to the entire exclusion of all others. But if the unoccupied territory were of ample extent, and the first settlers or colonists were succeeded by others, who, driven by necessity, sought the means of subsistence, the latter would have a natural and moral right to a partition of so much of the soil as would be necessary for their wants, as the younger children of the same parent are entitled according to the natural law to a participation in the inheritance which would have descended entire, had the eldest remained the only child; and to withhold an equitable distribution, thus founded in nature and reason, would be atrociously unjust.

Cicero aptly compares the world to a theatre, in which the seats are common property, yet every spectator claims that which he occupies, for the time being, as his own. But it is clear that the spectator is entitled to one seat only, and has no right, because he first arrived, to take possession of more than one.

This view of the subject is further confirmed by the actual events which have occurred in the acquisition of property of different kinds. Thus it appears that a community of lands for pasture prevailed among men long after a community in animals, or flocks, had ceased. For the great extent of land was sufficient for the use of all occupants, as yet but few in number, without their incommoding each other. In the words of Virgil, it was declared unlawful to fix a landmark on the plain, or to apportion it out in stated limits. But as men increased in numbers, and their flocks in the same proportion, they could no longer with convenience enjoy the use of lands in common, and it became necessary to divide them into allotments for each family. It is evident here that the circumstance of first occupancy is not the only one by which mankind have been guided. We perceive that their convenience is assigned as the reason for the division of lands, and no one can doubt that it is more 'convenient' for individuals in general, as well as more just, that the division should be as nearly as possible proportioned to the wants and interests of society at large. In the hot countries of the east, wells would naturally be objects of great importance, for the refreshment of their herds and flocks; so that, in order to avoid strife and inconvenience, all would be anxious to have them as possessions of their own, and these would therefore constitute the first objects of contract or agreement. Strictly speaking, according to the moral law, it would be unjust in any individual to appropriate exclusively so essential an object as a well of water, which obviously is a common gift, and which no one could entirely require. The circumstance of first occupation could only confer the right of being first supplied, after which every one else would have an equal right. The accounts of the commencement of many of these important rights we derive from Sacred History, and they are found to agree with the opinions maintained upon this subject by philosophers and poets, who have described the community of goods that prevailed in the early state of the world, and the distribution of property which afterwards took place. Hence a notion may be formed of the reason why men departed from their primeval state of holding all things in common, attaching the ideas of property, first to moveable, and next to immoveable things.

In considering how things passed from being held in common to a state of property, it is obvious, says Grotius, that it was not by the act of the mind alone that this change took place. For men in that case could never know what others intended to appropriate to their own use, so as to exclude the claim of every other pretender to the same; and many too might desire to possess the same thing. Property therefore must have been established either by express agreement, as by division; or by tacit consent, as by occupancy. For as soon as it was found inconvenient to hold things in common, before any division of lands had been established, it is natural says Grotius, that it must have been generally agreed that whatever any one had occupied should be accounted his own. Cicero, he says, considered it admitted as a universal maxim that every one should rather wish himself to enjoy the necessaries of life, than leave them for the acquisition of another. This is an opinion very consonant with the character of the Roman orator, who was much addicted to the vice of avarice. Quintilian observes, if such be the condition of life, that whatever has fallen to the private use of any individual, becomes the property of such holder, it is evidently unjust to take away any thing which is possessed by such a right, an opinion which evidently rests upon the assumption of the very thing in dispute, that whatever has 'fallen' to private use, becomes the absolute property of the holder. Besides, if ever such an agreement took place as that which Grotius assumes, with respect to the division of lands either expressly or tacitly, the natural feeling of mankind in general must necessarily have been, that the land retained by each on account of previous occupancy should be of reasonable extent only, and proportioned to the wants of the rest of the community. Indeed the division of lands among the Hebrew and other early nations, however barbarous the state of society might be in which it took place, is a proof of the existence of that natural feeling amongst mankind relating to the claims of each individual to an equal or fair participation in the common property of the earth, notwithstanding accidental circumstances may have invested some of them with a previous occupation. The contrary theory supposes that the natural right does not depend upon moral considerations, but on the mere accident of first possession or seizure, which is equally absurd and unjust.

Among the means of acquiring property, Paulus, the lawyer, reckons one, which seems most natural; and that is, if by the ingenuity of art, or the exertions of labor, we have given to any production its existence amongst the works of man. Grotius contends, however, that as nothing can naturally be produced, except from some materials before in existence, it follows that, if those materials were our own, the possession of them under any new shape or commodity, is only a continuation of our former property. If they belonged to no one, our possession comes under the class of title by occupancy: but, if they were another's, no improvement of ours can by the law of nature give us a right of property therein. Now occupancy is, undoubtedly, according to the origin of society, the primary means of title; but it is obvious that the produce of labor stands equally high in natural right, although second to it in the order of existence. Thus the ancients, in styling Ceres a law-giver, meant to signify that the division of lands had given birth to a new kind of right; namely, the fruits of the earth. There is, indeed, an evident distinction between the right to the fruits of the earth and the right to the land itself. The former is generally the produce of some degree of skill, labor, care and attention, which, in natural justice, confers a claim beyond the mere act of possession. The latter is fortuitous, may be unattended by merit, and requires the sanction of time and the proof of general convenience fully to establish it; but no one can hesitate to concede to industry its reward, or can doubt that, whilst man is doomed to labor, he is entitled to its fruits.

The acquisition of property, or the establishment of the rights of individuals to its separate and exclusive enjoyment, and the formation of government, are necessarily coeval. It would have been in vain that a few scattered individuals or families should have agreed to respect each other's possessions, until society had been so far matured, that such agreements could be enforced amongst the parties making them, and their violation punished. When society is once formed, government, as observed by Blackstone, results of course, as necessary to preserve and to keep that society in order. Unless some superior be constituted, whose commands and decisions all the members are bound to obey, they would still remain as in a state of nature, without any judge upon earth to define their several rights, and redress their several wrongs. But as all the members of society are naturally equal, in whose hands are the reins of government to be entrusted? To this the general answer is easy; but the application of it to particular cases has occasioned one-half of those mischiefs which are apt to proceed from misguided political zeal. In general, all mankind will agree, that government should be reposed in such persons, in whom those qualities are most likely to be found, the perfection of which is among the attributes of him who is emphatically styled the Supreme Being; the three grand requisites, namely, of wisdom, of goodness, and of power: wisdom, to discern the real interest of the community; goodness, to endeavour always to pursue that interest; and power to carry this knowledge and intention into effect. These are the natural foundations of sovereignty, and these requisites ought to be found in every well constituted government.

How the several forms of government we now see in the world at first actually began is matter of great uncertainty. However they began, or by what right soever they subsist, there is and must be in all of them a supreme, irresistible, absolute, uncontrolled authority, in which the jura summi imperii, or the rights of sovereignty, reside. And this authority is placed in those hands wherein (according to the opinion of the founders of such respective states, either expressly given or collected from their tacit approbation) the qualities requisite for supremacy, wisdom, goodness and power, are the most likely to be found.

The political writers of antiquity do not allow more than three regular forms of government: the first when the sovereign power is lodged in an aggregate assembly, consisting of all the members of a community, which is called a *democracy*; the second when it is lodged in a council composed of select members, and then it is styled an *aristocracy*; the last when it is entrusted in the hands of a single person, and then it takes the name of a *monarchy*. All other species of government, they say, are either corruptions of, or reducible to, these three.

By the sovereign power is meant the making of laws; for, wherever that power resides, all others must conform to and be directed by it, whatever appearance the outward form and administration of the government may put on. For it is at any time in the option of the legislature to alter that form and administration by a new edict or rule, and to put the execution of the laws into whatever hands it pleases: and all the other powers of the state must obey the legislative power in the execution of their several functions, or else the constitution is at an end.

In a democracy, where the right of making law resides in the people at large, public virtue, or goodness of intention, is more likely to be found than either of the other qualities of government. Popular assemblies are frequently foolish in their contrivance, and weak in their execution; but generally mean to do the thing that is right and just, and have always a degree of patriotism or public spirit.

In aristocracies there is more wisdom to be found than in the other forms of government; being composed, or intended to be composed, of the most experienced citizens; but there is less honesty than in a republic, and less strength than in a monarchy.

A monarchy is indeed the most powerful of any, all the sinews of government being knit and united together in the hand of the prince; but then there is imminent danger of his employing that strength to improvident or oppressive purposes.

Thus these three species of government have all of them their several perfections and imperfections. Democracies are usually the best calculated to direct the end of a law; aristocracies to invent the means by which that end shall be obtained; and monarchies to carry those means into execution. And the ancients had in general

no idea of any other permanent form of government but these three, and Tacitus treats the notion of a mixed government, formed out of them all, and partaking of the advantages of each, as a visionary whim, and one that, if effected, could never be lasting or secure.

But, happily for the people of this island, the British Constitution has long remained a standing exception to the truth of this observation. For, as with us the executive power of the law is lodged in a single person, they have all the advantages of strength and despatch that are to be found in the most absolute monarchy: and, as the legislative power of the kingdom is entrusted to three distinct estates, entirely independent of each other; 1. the king; 2. the lords, spiritual and temporal, which is an aristocratical assembly of persons selected for their piety, birth, wisdom, valor, or property; and, 3. the house of commons, freely chosen by the people from among themselves, which makes it a kind of democracy; as this aggregate body, actuated by different springs, and attentive to different interests, composes the British parliament, and has the supreme disposal of every thing, there can no inconvenience be attempted by either of the three branches which will not be withstood by one of the other two, each branch being armed with a negative power sufficient to repel any innovation which it shall think inexpedient or dangerous.

Here, then, is lodged the sovereignty of the British constitution; and lodged as beneficially as is possible for society. For in no other shape could we be so certain of finding the three great qualities of government so happily united. If the supreme power were lodged in any one of the three branches separately, we must be exposed to the inconveniences of either absolute monarchy, aristocracy, or democracy: and so want two of the principal ingredients of good polity; either virtue, wisdom, or power. If it were lodged in any two of the branches, for instance in the king and house of lords, our laws might be providently made and well executed, but they might not always have the good of the people in view. If lodged in the king and commons, we should want that circumspection and mediatory caution which the wisdom of the peers is to afford. If the supreme rights of legislature were lodged in the two houses only, and the king had no negative upon their proceedings, they might be tempted to encroach upon the royal prerogative, or perhaps to abolish the kingly office, and thereby weaken, if not totally destroy, the strength of the executive power.

But the constitutional government of this island is so admirably tempered and compounded that nothing can endanger or hurt it, but destroying the equilibrium of power between one branch of the legislature and the rest. For if ever it should happen that the independence of any one of the three should be lost, or that it should become subservient to the views of either of the other two, there would soon be an end of our constitution. The legislature would be changed from that which was originally set up by the general consent and fundamental act of the society: and such a change, however effected, is according to Mr. Locke at once an entire dissolution of the bands of government; and the people are thereby reduced to a state of anarchy, with liberty to constitute to themselves a new legislative power.

Sect. III.—Of the Natural or Moral Law.

We have in the previous section anticipated some of the grounds upon which the law of nature depends, and have illustrated some of its applications.

Grotius observes that natural right is the dictate of right reason, showing the moral turpitude, or moral fitness, of any act, from its agreement or disagreement with a rational nature, and consequently that such an act is either forbidden or commanded by God, the Author of nature. The actions upon which such a dictate is given are either binding or unlawful in themselves, and therefore necessarily understood to be commanded or forbidden by God. This characteristic distinguishes natural right, not only from human law, but from the law which God himself has been pleased to reveal.

There are some things, however, allowed by the law of nature, not absolutely, but according to a certain state of affairs. Thus, by the law of nature, before property was introduced, every one had a right to the use of whatever he found unoccupied; and, before laws were enacted, to avenge his personal injuries by force. Thus Polybius, relating the manner in which men first entered into society, concludes, that the injuries done to parents or benefactors inevitably provoked the indignation of mankind, giving an additional reason, that, as understanding and reflection form the great difference between men and other animals, it is evident they could not transgress the bounds of that difference, like other animals, without exciting universal abhorrence of their conduct. When this sense of justice is attributed to brutes, it is done improperly, from some shadow and trace of reason they may possess. But it is not material to the nature of right, whether the actions appointed by the law of nature, such as the care of our offspring, are common to us with other animals or not, or, like the worship of God, are peculiar to man. We have two criteria for determining the conformity of actions with the moral law:—the one is the general tendency of the action to a beneficial result, and the other is the common or moral sense, and uniform feeling of mankind at large.

It appears that Blackstone rests the determination of the moral law upon the first criterion which we have stated: as does Dr. Paley. But we think the latter is an equally valid and satisfactory test. The nature of the former, however, Blackstone well explains; and the other we shall illustrate from the pages of Grotius. If, says he, the discovery of the first principles of the law of nature depended only upon the due exertion of right reason, and could not otherwise be obtained, than by a chain of metaphysical disquisitions, mankind would have wanted some inducement to have quickened their enquiries, and the greater part of the world would have rested content in mental indolence, and ignorance its inseparable companion. As therefore the Creator is a being, not only of infinite power and wisdom, but also

of infinite goodness, he has been pleased so to contrive the constitution of human nature, that we should want no other prompter to enquire after and pursue the rule of right, but only our own self-love, that universal principle of action. For he has so intimately connected the laws of eternal justice with the happiness of each individual, that the latter cannot be attained but by observing the former; and, if the former be punctually obeyed, it cannot but induce the latter. In consequence of which mutual connexion of justiee and human felicity, he has not perplexed the law of nature with a multitude of abstract rules and precepts, referring merely to the fitness or unfitness of things, as some have surmised; but has graciously reduced the rule of obedience to this one paternal precept, 'that man should pursue his own happiness.' This is the foundation of what is called ethics, or natural law. For the several articles into which it is branched, in our systems, amount to no more than demonstrating, that this or that action tends to man's real happiness; that is, his happiness estimated with reference to its substantial and enduring influence upon the whole aggregate of life. And therefore very justly concluding, that the performance of it is a part of the law of nature; or, on the other hand, that this or that action is destructive of man's real happiness, and therefore that the law of nature forbids it.

This law of nature, being coeval with mankind, and dictated by God himself, is of course superior in obligation to any other. It is binding over all the globe, in all countries, and at all times; no human laws are of any validity, if contrary to this; and such of them as are valid derive all their force, and all their authority, mediately or immediately, from this original.

But to apply this to the particular exigencies of each individual, we must still have recourse to reason, to discern what the law of nature directs in every circumstance of life; by considering what method will tend the most effectually to our own substantial happiness.

The existence of the law of nature is proved, 1st, by its agreement with a reasonable and social nature: 2nd, by its being received as such among all, or at least the more civilised, nations. For a general effect can only arise from a general cause. Now scarcely any other cause can be assigned for so general an opinion but the common sense, as it is called, or moral sense, of mankind.

In support of this doctrine Grotius has quoted various authorities. There is a sentence of Hesiod, he says, that has been much praised, that opinions which have prevailed amongst many nations, must have some foundation: and Heraclitus establishing common reason as the best criterion of truth, says, those things are certain which generally appear so. Among other authorities may be quoted Aristotle, who says it is a strong proof in our favor, when all appear to agree with what we say; and Cicero maintains, that the consent of all nations, in any case, is to be admitted for the law of nature. Seneca is of the same opinion: any thing, says he, appearing the same to all men, is a proof of its truth. Quintilian says, we hold those things to be true in which all men agree.

We have called them 'the more civilised nations;' for, as Porphyry observes, some nations are so strange that no fair judgment of human nature can be formed from them. Chrysostom cautions us not to form our judgments of things from such as have corrupt minds. Andronicus, the Rhodian, says that, with men of a right and sound understanding, natural justice is unchangeable. Nor does it alter the case, though men of disordered and perverted minds think otherwise, like him who should deny honey to be sweet. Plutarch too agrees entirely with what has been said, as appears from a passage in his life of Pompey, affirming that man neither was nor is by nature a wild unsociable animal, but it is the corruption of his nature which makes him so; yet by acquiring new habits, by changing his place and way of living, he may be reclaimed to his original gentleness. Aristotle, taking a description of man from his peculiar qualities, makes him an animal of a gentle nature; and in another part of his works he observes, that, in considering the nature of man, we are to take our likeness from nature in its pure, and not in its corrupt state.

Natural right, as Grotius observes, relates not only to those things that exist independently of the human will, but to many things which necessarily follow the exercise of that will. Thus property, as now in use, was at first a creature of the human will. But, after it was established, one man was prohibited by the law of nature from seizing the property of another against his will. Wherefore Paulus said that theft is expressly forbidden by the law of nature. Ulpian condemns it as infamous in its own nature; and Euripides, in the verses of Helena:—'The air is common to men, the earth also, where every man, in the ample enjoyment of his possession, must refrain from doing violence or injury to that of another.'

The practice of Grotius, which we have followed, in citing the opinions of poets, orators, and historians, in support of his argument, has been most satisfactorily vindicated by Sir James Mackintosh, in his admirable discourse on the Law of Nations. He says, 'he quotes them as witnesses, whose conspiring testimony, mightily strengthened and confirmed by their discordance on almost every other subject, is a conclusive proof of the unanimity of the whole human race on the great rules of duty, and the fundamental principles of morals. On such matters, poets and orators are the most unexceptionable of all witnesses; for they address themselves to the general feelings and sympathies of mankind; they are neither warped by system nor perverted by sophistry; they can attain none of their objects; they can neither please nor persuade; if they dwell on moral sentiments not in union with those of their readers. No system of moral philosophy can surely disregard the general feelings of human nature, and the according judgment of all ages and nations.'

To this may be added, that not only are poets, orators, and historians, naturally the most competent of all to give evidence upon the nature of

our moral feelings, from their own full possession of the best sympathies of human nature, and to establish the general fact by their own innate consciousness; but the appeal to these authorities has a due and beneficial effect upon those who do not possess this moral faculty in the same degree; yet who are influenced by the reverence they feel for distinguished authority, and who yield a salutary obedience to the principle, though they may not fully appreciate its nature, or comprehend its consequences.

Sect. IV.—Of the Revealed Law.

If the moral sense of mankind could always be relied upon; if the benevolent feelings of men were always in operation—their sense of justice unswayed by selfishness—and their reason and understanding always unclouded, each would be 'a law unto himself,' and need no other guide than his own impressions and convictions. But this every one personally knows is not the case; and it is too true, that even those who possess the most intelligence, the highest human virtue, and the longest experience, are still prone to error alike in their moral and intellectual perceptions. To them 'the ways of Heaven are dark and intricate,' and 'their understanding traces them in vain.'

It has pleased, therefore, Divine Providence, to enlighten this natural darkness of the human mind by several express revelations, which are to be found in the Holy Scriptures. Writers upon this subject hold that the revealed law, emanating from the will of the Creator, does not command or forbid things in themselves either binding or unlawful, but makes them unlawful by its prohibition, and binding by its command. 'Undoubtedly,' says a commentator on Grotius, 'actions are made unlawful by the law of God declaring them to be such;' as St. Paul says, 'but for the law, I should not have known sin:' that is, 'I should not have known its evil and its enormity, but from finding it so expressly prohibited.' Yet still, as God is the moral Governor of the world, though his prohibitions alone render any acts unlawful, such acts, even though prohibited, would be found, upon trial, to be at variance with the nature, and consequently detrimental to the happiness of men. Therefore, the Divine prohibitions, when examined, will be found conformable to the laws of nature. Thus the conspiring evidence of nature and revelation will show that God is the author of both.

The revealed law is termed by some the voluntary divine right. The very meaning of these words shows, that it springs from the divine will, by which it is distinguished from natural law. This law admits of what Anaxarchus said, that God does not will a thing because it is just, but that it is just or binding because God wills it. Now this law was given either to mankind in general or to one particular people. We find three periods at which it was given by God to the human race: the first of which was immediately after the creation of man; the second at the period of the flood, and the third by that glorious dispensation through Jesus Christ. These three laws undoubtedly bind all men, as soon as they come to a sufficient knowledge of them.

Of all nations there is but one to which God particularly vouchsafed to give laws, and that was the people of Israel. Hence we may infer that we are bound by no part of the Levitical law, strictly and properly so called; because any obligation, beyond that arising from the law of nature, must proceed from the express will of the law-giver. Now it cannot be discovered by any proof, that God intended any other people than the Israelites to be bound by that law. Therefore, with respect to ourselves, we have no occasion to prove an abrogation of that law, for it could never be abrogated with respect to those whom it never bound. But the Israelites were released from the ceremonial part as soon as the law of the gospel was proclaimed.

The chief doctrines of the revealed law, so far as they relate to the morals of society, independently of religious considerations (which will be treated in another part of the work), are the following:—That we should do unto others as we would they should do unto us. That we should love our neighbour as ourselves: and in the interpretation of the rule we are to consider every human being as our neigbour. That we should render good for evil. In other words, that we should not only love our neighbours but our enemies. Philosophically speaking, it is substituting the law of universal philanthropy in the place of individual rights and interests.

These are precepts which manifestly inculcate a higher and purer morality than the selfishness of human beings, and their natural short-sightedness would have been willing to adopt even had they been able to discover them.

Sect. V.—Of International Law.

It is evidently impossible for the whole race of mankind to be united in one great community in which the same laws should prevail, and in which the same supreme power could enforce their execution. They must therefore necessarily be divided into many different states, suited to the natural variety of their inclinations and capacities. But, though entirely independent of each other, yet they are capable of, and benefited by mutual intercourse. Hence arises another kind of law to regulate this inter-communication; namely, *The law of nations;* which, as none of these states will acknowledge a superiority, must depend entirely upon the rules of natural law, or upon mutual compacts, treaties, or leagues, between the several communities.

Yet, frequently, in one part of the world that is held for the law of nations which is not so in another. Now this law of nations can only be proved in the same manner as the unwritten civil law, and that is by the continual experience and testimony of the sages of the law. For this law, as Dio Chrysostom well observes, consists of the discoveries made by experience and time, that is of the universal expediency of the general principles of justice; and in this we derive great advantage from the writings of eminent historians.

The following are some of the general rules of the law of nations:—

1. That there should be a right of free passage through countries, across rivers, and over any part of the sea, which belong to a particular people, upon necessary occasions: as in quest of settlements, to trade with other nations, or recover lost possessions.

2. In the prosecution of a just war any power has a right to take possession of a neutral soil, if there be real grounds for supposing the enemy intends to make himself master of the same; especially if the enemy's occupying it would be attended with irreparable mischief. But this rule, or rather exception, arising from necessity, must be followed by ample restitution when the necessity has ceased.

3. The privileges or rights granted to the people of one country, should be granted to those of all other countries; yet it is said a monopoly may be lawfully allowed to one particular state. Both these dicta, however, cannot be correct, and, to reconcile them, we must suppose that monopolies are generally unlawful, but that there may be some exceptions to the rule, arising from peculiar circumstances.

4. The natives of one country have a right to reside in another for the recovery of health or other just cause.

Sect. VI.—Of Conventional or Municipal Law.

Although some part of the laws by which the intercourse of nations is regulated has its origin in compact, and depends upon the mere will of the contracting parties, yet the much larger and most important part of it depends on the law of nature. The reverse of this is the case with municipal laws, by which the citizens or subjects of particular communities are regulated. These are chiefly conventional, adopted by common consent, and binding only by the law of nature on the principle of obedience to the civil power. It is true the municipal law generally, though not invariably, enforces the natural law; but the larger portion of its code applies to actions which in a state of nature would be indifferent, and in the neglect or performance of which there might be neither blame nor merit.

This corresponds with what Grotius terms 'voluntary right,' deriving its origin from the will; and, according to his authority, that which is of human origin is either a civil right, or a right more or less extensive than the civil right, and which is derived from the civil power. The less extensive right, and not derived from the civil power although subject to it, is various; comprehending the authority of parents over children, masters over servants, and the like. For as there were parents and children, masters and servants, before there were princes and subjects, the rights arising out of these primitive relations exist independently of the conventional law.

In one signification of the word 'right,' Grotius considers it a moral quality annexed to the person, justly entitling him to possess some particular privilege, or to perform some particular act. This moral quality, as he terms it, when perfect, is called a faculty; when imperfect, an aptitude. Some of the instances adduced in support of this position, however, rather show a natural than a moral quality, and others a conventional one. Of the former is the power of a father over his child, and the right of a husband over his wife. Of the latter is the right to services in respect of land, the right of passage to a house, and the right of demanding the fulfilment of a promise.

Civilians call a 'faculty' that right which every man has to his own; but Grotius, taking it in its strict and proper sense, as applicable to a state of society, terms it a right, comprehending the power that we have over ourselves, which is called liberty, and the power that we have over others, as that of a master over his slaves. It likewise comprehends property, the use and possession, and the power of alienating and pledging it. It implies also the power of demanding what is due, to which the obligation of the party indebted corresponds.

In this conventional view of the subject, 'right' is two-fold, the one private, established for the advantage of each individual; the other superior, or public, involving the claims which the state has upon individuals and their property for the public good. Thus the regal authority is above that of a father and a master, and the sovereign has a greater right over the property of his subjects, where the public good is concerned, than the owners themselves; and, when the exigencies of the state require a supply, every man is more obliged to contribute towards it, than to satisfy his creditors.

According to the signification of the word right, now under review, it has the same meaning as law, taken in its most extensive sense, to denote a rule of action obliging us to do what is proper. We say, 'obliging' us, for the best counsels or precepts, if they lay us under no obligation to obey them, cannot come under the denomination of law or right. Permission is no act of the law, but only the silence of the law; yet the law prohibits any one from impeding another in doing what the law permits.

The law obliges us to do what is proper, no simply what is just. Yet from giving the name of a right to that which is proper, a more general acceptation of the word justice has been derived. Aristotle, defining one kind of right to be natural, and the other voluntary, adopts the term lawful *right* in the strictest sense of the word, law; and sometimes an instituted right. The Hebrews distinguished natural rights as precepts, and voluntary rights as statutes.

A positive, legal permission, is either full, granting us power to do some particular act without the least restriction, or less than full, only allowing men impunity for certain actions, and a right to do them without molestation from others. From the permission of the former kind, no less than from a positive precept, it follows that what the law allows is not contrary to the law of nature. Thus, the law of nature authorising self-defence in its fullest extent, the law of nations, which authorises war for the same purpose, cannot be repugnant to it. But with regard to the latter kind of permission, allowing impunity for certain acts, but not expressly authorising them, we cannot so readily conclude those acts

to be conformable to the law of nature; because, where the words of permission are ambiguous in their meaning, it is better for us to interpret, according to the established law of nature, what kind of permission it is, than from our conception of its expediency to conclude it conformable to the law of nature. The law of England on homicide, as excusable in self-defence, will illustrate this position.

The rights which God has established called natural rights, because every man has naturally a right to them, such as life and liberty, need not the aid of human laws to be more effectually invested in every man than they are; neither do they receive any additional strength, when declared by the municipal laws to be inviolable. On the contrary, no human legislature has power to abridge or destroy them, unless the owner shall himself commit some act that amounts to a forfeiture.

Neither do divine or natural duties, such as, for instance, the worship of God, the maintenance of children, and the like, receive any stronger sanction from being also declared to be duties by the law of the land. The case is the same as to crimes, and misdemeanors, that are forbidden by the laws, and therefore styled mala in se, such as murder, theft, and perjury; which contract no additional turpitude from being declared unlawful by the legislature.

From these general considerations we proceed to the more minute definition of municipal law, which, according to Blackstone, is 'a rule of civil conduct prescribed by the supreme power in a state, commanding what is right, and prohibiting what is wrong.'

It is a rule; not a transient sudden order concerning a particular person, but something permanent, uniform, and universal. It is also distinguished from advice or counsel, which we are at liberty to follow or not as we see proper, and to judge of the reasonableness or unreasonableness of the thing advised; for our obedience to the law depends not upon our approbation, but upon the maker's will. Counsel is only matter of persuasion, law is matter of injunction—counsel acts only upon the willing, law on the unwilling also.

It is also distinguished from a compact or agreement; for a compact is a promise proceeding from us—law is a command directed to us. It is true there is an obligation, which a compact carries with it, equal in point of conscience to that of a law; but then the origin of the obligation is different. In compacts, we ourselves determine and promise what shall be done, before we are obliged to do it: in laws, we are obliged to act without ourselves determining or promising any thing at all; yet it may be observed that, although we do not personally consent, we are presumed to do so by our representatives in the legislature.

It is also a rule of civil conduct. This distinguishes it from the natural and revealed law: the former of which is the rule of moral conduct, and the latter not only the rule of moral conduct but of faith. Municipal law regards man only as a citizen, and as bound to contribute his part to the subsistence and peace of society.

It is likewise a rule prescribed. It is requisite that the rule be notified to the people who are to obey it. The manner in which the notification is to be made very greatly varies. It may be notified by universal tradition and long practice; or vivâ voce by officers appointed for that purpose; or by writing or printing. Yet, whatever way is made use of, it is incumbent on the promulgators to do it in the most public and perspicuous manner. All laws should be made to commence in futuro, and be notified before their commencement, which is implied in the term ' prescribed.'

It is also a rule made by the supreme power in the state, for legislation is the greatest act of superiority that can be exercised by one being over another. Wherefore it is requisite to the very essence of a law, that it be made by the supreme power, the nature of which has been already shown.

Having thus defined the general nature of municipal laws, we now proceed to consider their several parts and objects.

Every law, as further defined by Blackstone, may be said to consist of several parts: one declaratory; whereby the rights to be observed, and the wrongs to be eschewed, are clearly defined and laid down—another, directory, whereby the subject is instructed and enjoined to observe those rights, and to abstain from the commission of those wrongs—a third, remedial, whereby a method is pointed out to recover a man's private rights, or redress his private wrongs—to which may be added a fourth, usually termed the sanction, or vindicatory branch of the law, whereby is signified what evil or penalty shall he incurred by such as commit any public wrongs, or transgress or neglect their duty.

With regard to the first of these, the *declaratory* part of the municipal law, this depends not so much upon the law of revelation or of nature, as upon the wisdom and will of the legislator. In all those cases which are determined by the former, the legislator acts only in subordination to the great Law-giver, transcribing and publishing his precepts. So that the declaratory part of the municipal law has no force with regard to actions that are naturally and intrinsically right or wrong.

But, with regard to things in themselves indifferent, the case is entirely different. These become either right or wrong, just or unjust, duties or misdemeanors, according as the municipal legislator sees proper for promoting the welfare of the society, and more effectually carrying on the purposes of civil life Thus the common law has declared, that the goods of the wife do instantly upon marriage become the property and right of the husband; and the statute law has declared all monopolies a public offence; yet *that* right, and *this* offence, have no foundation in nature; but are merely created by the law for the purposes of civil society.

And sometimes, where the thing itself has its rise from the law of nature, the particular circumstances and mode of doing it become right or wrong, as the laws of the land shall direct. Thus, for instance, in civil duties, obedience to superiors is the doctrine of revealed as well as

natural religion: but who those superiors shall be, and in what circumstances, or to what degrees they shall be obeyed, it is the province of human laws to determine. And so, as to injuries or crimes, it must be left to our own legislature to decide, in what cases the seizing another's cattle shall amount to the crime of robbery, and where it shall be a justifiable action, as when a landlord takes them by way of distress for rent.

So much for the declaratory part of the municipal law: and the *directory* stands much upon the same footing; for this virtually includes the former, the delaration being usually collected from the direction. The law that says, 'thou shalt not steal,' implies a declaration that stealing is a crime. And we have seen, that, in things naturally indifferent, the very essence of right and wrong depends upon the direction of the laws to do or to omit them.

The *remedial* part of a law is so necessary a consequence of the former two, that laws must be very vague and imperfect without it. For in vain would rights be declared, in vain directed to be observed, if there were no method of recovering and asserting those rights, when wrongfully withheld or invaded. This is what we mean when we speak of the protection of the law. When, for instance, the declaratory part of the law has said, 'that the field or inheritance which belonged to Titius's father is vested by his death in Titius,' and the directory part has 'forbidden any one to enter on another's property without the leave of the owner;' if Gaius after this will presume to take possession of the land, the remedial part of the law will then interpose its office; will make Gaius restore the possession to Titius, and also pay him damages for the invasion.

With regard to the *sanction* of laws, or the evil that may attend the breach of public duties; human legislators have for the most part chosen to make the sanction of their laws rather vindicatory than remuneratory, or to consist rather in punishments than in actual particular rewards. Because in the first place the quiet enjoyment and protection of all our civil rights and liberties, which are the sure and general consequence of obedience to the municipal law, are in themselves the best and most valuable of all rewards: because, also, were the exercise of every virtue to be enforced by the proposal of particular rewards, it were impossible for any state to furnish stock enough for so profuse a bounty: and farther, because the dread of evil is a much more forcible principle of human actions than the prospect of good. The truth is, also, it may be observed, that providence, in its bounty, has not only connected our actual prosperity with every kind of good conduct, but has rendered the performance of duty in itself an agreeable and pleasurable act, and the source of enduring satisfaction afterwards in the contemplation of the result. It is manifest, also, that the good which already predominates in the lot of the meritorious, must present a contrast to the evil of punishment amply sufficient to constitute the most efficient motive.

For which reasons, though a prudent bestowing of rewards is sometimes of exquisite use, yet those civil laws which enforce and enjoin our duty, seldom, if ever, propose any privilege of gift to such as obey the law; but constantly come armed with a penalty denounced against transgressors, either expressly defining the nature and quantity of the punishment, or else leaving it to the discretion of the judges, and those who are entrusted with the care of putting the laws in execution.

Of all the parts of a law, the most effectual is the *vindicatory* For it is but lost labor to say, Do this, or avoid that, unless we also declare, this shall be the consequence of your non-compliance. The main strength of a law, therefore, consists in the penalty annexed to it. In this lies the principal obligation of human laws.

Legislators and their laws are said to *compel* and *oblige;* because, by declaring a penalty against offenders, they bring it to pass that no man can easily choose to transgress the law; since, by reason of the impending correction, compliance is in a high degree preferable to disobedience.

It has been justly held by ethical writers, that human laws are binding upon men's consciences. But, if that were the only or most forcible obligation, the good only would regard the laws, and the bad would set them at defiance. And, true as this principle is, it must still be understood with much restriction. It holds, we apprehend, as to rights; and that when the law has determined the field to belong to Titius, it is matter of conscience no longer to withhold or invade it.

So also in regard to natural duties, and such offences as are mala in se: here we are bound in conscience, because we are bound by superior laws, before those human laws were in being, to perform the one and abstain from the other.

But in relation to those laws which enjoin only positive duties, and forbid only such things as are not mala in se, but mala prohibita merely, without any intermixture of moral guilt, annexing a penalty to non-compliance; here, in the opinion of Blackstone (but in which we cannot agree): Conscience seems to be no farther concerned, than by directing a submission to the penalty, in case of our breach of those laws: for otherwise, he says, the multitude of penal laws in a state would not only be looked upon as an impolitic, but would also be a very wicked thing, if every such law were a snare for the conscience of the subject. But in these cases the alternative is offered to every man; either abstain from this, or submit to such penalty: and his conscience will be clear, whichever side of the alternative he thinks proper to embrace. Thus, by the statutes for preserving the game, a penalty is denounced against every unqualified person that kills a hare, and against every person who possesses a partridge in August. And so too, by other statutes, pecuniary penalties are inflicted for exercising trades without serving an apprenticeship thereto, for erecting cottages without annexing four acres of land to each, for not burying the dead in woollen, for not performing statute work on the public roads, and for innumerable other positive misdemeanors. Now these prohibitory laws do not make the transgression a moral offence, or

sin: the only obligation in conscience is to submit to the penalty, if levied. It must, however, be observed, he continues, that we are here speaking of laws that are simply and purely penal, where the thing forbidden or enjoined is wholly a matter of indifference, and where the penalty inflicted is an adequate compensation for the civil inconvenience supposed to arise from the offence. But, where disobedience to the law involves in it also any degree of public or private injury, there it falls within our former distinction, and is also an offence against conscience.

We cannot subscribe to the soundness of this distinction between the duty of obedience to those laws which relate to things termed intrinsically bad and those which are merely prohibited. Undoubtedly there are different degrees of offence, and the conscience is infinitely more outraged by the destruction of human life than by that of an animal protected only by the game laws; but the principle is the same in kind though different in degree. The duty of obedience is violated in the one case as it is in the other, although the importance of the consequences are widely different in amount.

The duty of obedience to the divine law, whether revealed or natural, stands first in order, but next to that must be placed obedience to the laws of our country, which, although less perfectly constructed than the other, are, at least, designed for the general benefit. The learned judge himself observes, that obedience to superiors is the doctrine of revealed as well as of natural religion, and who those superiors shall be, and in what circumstances or what degrees they shall be obeyed, it is the province of human laws to determine.

In reference to the divine law, it may be observed, that obedience is the test of the performance of the highest duty. The very first offence was an act of disobedience. Now, it cannot be objected that the command related to that which was in itself indifferent, for the divine will of the Creator is absolute. Nor can it be urged that the propriety or reasonableness of the injunction was not intelligible to the creature. Neither can it be said that the doom which followed the transgression would have been more consistent with justice, had the commission of murder, or some other offence which we are accustomed to deem atrocious, been the appointed criterion of obedience rather than the eating of the prohibited fruit.

If the doctrine, that the payment of the penalty is a full compensation for offence, be valid, then it would follow that the sufferings which succeeded the fall of man expiated his offence, and no other atonement could be necessary; an inference we presume from which the orthodox judge would have recoiled with abhorrence.

The doctrine is also equally at variance with the duties which arise out of the natural relations of life. The child is not exculpated for an act of express disobedience by the reproof or punishment which the parent inflicts. Repeated acts of disobedience, though followed each by chastisement, still leave a stain upon the moral character. The child remains incorrigibly disobedient. Is it enough to say that it has always undergone such punishment as the parent thought proper to apportion? No: the outrages against the moral law cannot be balanced by 'corporal sufferance,' any more than a felony can be compounded by the restoration of the stolen property, or the payment of its price.

But the absurdity of this may be shown still more. Though, according to the barbarous rules of the lex talionis, an eye may be demanded for an eye, and a tooth for a tooth, justice cannot acquit the offender from blame by his submitting to the mutilation. Punishment is the consequence of the offence, and he who suffers it cannnot complain of its infliction, for he is forewarned that it must ensue. But is the injured party, he who has been deprived of sight, is he satisfied by knowing that his enemy has been reduced to equal blindness? Has the injury he has sustained been removed by it? Did he submit to the wrong upon the tacit understanding that a similar fate awaited his assailant? He entered into no such contract, he is not benefited by it, and cannot be satisfied with its fulfilment; and, monstrous as such an hypothesis is, it is the only one that can support the position that justice is satisfied by inflicting the penalty. This wild sort of retribution is illustrated by a tale ascribed to the author of Waverley, and selected from a work now said to be in the press. A Highland drover, after a dispute with his fellow traveller, an Englishman, who triumphs over him in a boxing-match, quits the scene of his deadly mortification, and obtains a weapon which he had confided to a friend, with which he returns after the lapse of some hours, and stabs his antagonist to the heart. He then surrenders himself to the law. What his conscience is supposed to tell him we are not informed, but his language is quite accordant with the doctrine under review: he holds himself justified: 'I give,' says he, 'life for life; what can I do more?' The sophism is manifest; though he could not do more, he could have done less; he could have permitted his fellow-being to live; his own recklessness of life restored not animation to the dead, nor diminished the mortal pang which followed his murderous blow, or the agony inflicted upon the kindred of his victim.

Tried by the general principles of legislation it is a doctrine the most absurd imaginable. The legislator frames a law, declaring a certain act unlawful, and prohibiting its performance. The case supposes that the interest of society is concerned in making the regulation, and a conscientious man, a good subject, he who feels a regard for the interests of his country, would concur in the law, and require no other sanction. Although he might not perceive the reason of the enactment, he would not think himself justified in setting up his private judgment against the whole legislative body of the state; or, if he were conscientiously satisfied of the injustice or impolicy of the measure, he would seek in a lawful way to obtain an alteration, and in the mean time submit to it. But, as we have seen, it is necessary to enforce obedience upon the unwilling by affixing adequate penalties for transgression. Yet it can never be supposed that the legislator intends to open an account current

with the disobedient, and accept so much money for so many acts of transgression. The object of the legislator is to prevent the infraction altogether. The penalty is imposed for that purpose; and, according to every correct principle, the penalty should be of an amount calculated to effect its object.

According to this rule, if it happened that the penalty at first imposed did not prevent the offence, it would be strictly justifiable, and indeed the duty of the legislature, to increase the amount until the object of prevention were accomplished. Now another question arises out of this race between the legislator and the culprit,—has the latter a moral right, as regards the duty he owes to himself, to throw away his substance, to consume his property, in paying the forfeitures consequent upon his infractions of the law? We think this cannot be maintained.

The principle may be illustrated by applying it to the private transactions of individuals. It must be allowed that it is immoral to withhold the payment of a debt, or the performance of a contract, which we know to be just, and which we are able to discharge. And it cannot be maintained that this breach of the moral law is healed by the payment of the expense to which the creditor may be put. We can never know the precise consequences of our misconduct, and certainly do not repair it by the mere satisfaction which the law has awarded, since the evil may be, and generally is, much greater than the law can ascertain, or than can be on all occasions made the subject of legal proof and adjudication.

Nay it is singularly enough in another place admitted by the learned judge, that human laws are binding upon men's consciences, so far as respects the rights of property, and that, 'when the law has determined the field to belong to Titius, it is matter of conscience no longer to withhold or invade it.' Yet in a state of nature the field could not belong to Titius. It was perfectly indifferent who first obtained a right by occupancy, and that occupancy could not naturally enable him to invest it in some other person after his death, to the entire exclusion, not only of mankind in general, but even of his own children; yet such are the rights of property according to the conventional law.

When we examine indeed the instances, which are adduced to support the doctrine, its dangerous tendency becomes still more obvious. In all these instances the evil is, that each individual is allowed to judge, in his own case, whether the action prohibited be malum in se or not, and it is unnecessary to say that the interests of society must suffer, when every one is thus allowed to consult his own personal interest and convenience; and to enter into a sort of bargain with justice, that he shall be at liberty to violate its rules at a certain price. Take the instances adduced by Blackstone. First, of the penalties inflicted by the game laws. Now, although these laws are liable to many serious objections, and it is desirable to alter them, yet in several respects they are founded on principles clearly important and beneficial to society. It is not right that one man should trespass on another's land to kill even what are termed 'wild animals,' but which have been reared at considerable expense. Nor is it right that the poor should quit their useful and honest callings to prowl after these wild animals; a practice which, if it were general, would reduce civilised society to barbarism, and carry us back to the precarious life of the hunter. Against, therefore, the killing of game, except on a man's own land, and against the seizure of it by those who have contributed nothing to rear it, we conceive the laws may justly provide by adequate penalties.

Then it is said that exercising certain trades without having served an apprenticeship is also an 'indifferent thing,' and the payment of the penalty all that the moral law requires. To us it appears, however, that there is both mischief to the public and injury to individuals by a transgression of this prohibition. With respect to several trades the law may be unnecessary, since the public can provide against the evil by employing those only who are skilful; yet, even here, it is a small part of the public only that is competent to form a correct judgment and to elude imposition. The injury in such cases is limited to those, who, conforming to the law are put to expense or inconvenience in the course of their apprenticeship from which those who set the law at defiance are exempted. But take the instance of an apothecary: is it not contrary to good conscience that he should, in breach of a wholesome provision, venture to exercise his important profession to the imminent danger of human life without adequate skill and knowledge, which he can scarcely acquire in less than seven years?

The other instances of burying in woollen, working on the public roads, &c., may also be shown to have the public good in view and the neglect or violation of them as tending to its injury: and, therefore, that it is not an 'indifferent thing' to violate such laws, nor the infraction morally satisfied by the discharge of the penalty.

It may be said, however, that this mode of stating the instances adduced, brings them within the rule of mala in se. If that be so, we ought to have been furnished with those cases which are not capable of such an explanation. The illustrations are at variance with the doctrine. Yet we may presume that the well-known learning and ingenuity of the distinguished commentator have selected the best that could be found; and in truth, if there were any instance in which it is really a matter of perfect indifference whether the law were obeyed or not, except as to the payment of the price set upon the infringement, such a law ought not to exist. There ought to be no enactments which do not tend, on the one hand, to benefit society; or, on the other, to prevent the injuries which may assail it. All other laws are necessarily in violation of the indefeasible rights of individual liberty. And it will be recollected that the important question before us does not in the least depend upon the natural injustice of any law, but that it simply is—Whether the infringement of a law, relating to things in a state of nature indifferent, but which in a state of society the legislator has a

right to make, can be violated, with moral impunity, upon satisfaction of the penalty affixed?

There is also this evil consequent upon allowing individuals to compound for their disobedience, that it lessens the respect we should feel for the laws in general, and consequently those maxims of jurisprudence, which in every view of moral obligation we are bound to obey, would possess proportionally a less degree of influence. Indeed, the bulk of mankind are unable to make those distinctions, which in some cases are so exceedingly nice, that even the learned themselves differ about them, and they will be apt to confound such distinctions, and interpret them in their own favor, rather than the contrary. And we conceive there is this important consideration lost sight of, in pursuing these subtleties, that the moral disgrace attendant upon a trial and conviction for offending against any legal enactment, tends more to secure obedience to the laws in general, than those penalties which it is supposed altogether settle the account, as if it were a mere matter of arithmetic.

In short, we deny altogether the correctness of the premises from which the doctrine in question has been drawn. There are no actions which can be considered strictly 'indifferent,' after the law of the land has pronounced them otherwise. What might have been the case in an imaginary state, prior to the institution of civilised life, it is now needless to discuss. It is clearly important to connect the sanction of moral obligation with the enactments of the legislature, and thus to ensure as far as possible that obedience upon which the well-being of society depends.

Such being the general nature and several constituent parts of the municipal law, we have next to consider the rules by which they are interpreted and the general principles of equity.

The fairest and most rational method to interpret the will of the legislature is by exploring its intentions at the time when the law was made. To consult the legislative body upon the meaning of its laws, in relation to particular cases, is objectionable at all periods; but especially so at any considerable distance of time from their enactment, for the individual members are frequently changed, and it would rarely, if ever, occur that the same persons, the exact majority of whom passed the law, could be assembled to expound its intention. Besides, as Blackstone observes, such a practice would not only be endless but afford great room for partiality and oppression.

The most natural and probable means of determining questionable laws are by the examination of the words, the context, the subject matter, the effects and consequence, and the spirit and reason of the law.

1. *Words* are generally to be understood in their usual and most known signification, according to their general and popular use. Thus the law mentioned by Puffendorf, which forbad a layman to lay hands on a priest, was adjuged to extend to him who had hurt a priest with a weapon. Again, terms of art, or technical terms, must be taken according to the acceptation of the learned in each art trade and science. So in the act of settlement, where the crown of England is limited 'to the princess Sophia, and the heirs of her body, being protestants,' it becomes necessary to call in the assistance of lawyers to ascertain the precise idea of the words 'heirs of her body;' which in a legal sense comprise only certain lineal descendants. Lastly, where words are clearly repugnant in two laws, the latter law takes place of the elder.

2. If words happen to be still dubious we may establish their meaning from the *context*; with which it may be of singular use to compare a word or sentence, whenever it is ambiguous, equivocal, or intricate. Thus the preamble is ofted called in to help the construction of an act of parliament. Of the same nature is the comparison of a law with other laws made by the same legislature that have some affinity with the subject, or that expressly relate to the same point.

3. As to the *subject matter*, words are always understood as having a regard thereto; for that is always supposed to be in the eye of the legislator, and all his expressions directed to that end. Thus, when a law of Edward III. forbids all ecclesiastical persons to purchase provisions at Rome, it might seem to prohibit the buying of grain and other victual; but when we consider that the statute was made to repress the usurpations of the papal see, and that the nominations to benefices by the pope were called *provisions*, we see that the restraint is intended to be laid upon such provisions only.

4. As to the *effects and consequences*, the rule is that where words bear either none, or a very absurd signification, if literally understood, we must deviate from the received sense of them. Therefore the Bolognian law, mentioned by Puffendorf, which enacted, 'that whoever drew blood in the streets should be punished with the utmost severity,' was held not to extend to the surgeon who opened the vein of a person who fell down in the street in a fit.

5. But, lastly, the most universal and effectual way of discovering the true meaning of a law, when the words are dubious, is by considering the *reason* and *spirit* of it, or the cause which moved the legislator to enact it. For, when the reason ceases, the law itself ought likewise to cease with it. An instance of this is given in a case put by Cicero, or whoever else was the author of the treatise inscribed to Herennius. There was a law, that those who in a storm forsook the ship should forfeit all property therein, and the ship and lading should belong entirely to those who staid in it. In a dangerous tempest all the mariners forsook the ship, except only one sick passenger, who was unable to get out and escape. By chance the ship came safely to port. The sick man kept possession, and claimed the benefit of the law. Now here all the learned agree that the sick man was not within the reason of the law; for the reason of making it was, to give encouragement to such as should venture their lives to save the vessel: but this is a merit to which he could never pretend, who neither staid in the ship upon that account, nor contributed any thing to its preservation.

From this method of interpreting laws by the reason of them, arises what we call equity: which is thus defined by Grotius, 'the correction of that wherein the law (by reason of its universality) is deficient.' For since in laws all cases cannot be foreseen or expressed, it is necessary, that, when the general decrees of the law come to be applied to particular cases, there should be somewhere a power vested of defining those circumstances, which (had they been foreseen) the legislator himself would have expressed. And these are the cases which, according to Grotius, 'lex non exactè definit, sed arbitrio boni viri permittit.'

Equity thus depending essentially upon the particular circumstances of each individual case, there can be no established rules and fixed precepts of equity laid down, without destroying its very essence, and reducing it to a positive law. And, on the other hand, the liberty of considering all cases in an equitable light must not be indulged too far, lest thereby we destroy all law, and leave the decision of every question in the breast of the judge. And law, without equity, though hard and disagreeable, is much more desirable for the public good than equity without law; which would make every judge a legislator and introduce infinite confusion: as there would then be almost as many different rules of action laid down in our courts, as there are differences of capacity and sentiments in the human mind.

PART II.

OF THE LAWS OF ENGLAND.

The LAWS OF ENGLAND seem sufficiently important to require a separate introduction on the subject of their origin and foundations; the civil must, then, necessarily be divided from the criminal code; and each of these heads will be subdivided into chapters, preserving all the greater distinctions of rights and injuries, crimes and punishments, &c.

INTRODUCTION.

Origin, foundation, and maxims of the law.—The law of England may be divided into the lex non scripta, the unwritten or common law; and the lex scripta, the written or statute law.

OF THE COMMON LAW.—The lex non scripta, or unwritten law, includes not only general customs, or the common law properly so called, but also the particular customs of certain parts of the kingdom, and likewise those particular laws that are by custom observed only in certain courts and jurisdictions. In the profound ignorance of letters which formerly overspread the whole western world, all laws were entirely traditional; the nations among which they prevailed having little or no idea of writing. Thus the British as well as the Gallic druids committed all their laws and learning to memory; and it is said of the primitive Saxons here, as well as their brethren on the continent, that leges solâ memoriâ et usu retinebant. But at present the monuments and evidences of our legal customs are contained in the records of the several courts of justice, in books of reports and judicial decisions, and in the treatises of learned sages of the profession, preserved and handed down from the times of highest antiquity. These parts of the English law, however, are styled leges non scriptæ, because their original institution and authority are not set down in writing as acts of parliament are, but receive their binding power, and the force of laws, by long and immemorial usage, and by their universal reception throughout the kingdom: in like manner as Aulus Gellius defines the jus non scriptum to be that which is tacito et illiterato hominum consensu et moribus expressum.

The ancient English, particularly Fortescue, insist that these customs are as old as the primitive Britons, and continued down through the several mutations of government and inhabitants to the present time, unchanged and unadulterated. But the truth is, that there never was any formal exchange of one system of laws for another, though doubtless, by the intermixture of nations, the Romans, the Picts, the Saxons, the Danes, and the Normans, they must have insensibly introduced and incorporated many of their own customs with those that were before established. 'Our laws,' says lord Bacon, 'are mixed as our language;' and, indeed, antiquarians and historians assure us that our body of law is of this compound nature. For they tell us, that in the time of Alfred the local customs of the several provinces of the kingdom were grown so various that he found it expedient to compile his dome-book, or liber judicialis, for the general use of the whole kingdom. This book is said to have been extant so late as the reign of Edward IV., but is now unfortunately lost.

But the irruption and establishment of the Danes in England, which followed soon after, introduced new customs, and caused this code of Alfred in many provinces to fall into disuse, or at least to be mixed and debased with other laws. So that about the beginning of the eleventh century there were three principal systems of laws prevailing in different districts. 1. The *Mercen lage*, or Mercian laws, and those bordering on Wales. 2. The *West Saxon lage*, or laws of the West Saxons, prevailed in the counties south and west of the island, from Kent to Devonshire. These were probably much the same with the laws of Alfred, Berkshire being the seat of his peculiar residence. 3. The *Dane lage*, or Danish law, was principally maintained in the rest of the midland counties and on the east coast, the part most exposed to their inroads. The northern provinces were then under a distinct government.

Out of these three laws, Roger Hoveden and Ranulphus Cestrensis inform us, king Edward the Confessor extracted one uniform digest of laws to be observed throughout the whole kingdom; though Hovedon and the author of an old MS. chronicle assure us, likewise, that this work was projected and begun by his grandfather king Edgar. General digests of the same kind were formed in the thirteenth and fifteenth centuries in Sweden, Spain, and Portugal. That of Sweden was styled the Land's Lagh.

But these compilations of Edgar, and Edward the Confessor seem to have been only a new

edition of Alfred's dome-book, with additions. For Alfred is generally styled legum Anglicanarum conditor, as Edward is the restitutor. These, however, are the laws so often styled in history the laws of Edward the Confessor; which our ancestors struggled so hard to maintain, under the first princes of the Norman line; and which subsequent princes so frequently promised to keep and to restore, as the most popular act they could do when pressed by foreign emergencies, or domestic discontents. These are the laws that so vigorously withstood the repeated attacks of the civil law; which established in the twelfth century a new Roman empire over most states on the continent; states that have lost by these means their political liberties, while the free constitution of England, by the struggle to retain them, has been rather improved than debased. These, in short, are the laws which gave rise to that collection of maxims and customs now known by the name of the common law, a name either given to it, in contradistinction to other laws, as the statute law, the civil law, the law merchant, and the like; or, more probably, as a law common to all the realm, the jus commune, or folcright, mentioned by king Edward the Elder, after the abolition of the several provincial customs and particular laws above-mentioned. But the antiquity of this law is much higher than tradition or history can reach: hence, in this law, the goodness of a custom depends upon its having been used time out of mind.

This unwritten or common law is properly distinguishable into three kinds: I. General customs, which are the universal rule of the kingdom, and form the common law in its stricter and more usual signification. II. Particular customs; which for the most part affect only the inhabitants of particular districts. III. Certain particular laws; which by custom are adopted and used by some particular courts of pretty general and extensive jurisdiction.

Sect. I.—General Customs.

The common law, properly so called, is that by which proceedings and determinations in the king's ordinary courts of justice are guided and directed. This, for the most part, settles the course in which lands descend by inheritance; the manner and form of acquiring and transferring property; the solemnities and obligation of contracts; the rules of expounding wills, deeds, and acts of parliament; the respective remedies of civil injuries; the several species of temporary offences, with the manner and degree of punishment; and an infinite number of minuter particulars, which diffuse themselves as extensively as the ordinary distribution of common justice requires.

Some have divided the common law into two principal grounds or foundations: 1. Established customs; such as that, where there are three brothers, the eldest brother shall be the heir to the second in exclusion of the youngest: and, 2. Established rules and maxims; as, 'that the king can do no wrong,' that no man shall 'be bound to accuse himself,' and the like. But these seem to be one and the same thing. For the authority of these maxims rests entirely upon general reception and usage; and the only method of proving that this or that maxim is a rule of the common law is, by showing that it has been always the custom to observe it.

But here a very material question arises, How are these customs or maxims to be known, and by whom is their validity to be determined? The answer is, by the judges in the several courts of justice. They are the depository of the laws; the living oracles who must decide in all cases of doubt, and who are bound by an oath to decide according to the law of the land. Their knowledge of that law is derived from experience and study; from the viginti annorum lucubrationes which Fortescue mentions; and from being long personally accustomed to the judicial decisions of their predecessors.

The doctrine of the law then is briefly this, that precedents and rules must be followed, unless flatly absurd or unjust; for though their reason be not obvious, at first view, yet we owe such a deference to former times as not to suppose they acted wholly without consideration. We may indeed take it as a general rule, that the decisions of courts of justice are the evidence of common law.

The decisions, therefore, of courts are held in the highest regard, and are not only preserved as authentic records in the treasures of the several courts, but are handed out to public view in the numerous volumes of reports which furnish the lawyer's library. The reports are extant in a regular series from the reign of king Edward II. inclusive; and from his time to that of Henry VIII. were taken by the prothonotaries, or chief scribes of the court, at the expense of the crown, and published annually, whence they are known under the denomination of the year-books. But though king James I., by advice of lord Bacon, appointed two reporters, with a handsome stipend for this purpose; yet that wise institution was soon neglected, and, from the reign of Henry VIII. to the present time, this task has been executed by many private and contemporary hands, who, sometimes through haste, sometimes through mistake, have published very crude and imperfect accounts. Some of the most valuable of the ancient reports are those published by lord chief justice Coke, a man of great learning in his profession, whose four volumes of Institutes are of great authority in the courts of justice. The works of Glanvil, Bracton, Britton, Fleta, Littleton, and Fitzherbert, with some others of ancient date, are also often cited as authorities. Thus the first ground and chief corner stone of the laws of England is generally immemorial custom, or common law, from time to time declared in the decisions of the courts of justice, which decisions are preserved among the public records, explained in the reports, and digested for general use in the authoritative writings of the venerable sages of the law. And it is esteemed one of the characteristic marks of British liberty, that the common law depends upon custom; which carries this mark of freedom along with it, that it seems to have been introduced by the voluntary consent of the people.

SECT. II.—PARTICULAR CUSTOMS.

The second branch of the unwritten laws of England are particular customs, or laws which affect only the inhabitants of particular districts.

Such is the custom of gavel-kind in Kent, and some other parts of the kingdom (though perhaps it was general till the Norman Conquest); which ordains, among other things, that not the eldest son only of the father shall succeed to his inheritance, but all the sons alike; and that though the ancestor be attainted and charged, yet the heir shall succeed to his estate, without any escheat to the lord. Such is the custom that prevails in divers ancient boroughs, and therefore called borough English, that the youngest son shall inherit the estate in preference to all his elder brothers. Such also are the special and particular customs of manors, of which every one has more or fewer, and which bind all the copyhold tenants that hold of such manors. Such, lastly, are many customs in London, with regard to trade, apprentices, widows, orphans, and a variety of other matters. All these are contrary to the general law of the land, and are good only by special usage; though the customs of London are also confirmed by act of parliament.

To this head may, most properly, be referred a particular system of customs used only among one set of the king's subjects, called the custom of merchants, or lex mercatoria; which, however different from the general rules of the common law, is yet ingrafted into it, and made a part of it; being allowed, for the benefit of trade, to be of the utmost validity in all commercial transactions; for it is a maxim of law that cuilibet in suâ arte credendum est.

The rules relating to particular customs regard either the proof of their existence; their legality when proved; or their usual method of allowance. And, first, we will consider the rules of proof.

As to gavelkind, and borough English, the law takes particular notice of them; and there is no occasion to prove that such customs actually exist, but only that the lands in question are subject thereto. All other private customs must be particularly pleaded; and as well the existence of such customs must be shown, as that the thing in dispute is within the custom alleged. The trial, in both cases, is by a jury of twelve men, and not by the judges; except the same particular custom has been before tried, determined, and recorded, in the same court.

When a custom is actually proved to exist, the next enquiry is into the legality of it; for, if it is not a good custom, it ought to be no longer used. Malus usus abolendus est, is an established maxim of the law. To make a particular custom good, the following are necessary requisites:—

1. That it has been *used so long*, that the memory of man runneth not to the contrary.

2. It must have been *continued*, without interruption of the right: an interruption of the possession only for ten or twenty years, will not destroy the custom; but, if the right be discontinued, even for a day, the custom is quite at an end.

3. It must have been *peaceable*, and acquiesced in; not subject to contention and dispute.

4. Customs must be *reasonable*: or rather they must not be unreasonable.

5. Customs ought to be *certain*. A custom that lands shall descend to the most worthy of the owner's blood is void; for how shall this superior worth be determined? but a custom to descend to the next male of the blood, exclusive of females, is certain, and therefore good.

6. Customs, though established by consent, must (when established) be *compulsory*; and not left to the option of every man, whether he will use them or not.

7. Lastly, customs must be *consistent* with each other. One custom cannot be set up in opposition to another. For, if both are really customs, then both are of equal antiquity, and both established by mutual consent: which, to say of contradictory customs, is absurd.

Next, as to the *allowance* of special customs. Customs, in derogation of the common law, must be construed strictly: and all special customs must submit to the king's prerogative.

SECT. III.—PECULIAR CUSTOMARY LAWS.

The third branch of the leges non scriptæ, or customary laws, are those peculiar laws which by custom are adopted and used only in certain peculiar courts and jurisdictions. And by these are understood the civil and canon laws.

It may seem improper, at first view, to rank these laws under the head of unwritten laws, seeing they are set forth in pandects, codes, and institutions, &c., and enforced by an immense number of expositions, decisions, and treatises of the learned in both branches of the law. But it is plain, that it is not on account of their being written laws, that either the canon law, or the civil law, has any obligation within this kingdom. They bind not the subjects of England, because their materials were collected from popes or emperors; digested by Justinian, or declared authentic by Gregory; for the legislature of England does not, nor ever did, recognise any foreign power, as superior or equal to it in this kingdom; or as having the right to give law to any, the meanest of its subjects. But all the strength that either the papal or imperial laws have obtained in this realm is because they have been admitted and received by immemorial usage and custom in some particular cases and courts; or because they are in some other cases introduced by consent of parliament. This is expressly declared in statute 25 Henry VIII. cap. 21.

By the CIVIL law, absolutely taken, is generally understood the civil or municipal law of the Roman empire, as comprised in the institutes, the code, and the digest of the emperor Justinian, and the novel constitutions of himself and some of his successors. It consists of 1st. The Institutes, which contain the elements or first principles of the Roman law, in four books. 2d. The digests or pandects in fifty books; containing the opinions and writings of eminent lawyers, digested in a systematical method. 3rd. A new code or collection of imperial constitutions; the lapse of a whole century having rendered the former code of Theodosius imperfect. 4th. The novels or new constitutions posterior

in time to the other books, and amounting to a supplement to the code, containing new decrees of successive emperors as new questions happened to arise.

The CANON law is a body of Roman ecclesiastical law relative to such matters as that church either has, or pretends to have, the proper jurisdiction over. This is compiled from the opinions of the ancient Latin fathers, the decrees of general councils, and the decretal epistles and bulls of the holy see; and contains also the Decretum Gratiani compiled by one Gratian, an Italian monk, and entitled by him Concordia Discordantium Canonum; the Decretalia of Gregory IX., the Sextus Decretalium of Boniface VIII., the Constitutions of Clement V., and the Extravagantes of John XXII., and his successors.

Besides these collections, which during the times of popery were received as authentic in this island, as well as in other parts of Christendom, there is also a kind of national canon law composed of legatine and provincial constitutions, and adapted only to the exigencies of this church and kingdom. At the dawn of the reformation under Henry VIII. it was enacted in parliament that a review should be had of the canon law, and, till such review should be made, all canons, constitutions, ordinances, and synodals provincial, being then already made and not repugnant to the law of the land or the king's prerogative, should still be used and executed. And, as no such review has yet been perfected, upon this statute now depends the authority of the canon law in England. For, though canons were enacted by the clergy under James I. in 1603, yet as they were never confirmed in parliament, it has been solemnly adjudged that where they are introductory of new regulations they do not bind the laity, whatever regard the clergy may think proper to pay them.

There are four species of courts in which the civil and canon laws are permitted, under different restrictions to be used. 1. The courts of the archbishops and bishops and their derivative officers, usually called courts Christian (curiæ Christianitatis) or the ecclesiastical courts. 2. The military courts. 3. The courts of admiralty. 4. The courts of the two universities. In all, their reception in general and the different degrees of that reception are grounded entirely upon custom; corroborated in the latter instance by act of parliament, ratifying those charters which confirm the customary law of the universities.

1. The courts of common law have the superintendency over these courts; to keep them within their jurisdictions; to determine wherein they exceed them; and to punish the officer who executes, and in some cases the judge who enforces the sentence so declared to be illegal.

2. The common law has reserved to itself the exposition of all such acts of parliament as concern either the extent of these courts, or the matters depending before them.

3. An appeal lies from all these courts to the king, in the last resort.

SECT. IV.—OF THE STATUTE LAW.

We next proceed to the leges scriptæ, the written laws of the kingdom, which are statutes, acts, or edicts, made by the king's majesty by and with the advice of the lords spiritual and temporal and commons in parliament assembled. The oldest of these now extant, and printed in our statute-books, is the famous Magna Charta, as confirmed in parliament by 9 Hen. III.

As to their several kinds, statutes are either *general* or *special*, public or private.

1. A *general* or *public* act is a universal rule that regards the whole community: and of this the courts of law are bound to take notice judicially, and ex officio, without the statute being particularly pleaded, or formally set forth by the party who claims an advantage under it.

2. *Special* or *private* acts are rather exceptions than rules, being those which only operate upon particular persons and private concerns; such as the Romans entitled senatûs decreta in contradistinction to the senatûs consulta, which regarded the whole community; and of these the judges are not bound to take notice, unless they be formally shown and pleaded.

Statutes also are either *declaratory* of the common law, or *remedial* of some defects therein.

1. *Declaratory*, where the old custom of the kingdom is almost fallen into disuse or become disputable; in which case the parliament has thought proper in perpetuum rei testimonium and for avoiding all doubts and difficulties, to declare what the common law is and ever has been.

2. *Remedial* statutes are those made to supply such defects, and abridge such superfluities, in the common law, as arise either from the general imperfection of all human laws, from change of time and circumstances, from the mistakes and unadvised determinations of unlearned judges, or from any other cause whatsoever. And the doing of this, either by enlarging the common law where it was too circumscribed, or by restraining it where it was too lax, has occasioned another subordinate division of remedial acts of parliament into enlarging and restraining statutes.

The rules to be observed with regard to the construction of statutes are principally the following:—

1. There are three points to be considered in the construction of all remedial statutes; the old law, the mischief, and the remedy; that is, how the common law stood at the making of the act, what the mischief was for which the common law did not provide, and what remedy the parliament has provided to cure the mischief.

2. A statute which treats of things or persons of an inferior rank cannot, by any general words, be extended to those of a superior.

3. Penal statutes must be construed strictly.

4. Statutes against frauds are to be liberally and beneficially expounded. This may seem a contradiction to the last rule, most statutes against frauds being in their consequences penal. But this difference is here to be taken: where the statute acts upon the offender, and inflicts a penalty, as the pillory or a fine, it is then to be taken strictly; but when the statute acts upon the offence, by setting aside the fraudulent transaction, here it is to be construed liberally.

5. One part of a statute must be so construed by another that the whole may, if possible, stand: et res magis valeat quam pereat.

6. A saving totally repugnant to the body of the act is void.

7. Where the common law and a statute differ, the common law gives place to the statute; and an old statute gives place to a new one upon the general principle that *leges posteriores contrarias abrogant*. But this is to be understood only when the latter statute is couched in negative terms, or by its matter necessarily implies a negative.

8. If a statute, that repeals another, is itself repealed afterwards, the first statute is hereby revived without any formal words for that purpose.

9. Acts of parliament derogatory from the power of subsequent parliaments bind not.

10. Lastly, acts of parliament that are impossible to be performed are of no validity: and if there arise out of them collaterally any absurd consequences, manifestly contradictory to common reason, they are, with regard to those consequences, void.

Such is the general nature of the laws of England, over and above which, *equity* is also frequently called in to assist, to moderate, and to explain them. There are courts of equity established for the benefit of the subject to detect latent frauds and concealments, which the process of the courts of law is not adapted to reach—to enforce the execution of such matters of trust and confidence as are binding in conscience, though not cognizable in a court of law; to deliver from such dangers as are owing to misfortune or oversight; and to give a more specific relief, and more adapted to the circumstances of the case, than can always be had by most of the rules of the positive or common law. This is the business of the courts of equity, which, however, are only conversant in matters of property. For the freedom of our constitution will not permit, that in criminal cases a power should be lodged in any judge to construe the law otherwise than according to the letter. This caution, while it admirably protects the public liberty, can never bear hard upon individuals. A man cannot suffer more punishment than the law assigns, but he may suffer less. The laws cannot be strained by partiality to inflict a penalty beyond what the letter will warrant, but, in cases where the letter induces any apparent hardship, the crown has the power to pardon.

General Maxims of the English Law.

Although it has not been usual in works of this kind, we conceive it will be useful to state the leading maxims of the English law, and especially those which from their nature are calculated to be of extensive application. This is the more necessary on account of the brevity with which the *details* of the law must necessarily be set forth. We shall arrange these principles in the order of their nature and importance.

1. *Maxims relating to public offences.*

No man ought to accuse himself unless it be before God.

In criminal cases the proof ought to be as clear as day-light.

Intent without act is not punishable.

Malice is held equivalent to age.

A madman is punished by his madness: he cannot be further punished by the law.

He confesses his guilt who flies from judgment.

Offences the most difficult to guard against ought to be the most severely punished.

The health and welfare of the people is the highest law.

2. *Maxims of justice in general.*

The public good is to be preferred before private interest.

It is for public good that there should be an end to litigation.

Ignorance of the law doth not excuse.

Ignorance of the fact excuseth.

We ought not to go from the words of the law.

The disposition of the law is of greater force than the disposition of man.

Delays are odious in the law.

No injury is to be presumed.

The law excuseth impotency, or natural inability: as idiots, prisoners, &c.

In cases in general, there is favor shown to persons within age.

The law compelleth no man to impossibilities.

The construction of law shall wrong no person.

Necessity gives a privilege denied by law.

That which in the beginning is vicious cannot by length of time be made good.

Whatever is inconvenient and contrary to reason is not permitted in the law.

What otherwise is good and just, if it be acquired by force, or fraud, it is evil and unjust.

Things done between strangers ought not to injure those not parties: they may benefit them.

The laws help those that are watchful, and not those that are sleepy and negligent.

Every thing should be dissolved by the same means whereby it was first constituted.

3. *Maxims of equity.*

In all things, but especially in the law, there is equity.

He that will have equity done, must do equity.

Equity suffers not a wrong to be without remedy.

Equity suffers not advantages to be taken of a penalty or forfeiture, where compensation can be made.

Where equity is equal, the law must prevail.

A verdict at law is a bar to equity.

A contract founded in evil, or against morality, is void.

Conditions against law are void.

Deceit is not purged by circuity.

4. *Maxims affecting individuals.*

A personal action dies with the person, as in cases of trespass, and battery.

Injuries to the body cannot be remitted or forgiven.

What one does by another, he does by himself.

He who cannot pay in purse, must pay in person.

The title to an Englishman's liberties is older than the oldest title to any estate.

No one can be a witness in his own cause.

No one ought to be a judge in his own cause.

No one shall take advantage of his own wrong.

Let the actor take care what he does: as an acquittance for the last rent presumes the arrears discharged.

Every act is to be judged from the intention of the agent.

5. *Maxims affecting property.*

The act of God does injury to no man, as, if a house is blown down by tempest, the tenant is excused in waste, unless he expressly covenants to repair.

The act of law does injury to no one. Thus, if land out of which a rent charge is granted be recovered by elder title, the grantee shall have a writ of annuity.

An ambiguous deed or contract is to be expounded against the seller or granter.

Bad grammar does not vitiate a deed.

The right to land is of an infinite extent upwards as well as downwards.

To whomsoever any one shall grant any thing, he grants that without which it cannot be.

That is certain which can be reduced to certainty.

To whom it is lawful to do the greater, to him it is not unlawful to do the smaller thing.

A right sometimes sleeps, but never dies.

It is forbidden that any one should do that with his own, which may injure another; and so use your own that you do not hurt others.

Every man's grant shall be taken most strongly against himself.

He who bears the burden ought also to receive the profit.

He that reaps the profit ought to bear the burden.

Clandestine gifts are suspicious.

No action lies on a naked contract; that is, without consideration.

Long possession is the law of peace.

The naming of one thing is the exclusion of another.

Every thing may be annulled by the same means that made it.

The English law has been frequently censured for its voluminousness and complexity, by those who have not understood its nature, or the various circumstances out of which it arose. Sir Walter Scott, in his comparison of the Code Napoleon with the English system of jurisprudence, has admirably investigated the grounds of the public prejudice.

'It is the common and vulgar idea,' he says, 'that the system of legislation may be reduced and simplified into a few general maxims of equity, sufficient to lead any judge of understanding and integrity to a just decision of all questions which can possibly occur between man and man. It follows, as a corollary to this proposition, that the various multiplications of authorities, exceptions, particular cases, and especial provisions, which have been introduced among civilised nations, by the address of those of the legal profession, are just so many expedients to embarrass the simple course of justice with arbitrary modifications and refinements, in order to procure wealth and consequence to those educated to the law, whose assistance must be used as its interpreters, and who become rich by serving litigants as guides through the labyrinth of obscurity which had been raised by themselves and their predecessors.

'Such were the ideas of law and its professors, which occurred to the parliament of Praise-God Barebones, when they proposed to Cromwell to abrogate the whole common law of England, and dismiss the lawyers, as drones who did but encumber the national hive. Such was also the opinion of many of the French statesmen, who, as rash in judging of jurisprudence as in politics, imagined that a system of maxims, modified on the plan of the twelve tables of the ancient Romans, might serve all the purposes of a civil code in modern France. They who thought in this manner had entirely forgotten how soon the laws of these twelve tables became totally insufficient for Rome herself—how, in the gradual change of manners, some laws became obsolete, some inapplicable,—how it became necessary to provide for emerging cases, successively by the decrees of the senate, the ordinances of the people, the edicts of the consuls, the regulations of the prætors, the answers or opinions of learned jurisconsults, and finally by the rescripts, edicts, and novels of the emperors, until such a mass of legislative matter was assembled as scarcely the efforts of Theodosius or Justinian were adequate to bring into order, or reduce to principle.

But this, it may be said, was the very subject complained of. The simplicity of the old laws, it may be urged, was corrupted, and hence by the efforts of interested men, not by the natural progress of society, arose the complicated system which is the object of such general complaint.

'The answer to this is obvious. So long as society remains in a simple state, men have occasion for few and simple laws. But when society begins to be subdivided into ranks, when duties are incurred, and obligations contracted, of a kind unknown in a ruder or earlier period, these new conditions, new duties, and new obligations, must be regulated by new rules and ordinances, which accordingly are introduced as fast as they are wanted, either by the course of long custom, or by precise legislative enactment. There is no doubt one species of society in which legislation may be much simplified; and that is, where the whole law of the country, with the power of enforcing it, is allowed to reside in the bosom of the king, or of the judge who is to administer justice. Such is the system of Turkey, where the cadi is bound by no laws nor former precedents, save what his conscience may discover from perusing the koran. But so apt are mankind to abuse unlimited power, and indeed so utterly unfit is human nature to possess it, that, in all countries where the judge is possessed of such arbitrary jurisdiction, he is found accessible to bribes, or liable to be moved by threats. He has no distinct course prescribed, no beacon on which to direct his vessel, and

trims therefore his sails to the pursuit of his own profit.'

Before presenting an outline of the law of England, it may not be immaterial further to observe, that there are various modes in which its several departments may be treated and arranged. It may be viewed historically, and its progress delineated from rudeness to refinement;—philosophically, in relation to the principles of universal law; or artificially and technically, as regards the peculiar character and circumstances of the country to which its provisions apply. We shall endeavour to combine, as far as practicable, the two latter methods; the first would lead us beyond our limits, and be inconsistent with our plan.

The celebrated Commentaries of Sir William Blackstone have so fully taken possession of the minds of all legal enquirers, that, even were the work less excellent than it is, it would still be expedient, in some degree, to adopt the general plan of that distinguished composition. It has become a sort of text book, and has established so firm a hold in the recollection, that an entire deviation from its plan would appear like affectation rather than improvement. There are, however, some respects in which we think an alteration may be judiciously made, and in which the natural and philosophic arrangements may be preferred to the artificial and the technical.

In one respect Blackstone seems to have followed the classification of Grotius, who treats of the general rights of things, (On War and Peace, book II., chap. 2.) But this distinction, which might have some reason in its favor in a general work upon the law of nature and nations, can scarcely be maintained in reference to a code of municipal laws long established. In the former case it relates to the origin of property, and to the consideration that some things are impossible to be made the subject of property, as the sea in its full extent, &c. Now the laws of England, in relation to property, can apply only to those 'things' which are recognised as property, or over which the subjects or inhabitants of the realm are entitled to exercise dominion.

It may be questioned, also, whether the distinction which has been attempted to be made between public and private wrongs is well founded, or recognised as a principle in jurisprudence. Violations of the public law, whether civil or criminal, are public wrongs, although a single individual only may be the sufferer, and whether the injury be inflicted on person or property. The distinction, indeed, is not kept up consistently even in the Commentaries themselves, for the third volume is entitled Private Wrongs, and the fourth Public Wrongs; yet the latter includes offences against individuals, their persons, habitations, and property.

Adopting, therefore, a more popular arrangement and phraseology, our classification of the CIVIL code will consist in its principal divisions of rights and injuries, relating to person and property; and of redress, and the mode of obtaining it. The CRIMINAL code will be divided into different classes of crimes, their prevention, and appropriate punishment.

CIVIL CODE.

CHAP. I.—OF RIGHTS RELATING TO PERSONS.

Of persons in public authority.

1. *Of the king, his title, duties, prerogatives, his royal family, councils, and revenue.*—The superior executive power of this kingdom is lodged in a single person, the king or queen. This royal person may be considered with regard to 1. His title; 2. His duties; 3. His prerogative; 4. His royal family; 5. His councils; 6. His revenue, ordinary and extraordinary.

The king's title. The crown of England by the positive constitution of the kingdom has ever been descendible, and so continues. The crown is descendible in a course peculiar to itself. This course of descent is subject to limitation by parliament. Notwithstanding such limitations the crown retains its descendible quality, and becomes hereditary in the prince to whom it is limited. King Egbert, king Canute, and king William I., have been successively constituted the common stocks, or ancestors, of this descent. At the revolution, the convention of estates, or representative body of the nation, declared that the misconduct of king James II. amounted to an abdication of the government, and that the throne was thereby vacant. In consequence of this vacancy, and from a regard to the ancient line, the convention appointed the next protestant heirs of the blood royal of king Charles I. to fill the vacant throne, in the old order of succession, with a temporary exception or preference to the person of king William III. On the impending failure of the Protestant line of king Charles I., whereby the throne might again have become vacant, the king and parliament extended the settlement of the crown to the protestant line of king James I. viz. to the princess Sophia of Hanover, and the heirs of her body, being protestants, and she is now the common stock from whom the heirs of the crown must descend.

The king's duties, are to govern his people according to law, to execute judgment in mercy, and to maintain the established religion. These are his part of the original contract between himself and the people, founded in the nature of society, and expressed in his oath at the coronation.

The king's prerogative is that special power, and pre-eminence, which the king has above other persons, and out of the ordinary course of law, in right of his regal dignity. Such prerogatives are either direct or incidental. The incidental, arising out of other matters, are considered as they arise: we now treat only of the direct.

In the king's authority, or legal power, consists the executive part of government. In foreign concerns, the king, as the representative of the nation, has the right or prerogative, 1. Of sending or receiving ambassadors; 2. Of making treaties; 3. Of proclaiming war or peace; 4. Of issuing reprisals; 5. Of granting safe conducts. In domestic affairs the king is considered a constituent part of the supreme legislative power, and has a negative upon all new laws. He is not bound by statute unless specially named.

As the general of the kingdom, he may raise fleets and armies, build forts, appoint havens,

erect beacons, prohibit the exportation of arms and ammunition, and confine his subjects within the realm, or recall them from foreign parts.

The king is also the fountain of justice, and conservator of the peace; and therefore may erect courts, prosecute offenders, pardon crimes, and issue proclamations. He is likewise the fountain of honor, of office, and of privilege. He is also the arbiter of domestic commerce (not of foreign which is regulated by the law of merchants); and is therefore entitled to the erection of public marts, the regulation of weights and measures, and the coinage or legitimation of money.

The king is, lastly, the supreme head of the church; and, as such, convenes, regulates, and dissolves synods, nominates bishops, and receives appeals in all ecclesiastical causes.

The king's royal family are, 1. The queen, either regnant, consort, or dowager. 2. The prince and princess of Wales, and the princess royal. 3. The king's other descendants.

The king's councils are, 1. The parliament. 2. The peers. 3. The judges. 4. The privy council.

The king's revenue is either ordinary or extraordinary; and the ordinary is, 1. Ecclesiastical, 2. Temporal.

The ecclesiastical revenue consists: 1. In the custody of the temporalities of vacant bishoprics; 2. In corrodies and pensions; 3. In extra parochial tithes; 4. In the first fruits and tenths of benefices.

The kings ordinary temporal revenue consists, 1. In the demesne lands of the crown; 2. In the hereditary excise, being part of the consideration for the purchase of his feudal profits, and the prerogatives of purveyance and pre-emption; 3. In wine licenses, being the residue of the same consideration; 4. In his forests; 5. His courts of justice; 6. Royal fish; 7. Wrecks, and things jetsam, flotsam, and ligan; 8. Royal mines; 9. Treasure trove; 10. Waifs; 11. Estrays; 12. Forfeitures for offences, and deodands; 13. Escheats of lands; 14. Custody of idiots and lunatics.

What is usually termed the hereditary revenue of the crown, namely, the profits of the crown lands, the hereditary excise, the duty on wine licenses, and the profits arising from courts of justice, has been relinquished by his present majesty, and now forms part of the consolidated fund; instead of which parliament have granted to his majesty, during his life, for the maintenance of his civil list, £850,000 in England, and £207,000 in Ireland, chargeable upon the consolidated fund of the United Kingdom. Stat. 1 Geo. IV,, c. 1.

The king's extraordinary revenue consists in aids, subsidies, and supplies, granted him by the commons in parliament. Heretofore, these were usually raised by grants of the nominal tenth or fifteenth of the moveables in every township; or by subsidies assessed upon individuals, with respect to their land and goods.

A new system of taxation took place soon after the revolution; our modern taxes are therefore, 1. Annual; 2. Perpetual.

The annual taxes are, 1. The land-tax, or the ancient subsidy raised upon a new assessment; 2. The malt-tax, being an annual excise on malt, mum, cider, and perry.

The perpetual taxes, are, 1. The customs or tonnage and poundage of all merchandise, exported and imported; 2. The excise duty, or inland imposition, on a great variety of commodities; 3. The salt duty, or excise on salt; 4. The post-office, or duty for the carriage of letters; 5. The stamp-duty on paper, parchment, &c.; 6. The duty on houses and windows; 7. The duty on licenses for hackney-coaches and chairs.

Part of this revenue is applied to pay the interest of the national debt, till the principal is discharged by parliament.

The produce of these several taxes went originally to separate and specific funds, to answer specific loans upon their respective credits; but these are now consolidated by parliament into three several funds, the aggregate, general, and south-sea funds, to answer all the debts of the nation; the public faith being also superadded, to supply deficiences and strengthen the security of the whole.

The surpluses of these funds, after paying the interest of the national debt, are carried together and denominated the sinking fund; which, unless otherwise appropriated by parliament, is annually applied to pay off some part of the principal. But previous to this the aggregate fund is charged with an annual sum for the civil list which is the immediate proper revenue of the crown, settled by parliament on the king at his accession, for defraying the charges of civil government.

2. *Of the parliament.*—Parliaments, in some shape, are of as high antiquity as the Saxon government, and have subsisted in their present form upwards of 500 years. The parliament is assembled by the king's writs, and its sitting must not be intermitted above three years.

Its constituent parts are the king's majesty, the lords spiritual and temporal, and the commons represented by their members, each of which parts has a negative or necessary voice in making laws.

With regard to the general law of parliament, its power is absolute: each house is the judge of its own privileges, and all the members of either house were formerly entitled to the privilege of speech, of person, of their domestics, and of their lands and goods.

But the privileges as to their servants and property, together with all other privileges which derogated from the common law in matters of civil right, save only as to freedom of person in the members themselves, have since been relinquished by parliament, by stat. 10 Geo. III. c. 50.

The peculiar privileges of the lords, besides their judicial powers, are to hunt in the king's forests, to be attended by the sages of the law, to make proxies, to enter protests, and to regulate the election of the sixteen peers of North Britain, and of the twenty-eight peers of Ireland.

The peculiar privileges of the commons are, to raise taxes on the subject, and to determine the merits of their own elections, with regard to the qualifications of the electors and elected, and the proceedings at elections themselves.

Bills are usually read twice in each house, committed, engrossed, and then read a third

time; and when they have obtained the concurrence of both houses, and received the royal assent, they become acts of parliament.

The houses may adjourn their meetings, but the king only can prorogue the parliament.

Parliaments are dissolved, 1. At the king's will; 2. By the demise of the crown, or rather within six months after the demise; 3. By length of time, or having sat for the space of seven years.

3. *Of subordinate magistrates.*—Subordinate magistrates of the most general use and authority are, 1. Sheriffs; 2. Coroners; 3. Justices of the peace; 4. Constables; 5. Surveyors of the highways; 6. Overseers of the poor.

The sheriff is the keeper of each county, annually nominated in due form by the king: and is (within his county) a judge, a conservator of the peace, a ministerial officer, and the king's bailiff.

Coroners are permanent officers of the crown in each county, elected by the freeholders, whose office it is to make enquiry concerning the death of the king's subjects, and certain revenues of the crown, and also in particular cases to fill the office of the sheriff.

Justices of the peace are magistrates in each county statutably qualified and commissioned by the king's majesty; with authority to conserve the peace, to hear and determine felonies, and other misdemeanors, and to do many other acts committed to their charge by particular statutes.

Constables are officers of hundreds and townships, appointed at the leet, and empowered to preserve the peace, to keep watch and ward, and to apprehend offenders.

Surveyors of the highways are officers appointed annually in every parish, to remove annoyances in, and to direct the reparation of, the public roads.

Overseers of the poor are officers appointed annually, in every parish, to relieve such impotent, and employ such sturdy poor, as are settled in each parish, by birth, by parentage, by marriage, or by forty days' residence; accompanied with. 1. Notice to an overseer; 2. Renting a tenement of ten pounds annual value; 3. Paying their assessed taxations; 4. Hiring and service for a year; 5. Apprenticeship for seven years; 6. Having a sufficient estate in the parish.

2. *Of the people generally, and their allegiance.* The people are either aliens, that is, born out of the dominions or allegiance of the crown of Great Britain, or natives, that is, born within it. Allegiance is the duty of all subjects; being the reciprocal tie of the people to the prince, in return for the protection he affords them: and in natives this duty of allegiance is natural and perpetual; in aliens it is local and temporary only.

The rights of natives are also natural and perpetual; those of aliens local and temporary only, unless they be made denizens by the king or naturalised by parliament.

3. *Of the clergy and laity; the army and navy.* Natives are also either clergy, that is, all persons in holy orders or in ecclesiastical offices: or laity, which comprehends the rest of the nation.

The clergy are, 1. Archbishops and bishops; 2. Deans and chapters; 3. Archdeacons; 4. Rural deans; 5. Parsons (under which are included appropriators) and vicars, to whom there are generally requisite holy orders, presentation, institution, and induction: 6. Curates; to which may be added, 7. Churchwardens; 8. Parish clerks and sextons.

The laity are divisible into three states: civil, military, and maritime.

The civil state (which includes all the natives except the clergy, the army, the navy, and many individuals among them also) may be divided into the nobility and commonalty.

The nobility are dukes, marquises, earls, viscounts, and barons: these had anciently duties annexed to their respective honors. They are created either by writ, that is by summons to parliament; or by the king's letters patent, that is, by royal grant; and they enjoy many privileges, exclusive of their senatorial capacity.

The commonalty consists of knights of the garter, knights bannerets, baronets, knights of the bath, knights bachelors, esquires, gentlemen, yeomen, tradesmen, artificers, and laborers.

The military state, by the standing constitutional law, consists of the militia of each county, raised from among the people by lot, officered by the principal land-holders, and commanded by the lord-lieutenant.

The more disciplined occasional troops of the kingdom are kept on foot only from year to year, by parliament; and, during that period, are governed by martial law, or arbitrary articles of war, formed at the pleasure of the crown.

The maritime state consists of the officers and mariners of the British navy; who are governed by express and permanent laws, or the articles of the navy, established by act of parliament.

4. *Of corporations.*—Bodies politic, or corporations, which are artificial persons, are established for preserving in perpetual succession certain rights, which being conferred on natural persons only would fail in process of time. Corporations are, 1. Aggregate, consisting of many members; 2. Sole, consisting of one person only.

Corporations are also either spiritual, erected to perpetuate the rights of the church; or lay: and the lay are 1. Civil, erected for many temporal purposes; 2. Eleemosynary, erected to perpetuate the charity of the founder.

Corporations are usually erected and named by virtue of the king's royal charter, but may be created by act of parliament. The powers incident to all corporations are, 1. To maintain perpetual succession; 2. To act in their corporate capacity like an individual; 3. To hold lands subject to the statutes of mortmain; 4. To have a common seal; 5. To make bye-laws; which last power, in spiritual or eleemosynary corporations, may be executed by the king or the founder.

The duty of corporations is to answer the ends of their institution. To enforce this duty, all corporations may be visited; spiritual corporations by the ordinary; lay corporations by the founder, or his representative, viz. the civil by the king (who is the fundator incipiens of all),

represented in his court of king's bench; the eleemosynary by the endower (who is the fundator perficiens of such), or by his heirs or assigns. Corporations may be dissolved, 1. By act of parliament; 2. By the natural death of all their members; 3. By surrender of their franchises; 4. By forfeiture of their charter.

5. *Of the absolute rights of individuals.*—The absolute rights of individuals compose what is called civil liberty.

Civil liberty is the natural liberty of mankind so far restrained by human laws as is necessary for the good of society.

The absolute rights or civil liberties of Englishmen, as frequently declared in parliament, are principally three:—The right of personal security, of personal liberty, and of private property.

The right of personal security consists in the legal enjoyment of life, limb, body, health, and reputation.

The right of personal liberty consists in the free power of locomotion, without illegal restraint or banishment.

The right of private property consists in every man's free use and disposal of his own lawful acquisitions, without injury or illegal diminution.

Besides these three primary rights, there are others which are designed to preserve the former from unlawful attacks: 1. The constitution and power of parliaments; 2. The limitation of the king's prerogative: and others to vindicate them, when actually violated; namely, 3. The regular administration of public justice; 4. The right of petitioning for redress of grievances; 5. The having and using of arms for self-defence.

6. *Of persons in their private relations.*—The private relations of persons are four:—1. Husband and wife; 2. Parent and child; 3. Guardian and ward; 4. Master and servant.

(1.) *Husband and wife.*—The relation of marriage includes the reciprocal rights and duties of husband and wife.

Marriage is duly contracted between persons, 1. Consenting; 2. Free from canonical impediments, which make it voidable; 3. Free also from the civil impediments—of prior marriage—of want of age—of non-consent of parents, &c., where requisite — of want of reason; any of which make it totally void; and it must be celebrated by a clergyman in due form and place.

Marriage is dissolved, 1. By death; 2. By divorce in the spiritual court; not à mensâ et thoro only, but à vinculo matrimonii, for a canonical cause existing previous to the contract; 3. By act of parliament; as for adultery.

By marriage the husband and wife become one person in law; which unity is the principal foundation of their respective rights, duties, and disabilities.

(2.) *Of parent and child.*—The next and most universal private relation, is that of parent and child. Children are, 1. Legitimate, or those who are born in lawful wedlock, or within a competent time after; 2. Bastards, being those who are not so born.

The duties of parents to legitimate children are, 1. Maintenance; 2. Protection; 3. Education.

The power of parents consists principally in correction, and consent to marriage: both may, after death, be delegated by will to a guardian; and the former also, at any time, to a tutor or master.

The duties of legitimate children to parents are obedience, protection, and maintenance. The duty of parents to bastards is only that of maintainance. The rights of a bastard are such only as he can acquire; for he is incapable of inheriting any thing.

(3.) *Guardian and Ward.*—We come next to the relation of guardian and ward, which is plainly derived from the last; these being, during the continuance of their relation, reciprocally subject to the same rights and duties.

Guardians are of divers sorts: 1. Guardians by nature, or the parents; 2. Guardians for nurture, assigned by the ecclesiastical courts; 3. Guardians in soccage, assigned by the common law; 4. Guardians by statute, assigned by the father's will. All subject to the superintendance of the court of chancery.

Full age in male or female, for all purposes, is the age of tweuty-one years (different ages being allowed for different purposes); till which age the person is an infant. An infant, in respect of his tender years, has various privileges, and various disabilities in law; chiefly with regard to suits, crimes, estates, and contracts.

(4.) *Of Master and Servant.*—There are four species of servants (for slavery is unknown to our laws), viz. 1. Menial servants, who are hired; 2. Apprentices, who are bound by indentures; 3. Laborers, who are casually employed; 4. Stewards, báiliffs, and factors, who are rather in a ministerial state.

From this relation result divers powers to the master, and emoluments to the servant. The master has a property in the service of a servant, and must be answerable for such acts as the servant does by his express or implied command.

Chap. II.—Of Rights relating to Property.

1. *Of Property in general.*—All dominion over external objects has its original from the gifts of the Creator to man in general. The substance of things was, at first, common to all mankind; yet a temporary property, in the use of them, might even then be acquired, and continued, by occupancy. In process of time a permanent property was established in the substance, as well as in the use, of things; which was also originally acquired by occupancy only.

Lest this property should determine by the owners' dereliction, or death, whereby the thing would again become common, societies have established conveyances, wills, and heirships, in order to continue the property of the first occupant; and, where, by accident, such property becomes discontinued and unknown, the thing usually results to the sovereign of the state, by virtue of the municipal law.

But of some things, which are incapable of permanent substantial dominion, there still subsists only the same transient usufructuary property which originally subsisted in all things.

This property, or exclusive dominion, may be divided into, 1. Things real; 2. Things personal.

2. *Of real Property.*—In things real may be considered, 1. Their several kinds; 2. The te-

nures by which they may be holden; 3. The estates which may be acquired therein; 4. Their title, or the means of acquiring and losing them.

All the several kinds of things real are reducible to one of these three, viz. lands, tenements, or hereditaments; whereof the second includes the first, and the third includes the first and second.

Hereditaments, therefore, or whatever may come to be inherited (being the most comprehensive denomination of things real) are either corporeal, or incorporeal.

Corporeal hereditaments consist wholly of lands in their largest legal sense; wherein they include not only the face of the earth, but every other object of sense adjoining thereto, and subsisting either above or beneath it.

Incorporeal hereditaments are rights issuing out of things corporeal, or concerning, or annexed to, or exercisable within, the same.

Incorporeal hereditaments are, 1. Advowsons; 2. Tithes; 3. Commons; 4. Ways; 5. Offices; 6. Dignities; 7. Franchises; 8. Corrodies, or pensions; 9. Annuities; 10. Rents.

An advowson is a right of presentation to an ecclesiastical benefice, either appendant or in gross. This may be, 1. Presentative; 2. Collative; 3. Donative.

Tithes are the tenth part of the increase yearly arising from the profits aud stock of lands, and the personal industry of mankind. These, by the ancient and positive law of the land, are due of common right to the parson or (by endowment) vicar, unless especially discharged, 1. By real composition; 2. By prescription, either de modo decimandi, or de non decimando.

Common is a profit which a man has in the lands of another; 1. Common of pasture; which is either appendant, appurtenant, because of vicinage, or in gross; 2. Common of piscary; 3. Common of turbary; 4. Common of estover or botes.

Ways are a right of passing over another man's ground.

Offices are the right to exercise a public or private employment.

For dignities, which are titles of honor, see chap. I.

Franchises are a royal privilege, or branch of the king's prerogative, subsisting in the hands of a subject.

Corrodies, which may be converted into pensions, are ecclesiastical annuities.

An annuity is a yearly sum of money, charged upon the person, and not upon the lands of the grantor.

Rents are a certain profit issuing yearly out of lands and tenements; and are reducible to, 1. Rent-service; 2. Rent-charge; 3. Formerly rent-seek, where the party entitled to it had no power to distrain for it, but the remedy by distress is now given in all cases of distress.

3. *Of the feudal system and ancient tenures.*— The doctrine of tenure is derived from the feudal law, which was planted in Europe by its northern conquerors at the dissolution of the Roman empire.

Pure and proper feuds were parcels of land allotted by a chief to his followers; to be held on the condition of personally rendering due military service to their lord.

These were granted by investiture; were held under the bond of fealty; were inheritable only by descendants; and could not be transferred without the mutual consent of the lord and vassal.

Improper feuds were derived from the other, but differed from them in their original, their services and renders, their descent and other circumstances.

The lands of England were converted into feuds of the improper kind soon after the Norman conquest; which gave rise to the grand maxim of tenure, viz. that all lands in the kingdom are holden mediately or immediately of the king.

The distinction of tenures consisted in the nature of their services; as 1. Chivalry, or knight service; where the service was free, but uncertain; 2. Free soccage, where the service was free and certain; 3. Pure villenage, where the service was base and uncertain; 4. Privileged villenage, or villein soccage, where the service was base, but certain.

The most universal ancient tenure was that by chivalry, or knight service; in which the tenant of every knight's fee was bound, if called on, to attend his lord to the wars. This was granted by livery, and perfected by homage and fealty, which usually drew after them suit of court.

The fruits and consequences of the tenure by knight service were, 1. Aid; 2. Relief; 3. Primer-seisin; 4. Wardship; 5. Marriage; 6. Fines upon alienation; 7. Escheat.

Grand sergeantry differed from chivalry principally in its render, or service; and not in its fruits and consequences.

The personal service in chivalry was at length gradually changed into pecuniary assessments, which were called scutage or escuage.

These military tenures (except the services of grand sergeantry) were, at the restoration of king Charles, totally abolished, and reduced to free soccage by act of parliament.

Free soccage is a tenure by any free, certain, and determinate service. This tenure, the relic of Saxon liberty, includes petit sergeantry, tenure in burgage, and gavelkind.

Free soccage lands partake strongly of the feudal nature, as well as those in chivalry; being holden subject to some service;—at the least to fealty and suit of court; subject to relief, to wardship, and to escheat, but not to marriage; subject also formerly to aids, primer seisin, and fines for alienation.

Pure villenage was a precarious and slavish tenure; at the absolute will of the lord upon uncertain services of the basest nature. Hence, by tacit consent or encroachment, have arisen the modern copyholds, or tenure by copy of court roll; in which lands may be still held at the (nominal) will of the lord (but regulated) according to the custom of the manor. These are subject, like soccage lands, to service, relief, and escheat; and also to heriots, wardships, and fines upon descent and alienation.

Privileged villenage, or villein soccage, is an exalted species of copyhold tenure, upon base but certain services; subsisting only in the

ancient demesnes of the crown, whence the tenure is denominated the tenure in ancient demesne.

Copyholds of ancient demesne have divers immunities annexed to their tenure; but are still held by copy of court roll, according to the custom of the manor, though not at the will of the lord.

Frankalmoign is a tenure by spiritual services at large, whereby many ecclesiastical and eleemosynary corporations now hold their lands and tenements; being of a nature distinct from tenure by divine service in certain.

4. *Of freehold estates.*—Estates in lands, tenements, and hereditaments, are such interest as the tenant has therein; to ascertain which, may be considered, 1. The quantity of interest; 2. The time of enjoyment; 3. The number and connexion of the tenants.

(1.) *Quantity of interest.*—Estates with respect to their quantity of interest or duration, are either freehold, or less than freehold. A freehold estate, in lands, is such as is created by livery of seisin at common law; or in tenements of an incorporeal nature, by what is equivalent thereto. Freehold estates are either estates of inheritance, or for life only; and inheritances are, 1. Absolute, or fee simple; 2. Limited fees. Tenant in fee simple is he that has lands, tenements, or hereditaments, to hold to him and his heirs for ever.

Limited fees are, 1. Qualified, or base fees; 2. Fees conditional at the common law. Qualified, or base fees, are those which, having a qualification subjoined thereto, are liable to be defeated when that qualification is at an end.

Conditional fees, at the common law, were such as were granted to the donee, and the heirs of his body, in exclusion of collateral heirs. These were held to be fees granted on condition that the donee had issue of his body; which condition being once performed by the birth of issue, the donee might immediately alien the land; but the statute de Donis, being made to prevent such alteration thereupon, from the division of the fee (by construction of this statute), into a particular estate, and a reversion, the conditional fees began to be called fees-tail.

Entails, curtesy, and *dower.*—All tenements, real, or savouring of the reality, are subject to entails. Estates tail may be 1. General, or special; 2. Male or female; 3. Given in frank marriage. Incident to estates tail are 1. Waste; 2. Dower; 3. Curtesy; 4. Bar; by fine, recovery, or lineal warranty with assets. Estates tail are now, by many statutes and resolutions, almost brought back to the state of conditional fees at the common law.

Freeholds, not of inheritance, or for life only, are, 1. Conventional, or created by act of the parties; 2. Legal, or created by operation of law. Conventional estates for life are created by an express grant for term of one's own life, or per autre vie; or by a general grant, without expressing any term at all. Incident to this and all other estates for life, are estrovers and emblements: and to estates per autre vie general occupancy was also incident, as special occupancy still is, if cestuy que vie survives the tenant.

Legal estates for life are, 1. Tenancy in tail after possibility of issue extinct; 2. Tenancy by the curtesy of England; 3. Tenancy in dower.

Tenancy in tail, after possibility of issue extinct, is where one is tenant in special tail and a person from whose body the issue was to spring, dies without issue, or having left issue, that issue becomes extinct: whereupon the surviving tenant becomes tenant in tail after possibility of issue extinct. This estate partakes both of the incidents to an estate tail, and of those to an estate for life.

Tenancy by the curtesy of England is where a man marries a woman seised of an estate of inheritance, and he by her has issue, born alive, which was capable of inheriting her estate; in which case he shall, upon her death, hold the tenements for his own life, as tenant by the curtesy.

Tenancy in dower is where a woman marries a man seised of an estate of inheritance, of which her issue might by any possibility have been heir and the husband dies; the woman is hereupon entitled to dower, or one-third part of the lands to hold for her natural life. Dower is either by the common law; by special custom; ad ostium ecclesiæ; or ex assensu patris. Dower may be forfeited or barred; particularly by an estate in jointure.

Estates for a limited term, conditional, reversionary, &c.—Estates less than freehold are, 1. Estates for years; 2. Estates at will; 3. Estates at sufferance; 4. Estates on condition.

An estate for years is where a man, seised of lands and tenements, letteth them to another for a certain period of time, which transfers the interest of the term; and the lessee enters thereon, which gives him possession thereof, but not legal seising of the land. Incident to this estate are estovers; and also emblements, if it determine before the full end of the term.

An estate at will is where lands are let by one man to another, to hold at the will of both parties, and the lessee enters thereon.

Copyholds are estates held at the will of the lord, regulated according to the custom of the manor.

An estate at sufferance is where one comes into possession of land by lawful title, but keeps it afterwards without any title at all.

Estates on condition, whether freehold or otherwise, are, 1. On condition implied: 2. On condition expressed; 3. Estates in gage; 4. Estates by statute merchant, or staple; 5. Estates by elegit.

Estates on condition implied are where a grant of an estate has, from its essence and constitution, a condition inseparably annexed to it; though none be expressed in words. Estates on condition expressed are where an express qualification or provision is annexed to the grant of an estate; on the performance of which, either expressed or implied (if precedent), the estate may be vested or enlarged, or on the breach of them (if subsequent) an estate already vested may be defeated.

Estates in gage, in vadio, or in pledge, are estates granted as a security for money lent: being 1. In vivo vadio, or living gage, where the profits of land are granted till a debt be paid; upon which payment the grantor's estate

will revive: 2. In mortuo vadio, in dead, or mortgage, where an estate is granted on condition to be void at a day certain, if the grantor then repays the money borrowed; on failure of which, the estate becomes absolutely dead to the grantor.

Estates by statute merchant, or statute staple, are also estates conveyed to creditors in pursuance of certain statutes, till their profits have discharged the debt.

Estates by elegit are, where, in consequence of a judicial writ so called, lands are delivered by the sheriff to a plaintiff, till their profits shall satisfy a debt adjudged to be due by law.

(2.) *Estates, with respect to their time of enjoyment*, are either in immediate possession, or in expectancy; which estates in expectancy are created at the same time, and are parcel of the same estates, as those upon which they are expectant: these are, 1. Remainders; 2. Reversions.

A remainder is an estate limited to take effect, and be enjoyed, after another particular estate in possession is determined. Therefore, 1. There must be a precedent particular estate in order to support a remainder; 2. The remainder must pass out of the grantor, at the creation of the particular estate; 3. The remainder must vest in the grantee, during the continuance, or at the determination, of the particular estate.

Remainders are, 1. Vested—where the estate is fixed to remain to a certain person, after the particular estate is spent; 2. Contingent—where the estate is limited to take effect, either to an uncertain person, or upon an uncertain event.

An executory devise is such a disposition of lands, by will, that no estate shall vest thereby at the death of the devisor, but only upon some future contingency, without any precedent particular estate to support it.

A reversion is the residue of an estate left in the grantor, to commence in possession after the determination of some particular estate granted; to which are incident, fealty and rent.

Where two estates, the one less, the other greater, the one in possession, the other in expectancy, meet together in one and the same person, and in one and the same right, the less is merged in the greater.

(3.) *Of Tenancy in severalty, joint, common, &c.*—Estates, with respect to the number and connexion of their tenants, may be held, 1. In severalty; 2. In joint-tenancy; 3. In coparcenary; 4. In common.

An estate in severalty is where one tenant holds in his own sole right, without any other person being joined with him.

An estate in joint-tenancy is where an estate is granted to two or more persons; in which case the law construes them to be joint-tenants, unless the words of the grant expressly exclude such construction.

Joint-tenants have a unity of interest, of title, of time, and of possession; they are seised per my et per tout; and, therefore, upon the decease of one joint-tenant, the whole interest remains to the survivor.

Joint-tenancy may be dissolved, by destroying one of its four constituent unities.

An estate in coparcenary is where an estate of inheritance descends from the ancestor to two or more persons, who are called parceners, and all together make but one heir.

Parceners have a unity of interest, title, and possession—but are only seized per my, and not per tout; wherefore there is no survivorship among parceners.

Incident to this estate is the law of hotchpot.

Coparcenary may also be dissolved, by destroying any of its three constituent unities.

An estate in common is where two or more persons hold lands by distinct titles, and for distinct interests, but by unity of possession, because none knoweth his own severalty.

Tenants in common have therefore a unity of possession (without survivorship—being seised per my, and not per tout), but no unity of title, time, or interest.

This estate may be created, 1. By dissolving the constituent unities of the two former; 2. By express limitation in a grant: and may be destroyed, 1st, by uniting the several titles in one tenant; 2dly, by partition of the land.

5. *Of the title to real property.*—A title to, or right to possess, things real, may be reciprocally acquired or lost, 1. By descent; 2. By purchase.

(1). *By descent.*—Descent is the means whereby a man, on the death of his ancestor, acquires a title to his estate, in right of representation, as his heir at law. To understand the doctrines of descent, we must form a clear notion of consanguinity, which is the connexion or relation of persons descended from the same stock or common ancestor; and it is, first, lineal, where one of the kinsmen is lineally descended, not one from the other; secondly, collateral, where they are lineally descended not one from the other, but both from the same common ancestor.

The rules of descent or canons of inheritance observed by the laws of England are these: 1. Inheritances shall lineally descend to the issue of the person last actually seised, in infinitum, but shall never lineally ascend. 2. The male issue shall be admitted before the female. 3. When there are two or more males in equal degree, the eldest only shall inherit; but the females all together. 4. The lineal descendants, in infinitum, of any person deceased, shall represent their ancestor, or stand in the same place as the person himself would have done, had he been living. 5. On failure of lineal descendants, or issue of the person last seised, the inheritance shall descend to the blood of the first purchaser, subject to the last three rules. To evidence which blood, the two following rules are established. 6. The collateral heir of the person last seised must be his next collateral kinsman of the whole blood. 7. In collateral inheritances, the male stocks shall be preferred to the female; that is, kindred derived from the blood of the male ancestors shall be admitted before those from the blood of the female, unless, where the lands have, in fact, descended from the female.

(2.) *By purchase.*—Purchase, perquisitio, is the possession of an estate, which a man hath by his own act or agreement, and not by the mere act of law, or descent from any of his ancestors:

this includes, 1. Escheat; 2. Occupancy; 3. Prescription; 4. Forfeiture; 5. Alienation.

Escheat is where, upon deficiency of the tenant's inheritable blood, the estate falls to the lord of the fee.

Inheritable blood is wanting to 1, such as are not related to the person last seised; 2, the maternal relations in paternal inheritances, and vice versâ; 3, kindred of the half blood; 4, monsters; 5, bastards; 6, aliens and their issue; 7, persons attainted of treason or felony.

Occupancy is taking possession of those things which before had no owner. Thus at the common law where tenant per auter vie died during the life of cestuy que vie, he who could first enter might lawfully retain the possession, unless by the original grant the heir was made a special occupant. But the law of derelictions and alluvions has narrowed the title by occupancy.

Prescription, as distinguished from custom, is a personal immemorial usage of enjoying a right in some incorporeal hereditament, by a man, and either his ancestors or those whose estate of inheritance he has; of which the first is called prescribing to his ancestors, the latter in a *que* estate.

Forfeiture is a punishment annexed by law to some illegal act, or negligence, of the owner of things real; whereby the estate is transferred to another, who is usually the party injured. Forfeitures for crimes, or misdemeanors, are for 1. Treason; 2. Felony; 3. Misprision of treason; 4. Premunire; 5. Assaults on a Judge, and batteries, sitting the courts.

Alienations or conveyances which induce a forfeiture are, 1. Those in mortmain, made to corporations contrary to the statute law; 2. Those made to aliens; 3. Those made by particular tenants, when larger than their estates will warrant.

Lapse is a forfeiture of the right of presentation to a vacant church by neglect of the patron to present within six calendar months.

Simony is the corrupt presentation of any one to an ecclesiastical benefice, whereby that turn becomes forfeited to the crown.

Waste is a spoil, or destruction, in any corporeal hereditaments, to the prejudice of him that has the inheritance. Copyhold estates may have also other causes of forfeiture, according to the custom of the manor.

Bankruptcy is the act of becoming a bankrupt; that is, a trader who secretes himself, or does certain other acts, tending to defraud his creditors; by bankruptcy all the estates of the bankrupt are transferred to the assignees of his commissioners, to be sold for the benefit of his creditors.

6. *Of alienating or transferring real property.*—Alienation, conveyance, or purchase, in its more limited sense, is a means of transferring real estates wherein they are voluntarily resigned by one man, and accepted by another. This formerly could not be done by a tenant, without license from his lord; nor by a lord without attornment of his tenant.

All persons are capable of purchasing; and all that are in possession of any estates are capable of conveying them, unless under peculiar disabilities by law; as being attainted, non compotis, infants under duress, feme coverts or aliens. Alienations are made by common assurances which are, 1. By deed, or matter in pais; 2. By matter of record; 3. By special custom; 4 By devise.

In assurances by deeds may be considered. 1. The general nature of a deed. 2. Its several species. A deed, in general, is a writing sealed and delivered by the parties; and may be, 1. A deed indented, or indenture. 2. A deed poll.

The requisites of a deed are, 1. Sufficient parties, and proper subject matter; 2. Good and sufficient consideration; 3. Writing on paper, or parchment, duly stamped; 4. Legal and orderly parts: namely, 1st, the premises; 2dly, the habendum; 3dly, the tenendum; 4thly, the reddendum; 5thly, the conditions; 6thly, the warranty which is either lineal or collateral; 7thly, the covenants; 8thly, the conclusion, which includes the date. 5. Reading it, if desired; 6. Sealing, and, in many cases, signing it also; 7. Delivery; 8. Attestation.

A deed may be avoided, 1. By the want of any of the requisites before-mentioned; 2. By subsequent matter; 1st, rasure or alteration; 2dly, defacing its seal; 3dly, cancelling; 4thly, disagreement of those whose consent is necessary; 5thly, judgment of a court of justice.

Deeds which serve to convey real property, or conveyances, are either by common law or by statute; and, of conveyances by common law, some are original or primary, others derivative or secondary.

Original conveyances, are, 1. Feoffments; 2. Gifts; 3. Grants; 4. Leases; 5. Exchanges; 6. Partitions. Derivative are, 7. Releases; 8. Confirmations; 9. Surrenders; 10. Assignments; 11. Defeasances.

A feoffment is the transfer of any corporeal hereditament to another. perfected by livery of seisin, or delivery of bodily possession from the feoffer to the feoffee; without which no freehold estate therein can be created at common law. A gift is properly the conveyance of lands in tail. A grant is the regular method, by common law, of conveying incorporeal hereditaments. A lease is the demise, granting, or letting to farm of any tenement, usually for a less term than the lessor has therein, yet sometimes possibly for a greater; according to the regulations of the restraining and enabling statutes. An exchange is the mutual conveyance of equal interests, the one in consideration of the other. A partition is the division of an estate held in joint-tenancy, in coparcenary, or in common, between the respective tenants; so that each may hold his distinct part in severalty. A release is the discharge or conveyance of a man's right, in lands and tenements to another that has some former estate in possession therein. A confirmation is the conveyance of an estate or right in esse, whereby a voidable estate is made sure, or a particular estate increased. A surrender is the yielding up of an estate for life, or years, to him that has the immediate remainder or reversion; wherein the particular estate may emerge.

An assignment is the transfer, or making over to another, of the whole right one has in any estate; but usually in a lease for life or years. A defeasance is a collateral deed made at the same

time with the original conveyance, containing some condition upon which the estate may be defeated.

Conveyances by statute depend much on the doctrine of uses and trusts; which are a confidence reposed in the terre-tenant, or tenant of the land, that he shall permit the profits to be enjoyed, according to the directions of cestuy que use, or cestuy que trust. The statute of uses, having transferred all uses into actual possession (or, rather, having drawn the possession to the use) has given birth to three other species of conveyance: 1. A covenant to stand seised to uses; 2. A bargain and sale, enrolled; 3. A lease and release; 4. A deed to lead or declare the use of other more direct conveyances. 5. A revocation of uses; being the execution of a power, reserved at the creation of the use, of recalling at a future time the use or estate so created. All which owe their present operation principally to the statute of uses.

Deeds which do not convey, but only *charge* real property, and discharge it, are, 1. Obligations. 2. Recognizances. 3. Defeasances upon both.

By matter of record.—Assurances by matter of record are where the sanction of some court of record is called in, to substantiate and witness the transfer of real property: these are, 1. Private acts of parliament; 2. The king's grants; 3. Fines; 4. Common recoveries.

Private acts of parliament are a species of assurances calculated to give (by the transcendent authority of parliament) such reasonable powers or relief as are beyond the reach of the ordinary course of law. The king's grants, contained in charters or letters patent, are all entered on record for the dignity of the royal person, and security of the royal revenue. A fine (sometimes said to be a feoffment of record) is an amicable composition and agreement of an actual, or fictitious suit; whereby the estate in question is acknowledged to be the right of one of the parties. The parts of a fine are, 1. The writ of covenant; 2. The license to agree; 3. The concord; 4. The note; 5. The foot; to which the statute hath added, 6. Proclamations.

Fines are of four kinds, 1. Sur cognizance de droit come ceo que il ad de son done; 2. Sur cognizance de droit tantum; 3. Sur concessit, sur done, grant, et render; which is a double fine. The force and effect of fines (when levied by such as have themselves any interest in the estate) are to assure the lands in question to the cognizee, by barring the respective rights of parties, privies, and strangers. A common recovery is by an actual, or fictitious, suit or action for land, brought against the tenant of the freehold, who thereupon vouches another, who undertakes to warrant the tenant's title; but, upon such vouchee's making default, the land is recovered by judgment at law, against the tenant; who in return obtains judgment against the vouchee to recover lands of equal value in recompense. The force and effect of a recovery are to assure lands to the recoverer, by barring estates tail, and all remainders and reversions expectant thereon, provided the tenant in tail either suffers or is vouched in such recovery. The uses of a fine or recovery may be directed by, 1. Deeds to lead such uses, which are made previous to the levying or suffering them; 2. Deeds to declare the uses, which are made subsequent.

By special custom.—Assurances by special custom are confined to the transfer of copy-hold estates.

This is effected by, 1. Surrender by the tenant into the hands of the lord to the use of another, according to the custom of the manor; 2. Presentment, by the tenants or homage, of such surrender; 3. Admittance of the surrender, by the lord, according to the uses expressed in such surrender. Admittance may also be had upon original grants to the tenant from the lord, and upon descents to the heir from the ancestor.

By devise.—Devise is a disposition of lands and tenements contained in the last will and testament of the owner. This was not permitted by the common law, as it stood since the conquest, but was introduced by the statute law, under Henry VIII., since made more universal by the statute of tenures under Charles II., with the introduction of additional solemnities by the statute of frauds and perjuries in the same reign.

The construction of all common assurances should be, 1. Agreeable to the intention; 2. To the words of the parties; 3. Made upon the entire deed; 4. Bearing strongest against the contractor; 5. Conformable to law; 6. Rejecting the latter of two repugnant clauses in a deed, and the former in a will; 7. Most favorable in case of a devise.

Of the nature of and property in things personal.—Things personal are comprehended under the general name of chattels, which include whatever wants either the duration or the immobility attending things real. In these are to be considered, 1. Their distribution; 2. The property of them; 3. The title to that property.

As to the distribution of chattels, they are, 1. Chattels real; 2. Chattels personal. *Chattels real* are such quantities of interest in things immoveable, or lands and tenements, as are short of the duration of freeholds, being limited to a time certain, beyond which they cannot subsist. *Chattels personal* are things moveable, which may be transferred from place to place, with the person of the owner.

Property in chattels personal is either in possession or in action. Property in possession, where a man has the actual enjoyment of the thing, is, 1. Absolute; 2. Qualified. Absolute property is where a man has such an exclusive right in the thing, that it cannot cease to be his without his own act or default. Qualified property is such as is not in its nature permanent; but may sometimes subsist, and at other times not subsist. This may arise, 1. Where the subject is incapable of absolute ownership; 2. From the peculiar circumstances of the owners.

Property in action is where a man has not the actual occupation of the thing, but only a right to it, arising upon some contract, and recoverable by an action at law. The property of chattels personal is liable to remainders expectant on estates for life to joint-tenancy, and to tenancy in common.

Of the title to personal property.—The title to things personal may be acquired or lost by, 1. Occupancy; 2. Prerogative; 3. Custom; 4. Succession; 5. Marriage; 6. Forfeiture; 7. Judgment; 8. Gift or grant; 9. Contract; 10. Bankruptcy; 11. Testament; 12. Administration.

By occupancy. Occupancy still gives the first occupant a right to those few things which have no legal owner, or which are incapable of permanent ownership. Such as, 1. Goods of alien enemies; 2. Things found; 3. The benefit of the elements; 4. Animals, feræ naturæ; 5. Emblements; 6. Things gained by accession; 7. By confusion; 8. Literary property.

By prerogative is vested in the crown, or its grantees, the property of the royal revenue; and also the property of all game in the kingdom, with the right of pursuing and taking it.

By custom, obtaining in particular places, a right may be acquired in chattels; the most usual of which customs are those relating to, 1. Heriots; 2. Mortuaries; 3. Heirlooms. Heriots are either heriot-service, which differs little from a rent; or heriot-custom, which is a customary tribute of goods and chattels, payable to the lords of the fee, on the decease of the owner of lands. Mortuaries are a customary gift, due to the minister, in many parishes, on the death of his parishioners. Heir-looms are such personal chattels as descend by special custom to the heir, along with the inheritance of his ancestor.

By succession, the right of chattels is also vested in corporations aggregate, and likewise in such corporations sole as are the heads and representatives of bodies aggregate.

By marriage the chattels of the wife are vested in the husband, in the same degree of property, and with the same powers, as the wife, when sole, had over them, provided he reduces them to possession. The wife also acquires by marriage, a property in her paraphernalia.

By forfeiture for crimes and misdemeanors the right of goods and chattels may be transferred from one man to another, either in part or totally. Total forfeitures of goods arise from conviction of, 1. Treason, and misprision thereof; 2. Felony; 3. Excusable homicide; 4. Outlawry for treason or felony; 5. Flight; 6. Standing mute; 7. Atrocious contempts, as assaults on a judge and batteries, sitting the courts; 8. Præmunire; 9. Pretended prophecies; 10. Owling; 11. Residing abroad of artificers; 12. Challenges to fight for debts at play..

By judgment consequent on a suit at law a man may, in some cases, not only recover, but originally acquire a right to personal property. As, .1. To penalties, recoverable by action popular; 2. Damages; 3. To costs of suit.

By gifts, grants, and contracts. A grant or gift is a voluntary conveyance of a chattel, personal in possession, without any consideration or equivalent. A contract is an agreement, upon sufficient consideration, to do or not to do a particular thing; and, by such contract, any personal property, either in possession or in action, may be transferred. Contracts may be either express or implied, either executed or executory.

The consideration of contracts is, 1. A good consideration; 2. A valuable consideration; which is, 1. *Do, ut des*; 2. *Facio, ut facias*; 3. *Facio, ut des*; 4. *Do, ut facias*.

The most usual species of personal contracts are, 1. Sale or exchange; 2. Bailment; 3. Hiring or borrowing; 4. Debt. Sale or exchange is a transmutation of property from one man to another, in consideration of some recompense in value. Bailment is the delivery of goods in trust, upon a contract, express or implied, that the trust shall be faithfully performed by the bailee. Hiring or borrowing is a contract, whereby the possession of chattels is transferred for a particular time, on condition that the identical goods (or sometimes their value) be restored at the time appointed, together with (in case of hiring) a stipend or price for the use. This price being calculated to answer the hazard, as well as the inconvenience of lending, gives birth to the doctrine of interest or usury upon loans; and consequently to the doctrine of bottomry or respondentia and insurance. Debt is any contract whereby money becomes due to the creditor: this is, 1. A debt of record; 2. A debt upon special contract; 3. A debt upon simple contract; which last includes paper credit, or bills of exchange, and promissory notes.

By bankruptcy. Herein may be considered, 1. Who may become a bankrupt; 2. The acts whereby he may become a bankrupt; 3. The proceedings on a commission of bankrupt; 4. How his property is transferred thereby. Persons of full age, using the trade of merchandise, by buying and selling, and seeking their livelihood thereby, are liable to become bankrupts for debts of a sufficient amount.

A trader who endeavours to avoid his creditors, or evade their just demands, by any of the acts specified in the several acts of bankruptcy, doth thereby commit *an act of bankruptcy*. The proceedings on a commission of bankrupt, so far as they affect the bankrupt himself, are principally by 1. Petition; 2. Commission; 3. Declaration; 4. Choice of assignees; 5. The bankrupt's surrender; 6. His examination; 7. His discovery; 8. His certificate; 9. His allowance. The property of a bankrupt's personal estate is, immediately upon the act of bankruptcy, vested by construction of law in the assignees, and they, when they have collected sufficient for the purpose, distribute it by equal dividends among all the creditors. See BANKRUPT.

By Testament and Administration.—Concerning testaments and administrations, considered jointly, are to be observed 1. Their original, and antiquity; 2. Who may make a testament; 3. Its nature and incidents; 4. What are executors and administrators; 5. Their office and duty.

Testaments have subsisted in England immemorially; whereby the deceased was at liberty to dispose of his personal estate, reserving anciently to his wife and children their reasonable part of his effects. The goods of intestates belonged anciently to the king, who granted them to the prelates to be disposed of in pious uses but, on their abuse of this trust in the times of popery, the legislature compelled them to dele-

gate their power to *administrators* expressly provided by law.

All persons may make a testament, unless disabled by, 1. Want of discretion; 2. Want of free-will; 3. Criminal conduct.

Testaments are the legal declarations of a man's intentions, which he wills to be performed after his death: These are, 1. Written; 2. Nuncupative.

An *executor* is he to whom a man by his will commits the execution thereof.

Administrators are, 1. Durante minore ætate of an infant executor or administrator; 2. Cum testamento annexo, when no executor is named, or the executor refuses to act; 3. General administrators, in pursuance of the statutes of Edward III. and Henry VIII.; 4. Administrators de bonis non; when a former executor or administrator dies without completing his trust.

The office and duty of executors, and, in many points, of administrators also, are, 1. To bury the deceased; 2. To prove the will, or take administration; 3. To make an inventory; 4. To collect the goods and chattels; 5. To pay debts, observing the rules of priority; 6. To pay legacies, either general or specific if they be vested and not lapsed; 7. To distribute the undivided surplus, according to the statute of distributions.

Chap. III.—Of Injuries relating to Persons.

1. *Of injuries proceeding from, or affecting the crown.*—Injuries to which the crown is a party are, 1. Where the crown is the aggressor; 2. Where the crown is the sufferer. Some of these relate to injuries of property as well as personal rights; but it will be convenient to class them all under the present head.

The crown is the aggressor, whenever it is in possession of any property to which the subject has a right. This is remedied, 1. By petition of right; where the right is grounded on facts disclosed in the petition itself; 2. By monstrans de droit; where the claim is grounded on facts, already appearing on record. The effect of both which is to remove the hands or possession of the king.

Where the crown is the sufferer, the king's remedies are, 1. By such common law actions as are consistent with the royal dignity; 2. By inquest of office, to recover possession: which, when found, gives the king his right by solemn matter of record; but may afterwards be traversed by the subject; 3. By writ of scire facias, to repeal the king's patent or grant; 4. By information of intrusion, to give damages for any trespass on the lands of the crown; or of debt, to recover monies due upon contract, or forfeited by the breach of any penal statute; or sometimes in the latter cases by information in rem: all of which informations are filed in the exchequer, ex officio, by the king's attorney-general; 5. By writ of quo warranto, or information in the nature of such writ; to seize into the king's hands any franchise usurped by the subject, or o oust a usurper from ary public office; 6. By writ of mandamus, unless cause be shown, to admit or restore any person entitled to a franchise or office: to which, if a false cause be returned, the remedy is by traverse, or by action on the case for damages; and in consequence a peremptory mandamus or writ of restitution.

2. *Of injuries to the absolute rights of persons.*—Injuries to the rights of persons are, 1. Injuries to the absolute; 2. Injuries to the relative, rights of persons.

The absolute rights of individuals are, 1. Personal security; 2. Personal liberty; 3. Private property. To which the injuries must be correspondent.

(1.) *Personal security.*—Injuries to personal security are, 1. Against a man's life; 2. Against his limbs; 3. Against his body; 4. Against his health; 5. Against his reputation. The first must be referred to a subsequent chapter.

Injuries to the limbs and body are, 1. Threats; 2. Assault; 3. Battery; 4. Wounding; 5. Mayhem.

The remedy for these injuries is by action of trespass, vi et armis; for damages. The mode of procedure, before the several courts in which redress may be obtained, will be stated in a subsequent chapter; but it will be found convenient to point out the general nature of each remedy in connexion with the injury to which it applies.

Injuries to health, by any unwholesome practices, are remedied by a special action of trespass, on the case, for damages.

Injuries to reputation are, 1. Slanderous and malicious words. The remedy is by action on the case, for damages; 2. Libels; for which a similar remedy is provided; 3. For malicious prosecutions. The remedy is by action of conspiracy, or on the case, for damages.

(2.) *Personal liberty.*—The injury to personal liberty is false imprisonment. The remedies are, 1. By writ of, 1st, Mainprize; 2ndly, Odio et atia; 3dly, Homine replegiando; 4thly, Habeas corpus; to remove the wrong; 2. By action of trespass; to recover damages.

(3.) *Injuries to private property.* See the next chapter.

3. *Of the injuries to the relative rights of persons.*—Injuries to relative rights affect, 1. Husbands; 2. Parents; 3. Guardians; 4. Masters.

(1.) *Husbands*—Injuries to a husband are, 1. Abduction, or taking away his wife. The remedy provided by the law is by action of trespass, de uxore raptâ et abductâ; to recover possession of his wife, and damages; 2. Criminal conversation with her. The remedy for which is by action on the case, for damages; 3. Beating her. For which a remedy is provided by action on the case, or in trespass, per quod consortium amisit; for damages at the suit of the husband, or a joint action of trespass by the husband and wife.

(2.) *Parents and guardians.*—The injury to a parent or guardian is the abduction of their children or wards. The remedy for which is by an action of trespass, de filiis vel custodiis raptis vel abductis, to recover possession of them, and damages.

(3.) *Masters.*—Injuries to a master are, 1. Retaining his servants. For which the law has provided a remedy by action on the case for

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testamento annexo, when no ...
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debts, observing the rules of ...
legacies, either general or ...
vested and not lapsed; ...
divided surplus, according to ...
tributions.

CHAP. III.—OF I...

1. *Of injuries* ... *crown.*—Injuries to ... are, 1. Where the ... *Where* the crown ... *relate to* injuries of ... *rights;* but it will be ... *under th*... *The c*rown is ... *possessio*n ... *has a rig*ht ... *of right;* ... *disclosed* ... *de droit;* ... *already app*... *which is* ... *the king.*

Where the ... remedies ... are ... inquest of ... *when found* ... *matter of* ... *versed by* ... *to repeal* ... *formation* ... *trespass* ... *to recover* ... *by the* ... *in the* ... *which* ... *ex* ... By ...

val ... er- ... ion ...

uc- ... nim ... ight ... r or ...

ition ... ages ... which ... ly for ... ntive, ... n out ... ve, by ... ed and ... images ... used. ... en one ... or neg- ... of rents ... f those ...

due by ... compel ... tion of ... suetudi- ... ; 5. By ... ght sur ... The ... es. ... the law ... vexes; ...

custom, ... nolendi- ... the per- ... y action ... tter is the ...

the hin- ... n incor- ... d lawful ... Of fran- ... ; 4. Of ...

lied by a ... s.

rcommon- ... for which ... case, or of ... easant: to ...

ie remedies ... t; to com- ... r damages; ... ure; to ap- ... secunda su- ... rary cattle, ... the common ... ; the others ...

The remedies ... common, and ... disseisin, and ... amages only; ... is the only re-

damages; 2. Beating them; the remedy in which case is by action on the case or in trespass, per quod servitium amisit, for damages.

Chap. IV.—Injuries relating to Property.

1. *Of injuries to personal property.*—Personal property is either in possession or in action. Injuries to personal property in possession are, 1. By dispossession; 2. By damage, while the owner remains in possession.

(1.) *Dispossession.*—Dispossession may be effected, 1. By an unlawful taking; 2. By an unlawful detaining.

In this place, as in the chapter respecting personal injuries, we refer to a subsequent part of the treatise for an account of the mode of redress, and the courts in which it is to be sought; but we shall find it convenient briefly to notice, along with each species of injury, the general kind of remedy which the law affords; reserving the details of procedure for the fifth chapter.

For the unlawful taking of goods and chattels personal, the remedy is, 1. Actual restitution, which in case of a wrongful distress is obtained by action of replevin; 2. Satisfaction in damages: 1st, in the case of rescous, by action of rescous, pound breach, or on the case: 2dly, in case of other unlawful takings, by action of trespass or trover.

For the unlawful detaining of goods lawfully taken, the remedy is also, 1. Actual restitution; by action of replevin or detinue. 2. Satisfaction in damages: by action on the case, for trover and conversion.

(2.) *Damage.*—For damage to personal property while in the owner's possession, the remedy is in damages; by action of trespass vi et armis, in case the act be immediately injurious; or by action of trespass on the case to redress consequential damage.

Injuries to personal property, in action, arise by breach of contracts, 1. Express; 2. Implied.

Breaches of express contracts are, 1. By non-payment of debts; the remedies for which are, 1st, Specific payment; recoverable by action of debt; 2dly, damages for non-payment; recoverable by action on the case. 2. By non-performance of covenants. In which case remedy is by action of covenant, 1st, to recover damages, in covenants personal; 2dly, to compel performance, in covenants real. 3. By non-performance of promises, or assumpsits. And here the remedy is by action on the case, for damages.

Implied contracts are such as arise, 1. From the nature and constitution of government; 2. From reason and the construction of law.

Breaches of contracts, implied in the nature of government, are by the non-payment of money which the laws have directed to be paid. In these cases the remedy is by action of debt (which in such cases is frequently a popular, frequently a qui tam, action), to compel the specific payment; or, sometimes, by action on the case, for damages.

Breaches of contracts implied in reason, and construction of law, are by the non-performance of legal presumptive assumpsits: for which the remedy is in damages; by an action on the case on the implied assumpsits, 1. Of a quantum meruit; 2. Of a quantum valebat; 3. Of money expended for another; 4. Of receiving money to another's use; 5. Of an insimul computassent, on an account stated (the remedy on account unstated being by action of account); 6. Of performing one's duty, in any employment, with integrity, diligence, and skill. In some of which cases an action of deceit (or on the case in nature of deceit) will lie.

2. *Of injuries to real property.*—Injuries affecting real property are, 1. Ouster; 2. Trespass; 3. Nuisance; 4. Waste; 5. Subtraction; 6 Disturbance.

(1.) *Dispossession of freehold.*—Ouster is the amotion of possession; and is, 1. From freeholds; 2. From chattels real.

Ouster from freeholds is effected by, 1. Abatement; 2.; Intrusion; 3. Disseisin; 4. Discontinuance; 5. Deforcement.

Abatement is the entry of a stranger, after the death of the ancestor, before the heir.

Intrusion is the entry of a stranger, after a particular estate of freehold is determined, before him in remainder or in reversion.

Disseisin is a wrongful putting out of him that is seised of the freehold.

Discontinuance is where the tenant in tail, or the husband of a tenant in fee, makes a larger estate of the land than the law allows.

Deforcement is any other detainer of the freehold from him who has the property, but who never had the possession.

The universal remedy for all these injuries is restitution or delivery of possession; and sometimes damages for the detention. This is effected, 1. By mere entry; 2. By action possessory; 3. By writ of right.

Mere entry on lands, by him who has the apparent right of possession, will (if peaceable) divest the mere possession of a wrong doer. But forcible entries are remedied by immediate restitution, to be given by a justice of the peace. Where the wrong doer has not only mere possession, but also an apparent right of possession, this may be divested by him who has the actual right of possession by means of the possessory actions of writ of entry or assise.

A writ of entry is a real action, which disproves the title of the tenant, by showing the unlawful means under which he gained or continues possession. And it may be brought either against the wrong doer himself, or in the degrees called the per, the per and cui, and the post. These writs of entry, however, are not now in use.

An assise is a real action, which proves the title of the demandant by showing his own or his ancestor's possession; and it may be brought either to remedy abatements, viz. the assise of mort d'ancestor, &c.; or to remedy recent disseisins, viz. the assise of novel disseisin. But these writs have also fallen into disuse. Where the wrong doer has gained the actual right of possession, he who has the right of property can only be remedied by a writ of right, or some writ of a similar nature. As, 1. Where such right of possession is gained by the discontinuance of tenant in tail The remedy for the right

of property is by writ of formedon. 2. Where gained by recovery in a possessory action, had against tenants of particular estates by their own default. The remedy is by writ of quod ei deforceat. 3. Where gained by recovery in a possessory action had upon the merits. 4. Where gained by the statute of limitations. The remedy, in both cases, is by a mere writ of right, the highest writ in the law, which is now the general mode of proceeding in a real action and of which there have been several recent instances.

Dispossession of chattels real.—Ouster from chattels real is, 1. From estates by statute and elegit; 2. From an estate for years.

Ouster from estates by statute, or elegit, is effected by a kind of disseisin. The remedy for which is restitution and damages; by assise of novel disseisin, or usually by scire facias and re-extent.

Ouster from an estate for years, is effected by a like disseisin or ejectment, and the remedy is also by restitution and damages; 1. By writ of ejectione firmæ; 2. By writ of quare ejecit infra terminum.

A writ of ejectione firmæ, or action of trespass in ejectment, lieth where lands, &c., are let for a term of years, and the lessee is ousted or ejected from his term; in which case he shall recover possession of his term and damages.

This is now the usual method of trying titles to land, instead of an action real: viz. By 1. The claimant's making an actual or supposed lease upon the land to the plaintiff; 2. The plaintiff's actual or supposed entry thereupon; 3. His actual or supposed ouster and ejectment by the defendant. For which injury this action is brought either against the tenant, or (more usually) against some casual or fictitious ejector; in whose stead the tenant may be admitted defendant, on condition that the lease, entry, and ouster, be confessed, and that nothing else be disputed but the merits of the title claimed by the lessor of the plaintiff.

A writ of quare ejecit infra terminum is an action of a similar nature; only not brought against the wrong doer or ejector himself, but such as are in possession under his title. But this writ has now become wholly obsolete.

(2.) *Of trespass.*—Trespass is an entry upon, and damage done to another's lands, by one's self, or one's cattle; without any lawful authority, or cause of justification: which is called a breach of his close. The remedy for which is in damages; by an action of trespass, quare clausum fregit: besides that of distress, damage feasant. But unless the title to the land came chiefly in question, or the trespass was wilful or malicious, the plaintiff (if the damages be under 40*s.*) shall recover no more costs than damages.

(3.) *Of nuisance.*—Nuisance, or annoyance, is any thing that worketh damage or inconvenience: and it is either a public and common nuisance, or a private nuisance; which is any thing done to the hurt or annoyance of 1. The corporeal; 2. The incorporeal, hereditaments of another.

The remedies for a private nuisance, besides that of abatement, are 1. Damages, by action on the case; which also lies for special prejudice by a public nuisance; 2. Removal thereof, and damages, by assise of nuisance; 3. Like removal and damages, by writ of quod permittat prosternere. The remedy usually adopted is by action on the case, the others have fallen into disuse.

(4.) *Of waste.*—Waste is a spoil and destruction in lands and tenements, to the injury of him who hath, 1. An immediate interest, as by right of common in the lands; 2. The remainder or reversion of the inheritance.

The remedies for a commoner are restitution and damages, by assise of common: or damages only, by action on the case; the former of which remedies has become obsolete. The remedy for him in remainder or reversion is, 1. Preventive, by writ of estrepement at law, or injunction out of chancery, to stay waste; 2. Corrective, by action of waste, to recover the place wasted and damages; or by action on the case for damages only. The writ of estrepement is now disused.

(5.) *Of subtraction.*—Subtraction is when one who owes services to another, withdraws or neglects to perform them. This may be, 1. Of rents and other services, due by tenure; 2. Of those due by custom.

For subtraction of rents and services due by tenure, the remedy is, 1. By distress, to compel the payment or performance; 2. By action of debt; 3. By assise; 4. By writ de consuetudinibus et servitiis, to compel the payment; 5. By writ of cessavit; and, 6. By writ of right sur disclaimer; to recover the land itself. The distraint and action are the usual remedies.

To remedy the oppression of the lord, the law has also given, 1. The writ of ne injustè vexes; 2. The writ of mesne.

For subtraction of services due by custom, the remedy is, 1. By writ of secta ad molendinum, furnum torrale, &c., to compel the performance and recover damages; 2. By action on the case; for damages only. The latter is the ordinary remedy in use.

(6.) *Of disturbance.*—Disturbance is the hindering or disquieting the owners of an incorporeal hereditament, in the regular and lawful enjoyment of it. Disturbances are, 1. Of franchises; 2. Of commons; 3. Of ways; 4. Of tenure; 5. Of patronage.

Disturbance of franchises is remedied by a special action on the case; for damages.

Disturbance of common is, (1.) Intercommoning without right. The remedy given for which is in damages; by an action on the case, or of trespass: besides distress, damage feasant: to compel satisfaction.

(2.) Surcharging the common. The remedies for which are distress, damagé feasant; to compel satisfaction; action on the case, for damages; or, writ of admeasurement of pasture; to apportion the common, and writ de secundâ superoneratione; for the supernumerary cattle, and damages. In these cases, also, the common remedy is by distraint or action; the others having become obsolete.

(3.) Inclosure or obstruction. The remedies for which are by restitution of the common, and damages; by assise of a novel disseisin, and by writ of quod permittat: or damages only; by action on the case. The latter is the only remedy now in use.

Disturbance of ways is the obstruction, 1. Of a way in gross, by the owner of the land; 2. Of a way appendant, by a stranger. And the remedy for both is by damages, obtained in an action in the case.

Disturbance of tenure, by driving away tenants, is remedied by a special action on the case, for damages.

Disturbance of patronage is the hindrance of a patron to present his clerk to a benefice, whereof usurpation within six months is now become a species.

Disturbers may be, 1. The pseudo-patron, by his wrongful presentation; 2. His clerk, by demanding institution; 3. The ordinary, by refusing the clerk of the true patron.

The remedies are, 1. By assise of darrein presentment; 2. By writ of quare impedit; to compel institution and recover damages, consequent to which are the writs of quare incumbravit, and quare non admisit, for subsequent damages; 3. By writ of right of advowson; to compel institution, or establish the permanent right. The writ of quare impedit is now, however, the only remedy in use.

Chap. V.—Of Remedies for Injuries, and Mode of Procedure.

The redress of civil injuries is one principal object of the laws of England. This redress is effected, 1. By the mere act of the parties; 2. By the mere operation of law; 3. By both together, or suit in courts.

1. *Of redress by the mere act of the parties.*—Redress, by the mere act of the parties, is that which arises, 1. From the sole act of the party injured; 2. From the joint act of all the parties.

Of the first sort are, 1. Defence of one's self or relations; 2. Recaption of goods; 3. Entry on lands and tenements; 4. Abatement of nuisances; 5. Distress for rent, for suit or service, for amercements, for damage, or for divers statutable penalties, made of such things only as are legally distrainable; and taken and disposed of according to the due course of law; 6. Seising of heriots, &c.

Of the second sort are, 1. Accord; 2. Arbitration.

2. *Of redress by the mere operation of law.*—Redress, effected by the mere operation of law, is, 1. In the case of retainer, where a creditor is executor or administrator, and is thereupon allowed to retain his own debt; 2. In the case of remitter, where one who has had a good title to lands, &c., comes into possession by a bad one, and is thereupon remitted to his ancient good title, which protects his ill-acquired possession.

3. *Of redress in courts of justice.*—Injuries between subject and subject, cognisable by the courts of common law, are in general remedied by putting the party injured into possession of that right whereof he is unjustly deprived.

This is effected, 1. By delivery of the thing detained to the rightful owner; 2. Where that remedy is either impossible or inadequate, by giving the party injured a satisfaction in damages.

The instruments by which these remedies may be obtained are suits or actions: which are defined to be legal demands of one's right.

Redress, that is effected by the act both of the law and of the parties, is by suit or action in the courts of justice.

Herein may be considered, 1. The courts themselves; 2. The cognisance of wrongs or injuries therein. And, of courts, 1. Their nature and incidents; 2. Their several species.

A court is a place wherein justice is judicially administered by officers delegated by the crown; being a court either of record or not of record.

Incident to all courts are a plaintiff, defendant, and judge: and there are also usually attorneys; and advocates or counsel, viz. either barristers or serjeants at law.

(1.) *Of courts in general.*—Courts of justice, with regard to their several species, are, 1. Of a public, or general jurisdiction throughout the realm; 2. Of a private, or special jurisdiction.

Public courts of justice are, 1. The courts of common law and equity; 2. The ecclesiastical courts; 3. The military courts; 4. The maritime courts.

The general and public courts of common law and equity are, 1. The court of piepoudre; 2. The court baron; 3. The hundred court; 4. The county court; 5. The court of common pleas; 6. The court of king's bench; 7. The court of exchequer; 8. The court of chancery (which two last are courts of equity as well as law); 9 The court of exchequer chamber; 10. The house of peers, to which may be added as auxiliaries, 11. The courts of assize and nisi prius.

(2.) *Of courts ecclesiastical.*—Ecclesiastical courts which were separated from the temporal by William the Conqueror, or courts Christian, are, 1. The court of the archdeacon. 2. The court of the bishop's consistory. 3. The court of arches. 4. The court of peculiars. 5. The prerogative. 6. The court of delegates. 7. The court of review.

Remedies in the ecclesiastical courts.—Injuries cognizable in the ecclesiastical courts are, 1. Pecuniary. 2. Matrimonial. 3. Testamentary.

Pecuniary injuries, here cognizable, are, 1. Subtraction of tithes; for which the remedy is by suit to compel their payment, or an equivalent; and also their double value. 2. Non-payment of ecclesiastical dues, the remedy for which is by suit for payment. 3. Spoliation, for which the remedy is by suit for restitution. 4. Dilapidations, the remedy for which is by suit for damages. 5. Non-repair of the church, &c., and non-payment of church-rates, for which the remedy is by suit to compel them.

Matrimonial injuries, are, 1. Jactitation of marriage, in which the remedy is by suit for perpetual silence. 2. Subtraction of conjugal rites, for which the remedy provided is by suit for restitution. 3. Inability for the marriage state. The remedy for which is by suit for divorce. 4. Refusal of decent maintenance to the wife, for which there is a remedy by suit for alimony.

Testamentary injuries are, 1. Disputing the validity of wills, the remedy provided for which

is by suit to establish them. 2. Obstructing of administrations, and the remedy is by suit for the granting them. 3. Subtraction of legacies, for which the remedy is by suit for the payment.

The course of proceedings in these courts is much conformed to the civil and canon law; but their only compulsive process is that of excommunication; which is enforced by the temporal writ of significavit, or de excommunicato capiendo.

(3.) *Of courts military and maritime.*—Of courts military: the only permanent military court was that of chivalry, but which is now entirely out of use. The courts martial are temporary, and are annually established by act of parliament.

Civil injuries cognizable in the court military, or court of chivalry, are, 1. Injuries in point of honor, for which there was formerly a remedy by suit for honorable amends, but which is now entirely obsolete. 2. Encroachments in coat-armour, &c., the remedy for which is by suit to remove them, and the proceedings are of a summary nature.

Of Courts Maritime.—Maritime courts are, 1. The court of admiralty, and vice-admiralty. 2. The court of delegates. 3. The lords of the privy council, and others, authorised by the king's commission for appeals in prize causes.

Civil injuries cognizable in the courts maritime are injuries in their nature of common law cognizance, but arising wholly upon the sea, and not within the precincts of any county. The proceedings herein are also much conformed to the civil law.

(4.) *Of courts of a special or limited jurisdiction.*—Courts of a special and private jurisdiction, are, 1. The forest courts; including the courts of attachments, regard, swienmote, and justice seat. 2. The court of commissioners of sewers. 3. The court of policies of assurance. 4. The court of the marshalsea, and the palace court. 5. The courts of the principality of Wales. 6. The court of the duchy chamber of Lancaster. 7. The courts of the counties palatine, and other royal franchises. 8. The stannary courts. 9. The courts of London, and other corporations; to which may be referred the courts of requests, or courts of conscience; and the modern regulations of certain courts baron and county courts. 10. The courts of the two universities.

(5.) *Mode of procedure in the common law courts.*—1. Of proceedings *before trial.* The pursuit of the several remedies furnished by the laws of England is, 1. By action in the courts of common law; 2. By the proceedings in the courts of equity.

Of an action in the court of common pleas (originally the proper court for prosecuting suits) the orderly parts are, 1. The original writ; 2. The process; 3. The pleadings; 4. The issue, or demurrer; 5. The trial; 6. The judgment; 7. The proceedings in nature of appeal; 8. The execution.

Original writ.—The original writ is the begining or foundation of a suit, and is either optional, called a precipe, commanding the defendant to do something in certain, or otherwise show cause to the contrary; or preremptory, called a si fecerit te securum, commanding, upon security being given by the plaintiff, the defendant to appear in court, to show wherefore he has injured the plaintiff: both issuing out of chancery under the king's great seal, and returnable in bank during term time.

Process.—Process is the means of compelling the defendant to appear in court. This includes, 1. Summons; 2. The writ of attachment, or pone; which is sometimes the first or original process; 3. The writ of distringas, or distress infinite; 4. The writs of capias ad respondendum, and testatum capias; or, instead of these, in the king's bench, the bill of Middlesex, and writ of Latitat; and, in the Exchequer, the writ of quo minus. 5. The alias and pluries writs; 6. The exigent, or writ of exigi facias, proclamations, and outlawry; 7. Appearance and common bail; 8. The arrest; 9. Special bail, first to the sheriff, and then to the action.

Pleadings.—Pleadings are the mutual altercations of the plaintiff and defendant in writing: under which are comprised, 1. The declaration or count; wherein, incidentally, of the visne, nonsuit, retraxit, and discontinuance; 2. The defence, claim of cognizance, imparlance, view, oyer, aid, prayer, voucher, or age. 3. The plea; which is either a dilatory plea, (1st, to the jurisdiction; 2dly, in disability of the plaintiff; 3dly, in abatement;) or it is a plea to the action; sometimes confessing the action either in whole or in part, (wherein of a tender, paying money into court and set off,) but usually denying the complaint, by pleading either, 1st, the general issue; or, 2dly, a special bar, (wherein of justifications, the statutes of limitations, &c.) 4. Replication, rejoinder, surrejoinder, rebutter, surrebutter, &c. Therein of estoppels, color, duplicity, departure, new assignment, protestation, averment, and other incidents of pleading.

Issue and demurrer.—Issue is where the parties, in a course of pleading, come to a point affirmed on one side and denied on the other; which, if it be a matter of law, is called a demurrer; if it be a matter of fact, it still retains the name of an issue of fact.

Continuance is the detaining of the parties in court from time to time, by giving them a day certain to appear upon. And, if any new matter arises since the last continuance or adjournment, the defendant may take advantage of it, even after demurrer or issue, by alleging it as a plea puis darrein continuance.

The determination of an issue in law, or demurrer, is by the opinion of the judges of the court, which is afterwards entered on record.

2. *Of Trials.*—Trial is the examination of the matter of fact put in issue.

The species of trial are, 1. By the record. 2. By inspection. 3. By certificate. 4. By witnesses. 5. By wager of battel. 6. By wager of law. 7. By jury.

Trial by the record is had when the existence of such record is the point in issue.

Trial by inspection, or examination, is had by the court, principally when the matter in issue is the evident object of the senses.

Trial by certificate is had in those cases, where such certificate must have been conclusive to a jury.

Trial by witnesses (the regular method in the civil law) is only used in writ of dower, when the death of the husband is in issue.

Trial by wager of battel, in civil cases, was only had on writ of right; but, in lieu thereof, the tenant might have, at his option, the trial by the grand assise: but this mode of trial is now abolished by act of parliament.

Trial by wager of law is only had where the matter in issue may be supposed to have been privily transacted between the parties themselves, without the intervention of other witnesses.

Trial by jury. Trial by Jury is, 1. Extraordinary; as by the grand assise, in writs of right; and by the grand jury, in writs of attaint. 2. Ordinary.

The method and process of the ordinary trial by jury is, 1. The writ of venire facias to the sheriffs, coroners, or elisors: with the subsequent compulsive process of habeas corpora, or distringas. 2. The carrying down of the record to the court of nisi prius. 3. The sheriff's return; or pannel of, 1st, special, 2dly, common jurors. 4. The challenges; 1st, to the array; 2dly, to the polls of the jurors; either, propter honoris respectum, propter defectum, propter affectum (which is sometimes a principal challenge, sometimes to the favor), or propter delictum. 5. The tales de circumstantibus. 6. The oath of the jury. 7. The evidence; which is either by proofs, 1st, written; 2dly, parole:—or by the private knowledge of the jurors. 8. The verdict, which may be, 1st, privy; 2dly, public; 3dly, special.

3. *Of Judgment and its incidents.*—Whatever is transacted at the trial, in the court of nisi prius, is added to the record under the name of a postea: consequent upon which is the judgment.

Judgment may be arrested or stayed for causes, 1. Extrinsic, or dehors the record; as in the case of new trials. 2. Intrinsic, or within it; as where the declaration varies from the writ, or the verdict from the pleadings and issue; or where the case, laid in the declaration, is not sufficient to support the action in point of law

Where the issue is immaterial, or insufficient, the court may award a repleader.

Judgment is the sentence of the law, pronounced by the court, upon the matter contained in the record.

Judgments are, 1. Interlocutory; which are incomplete till perfected by a writ of enquiry. 2. Final.

Costs are expenses of suit, and are now the necessary consequences of obtaining judgment.

Appeals.—Proceedings, in the nature of appeals from judgment, are, 1. A writ of attaint, to impeach the verdict of a jury; which of late has been superseded by new trials. 2. A writ of audita querela; to discharge a judgment by matter that has since happened. 3. A writ of error from one court of record to another; to correct judgments, erroneous in point of law, and not helped by the statutes of amendment and jeofails.

Writs of error lie, 1. To the court of king's bench, from all inferior courts of record; from the court of common pleas at Westminster; and from the court of king's bench in Ireland. 2. To the courts of exchequer chamber, from the law side of the court of exchequer; and from proceedings in the court of king's bench by bill. 3. To the house of peers, from proceedings in the court of king's bench by original and on writs of error; and from the several courts of exchequer chamber.

Execution.—Execution is the putting in force of the sentence or judgment of the law. Which is effected, 1. Where possession of any hereditament is recovered; by writ of habere facias seisinam, possessionem, &c. 2. Where any thing is awarded to be done or rendered by especial writ for that purpose: as by a writ of abatement, in case of nuisance; retorna habendo, and capias in withernam, in replevin; distringas, and scire facias, in detinue. 3. Where money only is recovered; by writ of, 1st, Capias ad satisfaciendum, against the body of the defendant; or, in default thereof, scire facias against his bail. 2dly, Fieri facias, against his goods and chattels. 3dly, Levari facias, against his goods and the profits of his lands. 4thly, Elegit against his goods, and the possession of his lands. 5thly, Extendi facias and other process, on statutes, recognizances, &c., against his body, lands, and goods.

(6.) *Of Proceedings in the Courts of Equity.*—Matters of equity which belong to the peculiar jurisdiction of the court of chancery, are, 1. The guardianship of infants. 2. The custody of idiots and lunatics. 3. The superintendance of charities. 4. Commissions of bankrupt.

The court of exchequer, and the duchy-court of Lancaster, have also some peculiar causes, in which the interest of the king is more immediately concerned.

Equity is the true sense and sound interpretation of the rules of law; and, as such, is equally attended to by the judges of the courts both of common law and equity.

The essential differences, whereby the English courts of equity, are distinguished from the courts of law, are, 1. The mode of proof, by a discovery on the oath of the party; which gives a jurisdiction in matters of account and fraud. 2. The mode of trial, by depositions taken in any part of the world. 3. The mode of relief, by giving a more specific and extensive remedy than can be had in the courts of law; as, by carrying agreements into execution, staying waste or other injuries by injunction, directing the sale of incumbered lands, &c. 4. The true construction of securities for money, by considering them merely as a pledge. 5. The execution of trusts, or second uses, in a matter analogous to the law of legal estates.

The proceedings in the court of chancery (to which those in the exchequer very nearly conform) are, 1. Bill. 2. Writ of subpæna, and perhaps injunction. 3. Process of contempt, viz. (ordinarily) attachment, attachment with proclamations, commissions of rebellion, sergeant at arms, and sequestrations. 4. Appearance. 5. Demurrer. 6. Plea. 7. Answer. 8. Exceptions, amendments, cross or supplemental bills, bills of revivor, interpleader, &c. 9. Replication. 10. Issue. 11. Depositions taken upon interrogatories, and subsequent publication thereof. 12. Hearing. 13. Interlocutory decree, feigned issue,

and trial, reference to the master and report, &c. 14. Final decree. 15. Re-hearing, or bill of review. 16. Appeal to parliament.

CRIMINAL CODE.

Chap. I.—Of Crimes Against the Public.

1. *Of the nature of crimes.*—A crime or misdemeanor is an act committed, or omitted, in violation of a public law, either forbidding or commanding it. Crimes are distinguished from civil injuries, as they are a breach and violation of the public rights, due to the whole community, considered as a community.

2. *Of persons responsible for crimes.*—All persons are capable of committing crimes, unless there be in them a defect of will: for, to constitute a legal crime, there must be both a vicious will, and a vicious act. The will does not concur with the act, 1. Where there is a defect of understanding. 2. Where no will is exerted. 3. Where the act is constrained by force and violence.

A vicious will may therefore be wanting in the cases of, 1. Infancy. 2. Idiocy, or lunacy. 3. Drunkenness; which does not however, excuse. 4. Misfortune or chance-medley. 5. Ignorance, or mistake of fact. 6. Compulsion, or necessity; which is 1st, that of civil subjection; 2dly, that of duress per minas; 3dly, that of choosing the least pernicious of two evils, where one is unavoidable; 4thly, that of want, or hunger; which is no legitimate excuse. The king, from his excellence and dignity, is also incapable of doing wrong.

3. *Of the different degrees of guilt* in criminals, which are, 1. As principals. 2. As accessories. A principal in a crime is, 1. He who commits the fact. 2. He who is present at, aiding and abetting, the commission. An accessory is he who does not commit the fact, nor is present at the commission: but is in some sort concerned therein, either before or after. Accessories can only be in petit treason, and felony: in high treason and in simple larceny, and other crimes under the degree of felony, all are principals.

An accessory, before the fact, is one who, being absent when the crime is committed, has procured, counselled, or commanded, another to commit it.

An accessory after the fact is, where a person, knowing a felony to have been committed, receives, relieves, comforts, or assists, the felon. Such accesory is usually entitled to the benefit of clergy; where the principal, and accessory before the fact, are excluded from it.

Every accessory before the fact is made punishable by the late statute in the same manner as the principal; and an accessory after the fact (except a receiver of stolen property) is liable to be imprisoned not exceeding two years.

4. *Of offences against religion and the law of nations.*—Crimes and misdemeanors cognizable by the laws of England are such as more immediately offend, 1. God and his holy religion. 2. The law of nations, 3. The king and his government. 4. The public, or commonwealth. 5. Individuals.

Crimes more immediately offending God and religion are, 1 Apostasy. For which the penalty is incapacity, and imprisonment. 2. Heresy, and the penalty for one species thereof is the same as in the previous instance. 3. Offences against the established church, either by reviling its ordinances; for which the penalties are fine, deprivation, imprisonment, forfeiture; or by nonconformity to its worship: 1st, Through total irreligion, where the penalty is fine. 2dly, Through protestant dissenting; the penalty for which was abolished by the toleration act. 3rdly, Through popery, either in professors of the popish religion, popish recusants convict, or popish priests. The penalties were, incapacity, double taxes, imprisonment, fines, forfeitures, abjuration of the realm, judgment of felony without clergy, and judgment of high treason. But the greater part of these barbarous and intolerant statutes were repealed in 1779, by the famous *popish bill*. 4. Blasphemy; for which the penalty is fine, imprisonment, and corporal punishment. 5. Profane swearing and cursing; the penalty for which is fine, or imprisonment in the house of correction. 6. Witchcraft, or at least the pretence thereto; the penalty inflicted is imprisonment, and pillory. 7. Religious imposture; the penalty for which is fine, imprisonment, and corporal punishment. 8. Simony; which is punished by forfeiture of double value; and incapacity. 9. Sabbath-breaking, which may be fined. 10. Drunkenness, the penalty for which is fine, or stocks. 11. For lewdness, the penalties are fine, imprisonment, house of correction.

The law of nations is adopted in England in its full extent, as part of the law of the land Offences against this law are principally incident to whole states or nations; but, when committed by private subjects, are then the objects of the municipal law.

Crimes against the law of nations, animadverted on by the laws of England, are, 1. Violation of safe conducts. 2. Infringement of the rights of ambassadors: the penalty in both cases is arbitrary. 3. Piracy, for which the penalty is judgment of felony, without benefit of clergy.

5. *Of offences against the state and government.*—Crimes and misdemeanors more peculiarly offending the king and his government are, 1. High treason. 2. Felonies injurious to the prerogative. 3. Præmunire. 4. Other misprisions and contempts.

High treason may, according to the statute of Edward III., be committed, 1. By compassing or imagining the death of the king, or queen consort, or their eldest son and heir; demonstrated by some overt act. 2. By violating the king's companion, his eldest daughter, or the wife of his eldest son. 3. By some overt act of levying war against the king in his realm. 4. By adherence to the king's enemies. 5. Counterfeiting the king's great or privy seal. 6. By counterfeiting the king's money, or importing counterfeit money. 7. By killing the chancellor, treasurer, or kings justices, in the execution of their offices.

High treasons, created by subsequent statutes, are such as relate, 1. To papists: as the repeated defence of the pope's jurisdiction; the coming from beyond sea of a natural born popish priest

the renouncing of allegiance, and reconciliation to the pope, or other foreign power. 2. To the coinage, or other signatures of the king: as counterfeiting, or importing and uttering counterfeit foreign coin, here current; forging the sign manual, privy signet, or privy seal; falsifying, &c., the current coin. 3. To the Protestant succession: as corresponding with, or remitting to, the late pretender's sons; endeavouring to impede the succession; writing or printing in defence of any pretender's title, or derogation of the act of settlement, or of the power of parliament to limit the descent of the crown.

The punishment of high treason in males is, generally, to be, 1. Drawn; 2. Hanged; 3. Embowelled alive; 4. Beheaded; 5. Quartered; 6. The head and quarters to be at the king's disposal. But, in treasons relating to the coin, only to be drawn and hanged till dead. Females, in both cases, were formerly drawn and burnt alive; but this last barbarous punishment was abolished by act of parliament about 1790.

Against the king's prerogative.—Felony is that offence which occasions the total forfeiture of lands or goods at common law; now usually also punishable with death by hanging; unless through the benefit of clergy.

Felonies injurious to the king's prerogative, of which some are within, others without clergy, are, 1. Such as relate to the coin: as the wilful uttering of counterfeit money, &c., to which head some inferior misdemeanors affecting the coinage may be also referred. 2. Conspiring or attempting to kill a privy counsellor; 3. Serving foreign states, or enlisting soldiers for foreign service; 4. Embezzling the king's armour or stores; 5. Desertion from the king's armies, by land or sea.

Præmunire, in its original sense, is the offence of adhering to the temporal power of the pope, in derogation of the regal authority. The penalties for which are, outlawry, forfeiture, and imprisonment: which have since been extended to some offences of a different nature.

Among these are, 1. Importing popish trinkets; 2. Contributing to the maintenance of popish seminaries abroad, or popish priests in England; 3. Molesting the professors of abbey-lands; 4. Acting as broker in an usurious contract, for more than ten per cent; 5. Obtaining any stay of proceedings in suits for monopolies; 6. Obtaining an exclusive patent for gunpowder or arms; 7. Exertion of purveyance or preemption; 8. Asserting a legislative authority in both or either house of parliament; 9. Sending any subject a prisoner beyond sea; 10. Refusing the oaths of allegiance and supremacy; 11. Preaching, teaching, or advised speaking, in defence of the right of any pretender to the crown, or in derogation of the power of parliament to limit the succession; 12. Treating of other matters by the assembly of Scotland, convened for electing their representatives in parliament; 13. Unwarrantable undertakings by unlawful subscriptions to public funds.

Misprisions and contempts are all such high offences as are under the degree of capital. These are, 1. Negative, in concealing what ought to be revealed; 2. Positive, in committing what ought not to be done.

Negative misprisions are, 1. Misprision of treason; for which the penalty is forfeiture and imprisonment. 2. Misprision of felony; the punishment for which is fine and imprisonment. 3. Concealment of treasuretrove; in which also the punishment is fine and imprisonment.

Positive misprisions, or high misdemeanors and contempts, are, 1. Mal-administration of public trusts, which includes the crime of peculation; the usual penalties for which are banishment, fines, imprisonment, disability. 2. Contempts against the king's prerogative; which are punished by fine and imprisonment. 3. Contempts against his person and government; the penalties inflicted for which are fine, imprisonment, and infamous corporal punishment. 4. Contempts against his title; the penalties are fine and imprisonment; or fine and disability. 5. Contempts against his palaces, or courts of justice; which are punished by fine, imprisonment, corporal punishment, forfeiture, and formerly the loss of right hand.

6. *Offences against the community.*

Crimes especially affecting the commonwealth are offences, 1. Against the public justice; 2. Against the public peace; 3. Against the public trade; 4. Against the public health; 5. Against the public police or economy.

(1.) Offences against public justice are, 1. Embezzling or vacating records, and personating others in the courts of justice; the penalty for which is judgment of felony, without benefit of clergy. 2. Compelling prisoners to become approvers; the punishment is judgment of felony. 3. Obstructing the execution of process. 4. Escapes; 5. Breach of prison; 6. Rescue; which four may, according to the circumstances, be either felonies or misdemeanors, punishable by fine and imprisonment. 7. Returning from transportation; this is felony, without benefit of clergy. 8. Taking rewards to help one to his stolen goods; the penalty is the same as for the theft. 9. Receiving stolen goods; the penalties are transportation, fine, and imprisonment. 10. Theftbote; 11. Common barretry and suing in a feigned name; 12. Maintenance; 13. Champerty: in these four the penalties are fine and imprisonment. 14. Compounding prosecutions on penal statutes; penalty, fine, imprisonment, and disability. 15. Conspiracy, and threats of accusation in order to extort money, &c.; for which the penalties to be inflicted are the villainous judgment, fine, imprisonment, pillory, whipping, transportation. 16. For perjury and subornation thereof; the penalties are infamy, imprisonment, fine, or pillory; and sometimes transportation, or house of correction. 17. For bribery, the penalties are fine, and imprisonment. 18. Embracery (an attempt to overawe a jury); which is punished by infamy, fine, and imprisonment. 19. For false verdict; the penalty is the judgment in attaint. 20. Negligence of public officers, &c., is punished by fine, and forfeiture of the office; 21. Oppression by magistrates; 22. Extortion of officers: the penalty in both instances is imprisonment, fine and sometimes forfeiture of the office.

(2.) *Against public peace.*—Offences against the public peace are, 1. Riotous assemblies to the number of twelve; 2. Appearing armed or hunting in disguise; 3. Threatening or demanding any valuable thing by letter. All these are felonies without benefit of clergy. 4. Destroying of turnpikes, &c.; the penalties are, whipping, imprisonment, judgment of felony, with and without clergy. 5. Affrays; 6. Riots, routs, and unlawful assemblies; 7. Tumultuous petitioning; 8. Forcible entry and detainer. The penalties in the last four are fine and imprisonment. 9. For going unusually armed the penalty is forfeiture of arms and imprisonment; 10. Spreading false news; which is punished by fine and imprisonment; 11. For pretended prophecies the penalties are fine, imprisonment, and forfeiture; 12. Challenges to fight; the penalties are fine, imprisonment, and sometimes forfeiture; 13. For libels the penalties are fine, imprisonment, and corporal punishment.

(3.) *Against public trade.*—Offences against the public trade, are, 1. Owling, and the penalties are fines, forfeiture, imprisonment, transportation, judgment of felony; 2. Smuggling, for which the penalties are fines, loss of goods, judgment of felony; 3. Fraudulent bankruptcy; the penalty for which is judgment of felony; 4. Usury, which is punished by fine and imprisonment; 5. For cheating, the penalties are fine, imprisonment, pillory, tumbrel, whipping, or other corporal punishment; 6. Forestalling; 7. Regrating; 8. Engrossing: the penalties for all three are loss of goods, fine, imprisonment; 9. Monopolies, and combinations to raise the price of commodities, the penalties for these are fines, imprisonment, loss of goods, infamy, and sometimes the pains of *præmunire*; 10. For exercising a trade, not having served as an apprentice, the penalty is fine; 11. Transporting or residing abroad of artificers; for which the penalties are fine, imprisonment, forfeiture, incapacity, becoming aliens.

(4.) *Against public health and police.*—Offences against the public *health* are, 1. Irregularity in the time of the plague, or of quarantine; and the penalties are whipping, judgment of felony, with and without clergy; 2. Selling unwholesome provisions, for which the penalties are amercement, fine, imprisonment, abjuration of the town.

Offences against the public *police* and economy, or domestic order of the kingdom, are 1. Those relating to clandestine and irregular marriages; the penalties are judgment of felony, with and without clergy; 2. Bigamy, or (more properly) polygamy, the penalty for which is judgment of felony; 3. Idleness, vagrancy, and incorrigible roguery, the penalties for which are imprisonment, whipping, judgment of felony; 4. Common nuisances; 1st, By annoyances or purprestures in highways, bridges, and rivers; 2dly, By offensive trades and manufactures; 3dly, By disorderly houses; 4thly, By lotteries; 5thly, By cottages; 6thly, By fireworks; 7thly, By eavesdropping: the penalty in all of which is by fine; 8thly, By common scolding; penalty the cucking stool: 5. Luxury in diet; penalty discretionary; 6. Gaming; the penalties inflicted on gentlemen are fines, on others fine and imprisonment, on cheating gamesters, fine, infamy, and the corporal pains of perjury; 7. For destroying game the penalties are fines and corporal punishment.

Chap. II.—Of Offences against Individuals.

1. *Of offences against life.*—Crimes especially affecting individuals are, 1. Against their persons; 2. Against their habitations; 3. Against their property.

Crimes against individuals are, 1. By homicide, or destroying life; 2. By other corporal injuries.

Homicide is, 1. Justifiable; 2. Excusable; 3. Felonious.

Homicide is justifiable, 1. By necessity and command of law; 2. By permission of law; 1st, for the furtherance of public justice; 2dly, for prevention of some forcible felony.

Homicide is excusable, 1. Per infortunium, or misadventure; 2. *Se defendendo*, or in self-defence, by chance-medley. The penalty in both cases is forfeiture of goods; which, however, is pardoned of course.

Felonious homicide is the killing of a human creature without justification or excuse. This is, 1. Killing one's self; 2. Killing another.

Killing one's self, or self murder, is where one deliberately, or by any unlawful malicious act, puts an end to his own life. This is felony; punished by forfeiture of goods and chattels.

Killing another is, 1. Manslaughter; 2. Murder.

Manslaughter is the unlawfully killing of another without malice, express or implied. This is either, 1. Voluntary, upon a sudden heat; 2. Involuntary, in the commission of some unlawful act. Both are felony, but within clergy, except in the case of stabbing.

Murder is when a person, of sound memory and discretion, unlawfully killeth any reasonable creature in being, and under the king's peace; with malice aforethought, either express or implied. This is felony without clergy; punished with speedy death, and hanging in chains, or dissection.

Petit treason (being an aggravated degree of murder) is where the servant kills his master, the wife her husband, or the ecclesiastic his superior. The punishment for which is to be drawn and hanged.

2. *Of offences against the person.*—Crimes affecting the persons of individuals not amounting to homicide are, 1. Mayhem, and also shooting at another. The penalties for which are fine, imprisonment, judgment of felony, without benefit of clergy. According to a recent act of parliament, shooting, stabbing, or cutting, with intent to murder, rob, maim, or disfigure, is deemed felony, without benefit of clergy, if the crime would have been murder had death ensued. 2. Forcible abduction and marriage or defilement of an heiress, which is felony; also stealing and deflowering or marrying any woman child under the age of sixteen years; for which the penalty is imprisonment, fine, and temporary forfeiture of her lands. 3. Rape, and

also carnal knowledge of a woman child under the age of ten years. 4. Buggery with man or beast. Both these are felonies, without benefit of clergy. 5. Assault; 6. Battery, especially of clergymen; 7. Wounding. The penalties in all three are fine, imprisonment, and other corporal punishment. 8. False imprisonment; for which the penalties are fine, imprisonment, and (in some atrocious cases) the pains of *præmunire* and incapacity of office or pardon. 9. For kidnapping, or forcibly stealing away the king's subjects, the penalty is fine and imprisonment. 10. Administering medicine to procure abortion is in some cases a capital felony, in others punishable by imprisonment or transportation.

3. *Of offences against habitations.*—Crimes affecting the habitations of individuals are, 1. Arson; 2. Burglary.

Arson is the malicious and wilful burning of the house, or out-house, of another man. This is felony; in some cases within, in others without clergy.

Setting fire to a man's own house, out-house, &c., with intent to injure another, is now also made felony, without benefit of clergy.

Burglary is the breaking and entering by night into a mansion house, with intent to commit a felony. This is felony without clergy.

4. *Of offences against property.*—Crimes affecting the private property of individuals are, 1. Larciny; 2. Malicious mischief; 3. Forgery.

Larciny is, 1. Simple; 2. Mixed or compound. Simple larciny is the felonious taking, and carrying away, of the personal goods of another. And it formerly was, 1. Grand larciny, being above the value of 12*d*; 2. Petit larciny, to the value of 12*d* or under. This distinction is now abolished as to the value of the property, and the punishment for simple larciny is whipping, imprisonment, hard labor, or transportation.

Mixed or compound larceny is that wherein the taking is accompanied with the aggravation of being, 1. From the house; 2. From the person.

Larcinies from the *house* are punished with death for *breaking and entering* a dwelling house and stealing property to any value.

Or stealing to any value in any dwelling house, *any person therein being put in fear.*

Or stealing in any dwelling house to the value of £5 or more.

No building is deemed part of the dwelling house unless there be a communication *immediate* or by a *covered* and *enclosed* passage leading from the one to the other.

Stealing from a church or chapel is also a capital felony.

Robbery from buildings not within this description is punished with transportation or imprisonment. And so for robberies in shops and counting-houses.

Lodgers robbing a house or apartment are liable to transportation, imprisonment, or whipping.

Larciny from the *person* is, 1. By privately stealing from the person of another, above the value of 12*d.*; 2. By robbery, or the felonious and forcible taking from the person of another, in or near the highway, goods or money of any value by putting him in fear. These are both felonies without clergy. An attempt to rob is also felony.

Malicious injury to property by destroying ships, machinery, and manufactures, fish-ponds, sea, river, and canal banks, bridges, churches, chapels, meeting-houses, houses, out-houses, trees, shrubs, corn, hay, straw, hop-binds, cattle, coal-mines (or engines thereunto belonging), flood-gates, fences for enclosures by act of parliament, walls, &c., are punished by forfeitures, imprisonment, hard labor, and in some cases by transportation.

Forgery is the fraudulent making or alteration of a writing in prejudice of another's right: the penalties for which are fine, imprisonment, pillory, forfeiture, judgment of felony without clergy.

Chap. III.—Of the Prevention of Crimes.

It is an honor, and almost a singular one, to our English laws, that they furnish a title of this sort; since *preventive* justice is upon every principle of reason, of humanity, and of sound policy, preferable in all respects to *punishing* justice; the execution of which, though necessary, and its consequence a species of mercy to the commonwealth, is always attended with many harsh and disagreeable circumstances.

This preventive justice consists in obliging those persons, whom there is a probable ground to suspect of future misbehaviour, to stipulate with, and to give full assurance to the public, that such offence as is apprehended shall not happen; by finding pledges or securities for keeping the peace, or for their good behaviour. This requisition of sureties forms part of the penalty inflicted upon such as have been guilty of certain gross misdemeanors: but there it must be understood rather as a caution against the repetition of the offence, than any immediate pain or punishment. And, indeed, if we consider all human punishments in a large and extended view, we shall find them all rather calculated to prevent future crimes, than to expiate the past: since all punishments inflicted by temporal laws may be classed under three heads; such as tend to the amendment of the offender himself, or to deprive him of any power to do future mischief, or to deter others by his example: all of which conduce to one and the same end, of preventing future crimes, whether that be effected by amendment, disability, or example. But the caution of which we speak at present is such as is intended merely for prevention, without any crime actually committed by the party, but arising only from a probable suspicion that some crime is intended, or likely to happen; and consequently it is not meant to any degree of punishment, unless perhaps for a man's imprudence in giving just ground of apprehension.

By the Saxon constitution these sureties were always at hand, by means of king Alfred's wise constitution of decenaries or frankpledges; wherein the whole neighbourhood or tithing of freemen were mutually pledges for each other's good behaviour. But, this great and general security being now fallen into disuse and neglected, there has succeeded to it the method of making

suspected persons find particular and special securities for their future conduct: of which we find mention in the laws of king Edward the Confessor; 'tradat fidejussores de pace et legalitate tuendâ.' Let us therefore consider, first, what this security is; next, who may take or demand it; and, lastly, how it may be discharged.

1. *Security to keep the peace and be of good behaviour.*—This security consists in being bound, with one or more sureties, in a recognizance or obligation to the king, entered on record, and taken in some court or by some judicial officer; whereby the parties acknowledge themselves to be indebted to the crown in the sum required (for instance £100), with condition to be void and of none effect, if the party shall appear in court on such a day, and in the mean time shall keep the peace; either generally, towards the king, and all his liege people; or particularly, also, with regard to the person who craves the security. Or, if it be for the good behaviour, then on condition that he shall demean and behave himself well, or be of good behaviour, either generally or specially, for the time therein limited, as for one or more years, or for life. This recognizance, if taken by a justice of the peace, must be certified to the next sessions, in pursuance of the statute 3 Hen. VII., c. 1; and if the condition of such recognizance be broken, by any breach of the peace in the one case, or any misbehaviour in the other. the recognizance becomes forfeited or absolute; and, being estreated or extracted (taken out from among the other records), and sent up to the exchequer, the party and his sureties, having now become the king's absolute debtors, are sued for the several sums in which they are respectively bound.

2. *By whom and how it may be obtained.*—Any justices of the peace, by virtue of their commission, or those who are ex officio conservators of the peace, may demand such security according to their own discretion; or it may be granted at the request of any subject, upon due cause shown, provided such demandant be under the king's protection; for which reason it has been formerly doubted whether Jews, Pagans, or persons convicted of a præmunire, were entitled thereto Or, if the justice is averse to act, it may be granted by a mandatory writ, called a supplicavit, issuing out of the king's bench or chancery; which will compel the justice to act, as a ministerial and not as a judicial officer: and he must make a return to such writ, specifying his compliance, under his hand and seal. But this writ is seldom used; for, when application is made to the superior courts, they usually take the recognizances there, under the directions of the statute 21 Jac. I. c. 8. And indeed a peer or peeress cannot be bound over in any other place than the courts of king's bench or chancery: though a justice of the peace has a power to require sureties of any other person, being compos mentis, and under the degree of nobility, whether he be a fellow-justice or other magistrate, or whether he be merely a private man. Wives may demand it against their husbands; or husbands, if necessary, against their wives. But feme-coverts, and infants under age, ought to find security by their friends only, and not to be bound themselves: for they are incapable of engaging themselves to answer any debt; which, as we observed, is the nature of these recognizances or acknowledgments.

3. *How the responsibility may be discharged.*—A recognizance may be discharged either by the demise of the king, to whom the recognizance is made; or by the death of the principal party bound thereby, if not before forfeited; or by order of the court to which such recognizance is certified by the justices (as the quarter sessions, assizes, or king's bench), if they see sufficient cause: or in case he at whose request it was granted, if granted upon a private account, will release it, or does not make his appearance to pray that it may be continued.

Thus far what has been said is applicable to both species of recognizances, for the peace, and for the good behaviour; de pace, et legalitate, tuendâ, as expressed in the laws of king Edward. But as these two species of securities are in some respects different, especially as to the cause of granting, or the means of forfeiting them, we shall now consider them separately: and, first, shall show for what cause such a recognizance, with sureties for the peace, is grantable; and, then, how it may be forfeited.

4. *For what causes the security is grantable.*—Any justice of the peace may, ex officio, bind all those to keep the peace who in his presence make any affray; or threaten to kill or beat another; or contend together with hot and angry words; or go about with unusual weapons or attendance, to the terror of the people; and all such as he knows to be common barrators; and such as are brought before him by the constable for a breach of the peace in his presence; and all such persons as, having been before bound to the peace, have broken it and forfeited their recognizances. Also, whenever any private man has just cause to fear that another will burn his house, or do him a corporal injury, by killing, imprisoning, or beating him; or that he will procure others so to do; he may demand surety for the peace against such person: and every justice of the peace is bound to grant it, if he who demands it will make oath that he is actually under fear of death or bodily harm, and will show that he has just cause to be so, by reason of the other's menaces, attempts, or having lain in wait for him; and will also farther swear, that he does not require such surety out of malice or for mere vexation. This is called swearing the peace against another: and, if the party does not find such sureties as the justice in his discretion shall require, he may be immediately committed till he does.

5. *Of the forfeiture of recognizances for keeping the peace.*—Such recognizances for keeping the peace, when given, may be forfeited by any actual violence, or even an assault, or menace, to the person of him who demanded it, if it be a special recognizance: or, if the recognizance be general, by any unlawful action whatsoever, that either is or tends to a breach of the peace; or, more particularly, by any one of the many species of offences which are mentioned as crimes in the two preceding chapters; or by any private

violence committed against any of his majesty's subjects. But a bare trespass upon the lands or goods of another, which is a ground for a civil action, unless accompanied with a wilful breach of the peace, is no forfeiture of the recognizance. Neither are mere reproachful words, as calling a man knave or liar, any breach of the peace so as to forfeit one's recognizance (being looked upon to be merely the effect of unmeaning heat and passion), unless they amount to a challenge to fight.

The other species of recognizance, with sureties, is for the good abearance or good behaviour. This includes security for the peace, and somewhat more: we will therefore examine it in the same manner as the other.

6. *Of compelling security for good behaviour.*—First, then, the justices are empowered, by the statute 34 Edw. III. c. 1, to bind over to the good behaviour towards the king and his people, all them that be not of good fame, wherever they be found; to the intent that the people be not troubled nor endamaged, nor the peace diminished, nor merchants and others, passing by the highways of the realm, be disturbed nor put in the peril which may happen by such offenders. Under the general words of this expression, 'that be not of good fame,' it is holden that a man may be bound to his good behaviour for causes of scandal, contra bonos mores, as well as contra pacem; as, for haunting bawdy-houses with women of bad fame, or for keeping such women in his own house, or for words tending to scandalise the government, or in abuse of the officers of justice, especially in the execution of their office. Thus also a justice may bind over all night-walkers; eaves-droppers; such as keep suspicious company, or are reported to be pilferers or robbers; such as sleep in the day and wake in the night; common drunkards; whoremasters; the putative fathers of bastards; cheats, idle vagabonds, and other persons, whose misbehaviour may reasonably bring them within the general words of the statute, as persons not of good fame: an expression, it must be owned of so great a latitude as leaves much to be determined by the discretion of the magistrate himself. But, if he commit a man for want of sureties, he must express the cause thereof with convenient certainty: and take care that such cause be a good one.

7. *Forfeiture of recognizances for good behaviour.*—A recognizance for the good behaviour may be forfeited by all the same means as one for the security of the peace may be: and also by some others. As, by going armed with unusual attendance, to the terror of the people; by speaking words tending to sedition; or by committing any of those acts of misbehaviour which the recognizance was intended to prevent. But not by giving barely fresh cause of suspicion of that which perhaps may never actually happen; for though it is just to compel suspected persons to give security to the public against misbehaviour that is apprehended, yet it would be hard, upon such suspicion, without the proof of any actual crime, to punish them by a forfeiture of their recognizance.

Chap. IV.—Of the Punishment of Crimes, and the Mode of Procedure.

1. *Of the nature and object of punishment.*—Punishments may be considered with regard to 1. The power; 2. The end; 3. The measure of their infliction.

The power, or right, of inflicting human punishments for natural crimes, or such as are mala in se, was by the law of nature vested in every individual; but, by the fundamental contract of society, is now transferred to the sovereign power; in which also is vested, by the same contract, the right of punishing positive offences, or such as are mala prohibita.

The end of human punishments is to prevent future offences; 1. By amending the offender himself; 2. By deterring others through his example; 3. By depriving him of the power to do future mischief.

The measure of human punishments must be determined by the wisdom of the sovereign power, and not by any uniform universal rule: though that wisdom may be regulated, and assisted, by certain general, equitable, principles.

2. *Of courts of criminal jurisdiction.*—In the method of punishment may be considered, 1. The several courts of criminal jurisdiction; 2. The several proceedings therein.

The criminal courts are, 1. Those of a public and general jurisdiction throughout the realm; 2. Those of a private and special jurisdiction.

Public criminal courts are, 1. The high court of parliament; which proceeds by impeachment; 2. The court of the lord high steward; and the court of the king in full parliament for the trial of capitally indicted peers; 3. The court of king's bench; 4. The court of chivalry, now disused; 5. The court of admiralty under the king's commission; 6. The courts of oyer and terminer, and general gaol delivery; 7. The court of quarter-sessions of the peace; 8. The sheriff's tourn; 9. The court-leet; 10. The court of the coroner; 11. The court of the clerk of the market.

Private criminal courts are, 1. The court of the lord steward, &c., by statute of Henry VII.; 2. The court of the lord steward, &c., by statute of Henry VIII.; 3. The university courts.

3. *Of summary convictions.*—Proceedings in criminal courts are, 1. Summary. 2. Regular.

Summary proceedings are such whereby a man may be convicted of divers offences, without any formal process or jury, at the discretion of the judge, or judges, appointed by act of parliament or common law.

Such are, 1. The trials of offences and frauds against the laws of excise, and other branches of the king's revenue. 2. Convictions before justices of the peace upon a variety of minute offences, chiefly against the public police. 3. Attachments for contempts of superior courts of justice.

4. *Of proceedings before trial.*—Regular proceedings in the courts of common law, are, 1. Arrest. 2. Commitment and bail. 3. Prosecution 4. Process. 5. Arraignment, and its incidents. 6. Plea and issue. 7. Trial and conviction. 8. Formerly benefit of clergy. 9. Judgment and its consequence. 10. Reversal of judgment. 11. Reprieve or pardon. 12. Execution.

(1.) *Arrest*.—An arrest is the apprehending or restraining of one's person; in order to be forthcoming to answer a crime whereof one is accused or suspected.

This may be done, 1. By warrant. 2. By an officer, without warrant. 3. By a private person, without warrant. 4. By hue and cry.

(2.) *Commitment and bail*.—Commitment is the confinement of ones's person in prison for safe custody, by warrant from proper authority; unless in bailable offences he puts in a sufficient bail or security for his future appearance.

The magistrate is bound to take reasonable bail, if offered, unless the offender be not bailable.

Such are, 1. Persons accused of treason; or, 2. Of murder; or, 3. Of manslaughter, by indictment; or if the prisoner was clearly the slayer. 4. Prison-breakers, when committed for felony. 5. Outlaws. 6. Those who have abjured the realm. 7. Approvers and appellees. 8. Persons taken with the mainour. 9. Persons accused of arson. 10. Excommunicated persons.

The magistrate may, at his discretion, admit to bail or otherwise, persons not of good fame, charged with other felonies, whether as principals or as accessories. If they be of good fame, he is bound to admit them to bail. The court of king's bench, or its judges, in time of vacation, may bail in any case whatsoever.

(3.) *Prosecutions*.—Prosecution, or the manner of accusing offenders, is either by a previous finding of a grand jury; as, 1. By presentment. 2. By indictment: or without such findings. 3. By information. 4. By appeal.

A presentment is the notice taken by a grand jury of any offence, from their own knowledge or observation.

An indictment is a written accusation of one or more persons of a crime or misdemeanor, preferred to, and presented on oath by, a grand jury; expressing with sufficient certainty, the person, time, place, and offence.

An information is, 1. At the suit of the king and a subject, upon penal statutes. 2. At the suit of the king only. Either 1. Filed by the attorney general ex officio, for such misdemeanors as affect the king's person or government; or, 2. Filed by the master of the crown office, with leave of the court of king's bench, at the relation of some private subject, for other gross and notorious misdemeanors, all differing from indictments in this, that they are exhibited by the informer, or the king's officer, and not on the oath of a grand jury.

An appeal was an accusation or suit, brought by one private subject against another, for larceny, rape, mayhem, arson, or homicide; which the king could not discharge or pardon, but the party alone could release: but which proceeding is now abolished.

(4.) *Process on an indictment*.—Process to bring in an offender, when indicted in his absence, is, in misdemeanors, by venire facias, distress infinite, and capias; in capital crimes, by capias only; and in both, by outlawry.

During this stage of proceedings, the indictment may be removed into the court of king's bench from any inferior jurisdiction, by writ of certiorari facias; and cognizance must be claimed in place of exclusive jurisdiction.

(5.) *Arraignment*.—Arraignment is the calling of the prisoner to the bar of the court, to answer the matter of the indictment.

Incident hereunto are, 1. The standing mute of the prisoner; for which, in petit treason, and felonies of death, he shall undergo the peine forte et dure. 2. His confession, which is either simple, or by way of approvement.

In treason, petit larceny, and misdemeanors, standing mute has always been holden as a confession, and equivalent to a conviction; and now the law extends it to felony and piracy.

(6.) *Plea and issue*.—The plea, or defence, alleged by the prisoner, may be, 1. A plea to the jurisdiction. 2. A demurrer in point of law. 3. A plea in abatement. 4. A special plea in bar; which is, 1st, autrefois acquit; 2dly, autrefois convict; 3dly, autrefois attaint; 4thly, a pardon. 5. The general issue, not guilty.

Hereupon issue is joined by the clerk of the arraigns, on behalf of the king.

5. *Of the trial, conviction, and its consequences*.—(1.) *Trials* of offences, by the laws of England, were and are, 1. By ordeal, of either fire or water. 2. By the corsned. Both these have been long abolished. 3. By battel, in appeals and approvements, which are also now abolished. 4. By the peers of Great Britain. 5. By jury.

The method and process of trial by jury are, 1. The impannelling of the jury. 2. Challenges; 1st, for cause; 2dly, peremptory. 3. Tales de circumstantibus. 4. The oath of the jury. 5. The evidence. 6. The verdict, either general or special.

(2.) *Conviction* is when the prisoner pleads, or is found guilty; whereupon, in felonies, the prosecutor is entitled to, 1. His expenses. 2. Restitution of his goods.

(3.) *Benefit of clergy*.—Clergy, or the benefit thereof, was originally derived from the usurped jurisdiction of the popish ecclesiastics; but was new-modelled by several statutes. It was an exemption of the clergy from any other secular punishment, for felony, than imprisonment for a year, at the court's discretion: and it was extended likewise, absolutely, to lay peers, for the first offence. All felonies were entitled to the benefit of clergy, except such as were ousted by particular statutes. Felons, on receiving the benefit of clergy, though they forfeited their goods to the crown, were discharged of all clergyable felonies before committed, and restored in all capacities and credits. But now every one guilty of felony, whether peer or commoner, clergy or layman, is alike amenable. The term benefit of clergy, however, still discriminates a certain class of offences, to which a specific punishment is attached.

(4.) *Judgment*.—Judgment, unless any matter be offered in arrest thereof, follows upon conviction; being the pronouncing of that punishment which is expressly ordained by law.

Attainder of a criminal is the immediate consequence, 1. Of having judgment of death pronounced upon him; 2. Of outlawry for a capital offence.

The consequences of attainder are, 1. Forfeiture to the king. 2. Corruption of blood.

Forfeiture to the king is, 1. Of real estates, upon attainder:—in high treason absolutely, till the death of the late pretender's sons; in felonies, for the king's year, day, and waste; in misprision of treason, assaults on a judge, or battery sitting the courts, during the life of the offender. 2. Of personal estates upon conviction; in all treason, misprision of treason, felony, excusable homicide, petty larceny, standing mute upon arraignment, the above named contempts of the king's courts, and flight.

Corruption of blood is an utter extinction of all inheritable quality therein: so that, after the king's forfeiture is first satisfied, the criminal's lands escheat to the lord of the fee; and he can never afterwards inherit, be inherited, or have any inheritance derived through him. But this corruption of blood is now limited to high treason, petit treason, and murder.

(5.) *Reversal of judgment.*—Judgments, and their consequences, may be avoided, 1. By falsifying, or reversing, the attainder. 2. By reprieve, or pardon.

Attainders may be falsified, or reversed, 1. Without a writ of error; for matters dehors the record. 2. By writ of error; for mistakes in the judgment, or record. 3. By act of parliament; for favor.

When an outlawry is reversed, the party is restored to the same plight as if he appeared upon the capias. When a judgment, on conviction, is reversed, the party stands as if never accused.

(6.) *Reprieve and pardon.*—A reprieve is a temporary suspension of the judgment, 1. Ex arbitrio judicis. 2. Ex necessitate legis; for pregnancy, insanity, or the trial of identity of person, which must always be tried instanter.

A pardon is a permanent avoider of the judgment by the king's majesty, in offences against his crown and dignity; drawn in due form of law, allowed in open court, and thereby making the offender a new man.

The king cannot pardon, 1. Imprisonment of the subject beyond the seas. 2. Offences prosecuted by appeal. 3. Common nuisances. 4. Of offences against popular or penal statutes, after information brought by a subject. Nor is his pardon pleadable to an impeachment by the commons in parliament.

(7.) *Execution.*—Execution is the completion of human punishment, and must be strictly performed in the manner which the law directs.

The warrant for execution is sometimes under the hand and seal of the judge; sometimes by writ from the king; sometimes by rule of court; but commonly by the judge's signing the calendar of prisoners, with their separate judgments in the margin.

PART III.

OF THE LAWS OF SCOTLAND.

Introduction.

The municipal law of Scotland, as of most other countries, consists partly of statutable or written law, which has the express authority of the legislative power; partly of customary or unwritten law, which derives force from presumed or tacit consent.

Under the statutable or written law are comprehended, 1. Acts of parliament; not only those which were made down to the union with England, but such of the British statutes enacted since the union as concern this part of the United Kingdom.

A collection of law books under the title of Regiam Majestatem was published by Sir John Skene, at the commencement of the sixteenth century. It consists of the Regiam Majestatem, now generally deemed to be a mere transcript from a work of Glanville, an English lawyer, called Regiam Potestatem,. interlarded with a few of the laws and particular customs of this country, the borough laws, the laws of R. Malcolm, &c.

The written law of Scotland also comprehends the acts of sederunt, which are ordinances for regulating the forms of proceeding before the court of session. The Roman law continues to have great authority in all cases where it is not derogated from by any statute or custom.

Unwritten or customary law, is that which, without being expressly enacted by statute, derives its force from the tacit consent of king and people: custom, as it is equally founded in the will of the lawgiver with written law, has therefore the same effects: hence, as one statute may be explained or repealed by another, so a statute may be explained by the uniform practice of the community, and even go into disuse by a posterior contrary custom.

A uniform train of the judgments or decisions of the court of session is commonly considered as part of the customary law.

The Scottish acts of parliament were proclaimed in all the different shires, boroughs, and baron-courts. But after statutes came to be printed that custom was gradually neglected; and at last the publication of laws at the market cross of Edinburgh was declared sufficient; and they became obligatory forty days thereafter. British statutes are deemed sufficiently notified without formal promulgation; though, for the information of the lieges in general, copies of every public statute are now forwarded to each district of every county throughout the kingdom at the public expense. After a law is published, no pretence of ignorance can excuse the breach of it.

By the rules of interpreting statute law received in Scotland, an argument may be used from the title to the act itself; a rubro ad nigrum; or at least where the rubric has been either originally framed, or afterwards adopted, by the legislature.

By the rules for the interpretation of laws in Scotland being, in general, nearly the same with those observed for the interpretation and construction of the statute laws in England, it is unnecessary to repeat them here.

The objects of the laws of Scotland, according to Mr. Erskine in his Institute, are persons, things, and actions.

Chap. I.—Of Persons in their Public Relation.

1. *Of the authority of courts in general.*—Jurisdiction is a power conferred upon a judge

or magistrate, to take cognizance of, and decide causes according to law, and to carry his sentences into execution. The district, within which a judge has the right of jurisdiction, is called his territory: and every act of jurisdiction exercised by a judge without his territory is null.

Jurisdiction is either supreme, inferior, or mixed. That jurisdiction is supreme from which there lies no appeal to a higher court. Inferior courts are those whose sentences are subject to the review of the supreme courts, and whose jurisdiction is confined to a particular territory. Mixed jurisdiction participates of the nature both of the supreme and inferior.

Jurisdiction is either civil or criminal. By the first, questions of private right are decided; by the second, crimes are punished.

Jurisdiction is either privative or cumulative. Private jurisdiction is that which belongs only to one court, to the exclusion of all others. Cumulative, otherwise called concurrent, is that which may be exercised by any one or two or more courts in the same cause.

Jurisdiction is either proper or delegated. Proper jurisdiction is that which belongs to a judge or magistrate himself, in virtue of his office. Delegated is that which is communicated by the judge to another, called a deputy or substitute.

Civil jurisdiction is founded, 1. Ratione domicilii, if the defender has his domicile within the judge's territory.

A domicile is the dwelling place where a person lives with an intention to remain; and custom has fixed it as a rule, that residence for forty days founds jurisdiction. If one has no fixed dwelling-place, e. g. a soldier, or a travelling merchant, a personal citation against him within the territory is sufficient to found the judge's jurisdiction over him, even in civil questions. As the defender is not obliged to appear before a court to which he is not subject, the pursuer must follow the defender's domicile.

It is founded, 2. Ratione rei sitæ, if the subject in question be within the territory. If that subject be immoveable, the judge, whose jurisdiction is founded in this way, is the sole judge competent, excluding the judge of the domicile.

Where one who has not his domicile within the territory is to be sued before an inferior court, ratione rei sitæ, the court of session must be applied to, whose jurisdiction is universal, and, who, of course, grants letters of supplement to cite the defender to appear before the inferior judge. Where the party to be sued resides in another kingdom, and has an estate in this, the court of session is the only proper court, as the commune forum to all persons residing abroad; and the defender, if his estate be heritable, is considered as lawfully summoned to the court by a citation at the market-cross of Edinburgh, and pier and shore of Leith: but where a stranger, not a native of Scotland, has only a moveable estate in this kingdom, he is deemed to be so little subject to the jurisdiction of its courts, that action cannot be brought against him till his effects be first attached by an arrestment jurisdictionis fundandæ causâ.

A judge may in special causes arrest or secure the persons of such as have neither domicile nor estate within his territory, even for civil debts. Thus, on the border between Scotland and England, warrants are granted of course by the judge ordinary of either side, against those who have their domicile upon the opposite side; and security is also required where natives are suspected of withdrawing.

A judge may be declined, i. e. his jurisdiction disowned judicially, 1. Ratione causæ, from his incompetency to the special cause brought before him. 2. Ratione suspecti judicis; where either the judge himself, or his near kinsman, has an interest in the suit. No judge can vote in the cause of his father, brother, or son, either by consanguinity or affinity; nor in the cause of his uncle or nephew by consanguinity. 3. Ratione privilegii; where the party is by privilege exempted from their jurisdiction.

Prorogated jurisdiction, jurisdictio in consentiente, is that which is, by the consent of parties, conferred upon a judge, who without such consent would be incompetent.

A party who has either properly declined the jurisdiction of the judge before whom he had been cited, or who thinks himself aggrieved by any proceedings in the cause, may before decree apply to the court of session to issue letters of advocation for calling the action from before the inferior court to themselves.

2. *Of the supreme judges and courts.*—The British house of peers is the court of last resort, to which appeals lie from all the supreme courts of Scotland; but that court has no original jurisdiction in civil matters, in which they judge only upon appeal.

A court was erected in 1425, consisting of certain persons to be named by the king, out of the three estates of parliament, which was vested with the jurisdiction formerly lodged in the council, and obtained the name of the session, because it was ordained to hold annually a certain number of sessions at the places to be especially appointed by the king.

The judges who were vested with a universal civil jurisdiction, consisted originally of seven churchmen, seven laymen, and a president, who was required to be a prelate; but spiritual judges were in 1584 partly, and in 1640 totally, prohibited. At the commencement of the winter session, 1808, the fifteen ordinary judges were separated into two divisions, the one consisting of eight, and the other of seven members. Each division possesses the same powers, and carries on actions under the same forms, as the whole did formerly, with some improvements, by which the business of the nation is greatly facilitated.

The appellation of the *college of justices* is not confined to the judges who are distinguished by the name of senators; but comprehends advocates, clerks of session, writers to the signet, and others.

Though the jurisdiction of the session is properly limited to civil causes, the judges have always sustained themselves as competent to the crime of falsehood. Where the falsehood deserves death or demembration, they, after finding the crime proved, remit the criminal to the court

of justiciary. Special statute has given to the court of session jurisdiction in contraventions of law burrows, deforcements, and breach of arrestment; and they have been in use to judge in battery pendente lite, and in usury. In certain civil causes, the jurisdiction of the session is exclusive of all inferior jurisdictions, as in declarations of property, and other competitions of heritable rights, provings of the tenor, cessiones bonorum, restitution of minors, reductions of decrees or of writings, sales of the estates of minors or bankrupts, &c.: in a second class of causes, their jurisdiction can be exercised only in the way of review, after the cause is brought from the inferior court; as in maritime and consistorial causes, which must be pursued in the first instance before the admiral or commissary; and in actions below £25 sterling, which must be commenced before the judge ordinary. The session may proceed as a court of equity by the rules of conscience, in abating the rigor of law, and giving aid in proper cases to such as in a court of law can have no remedy.

In 1672 five lords of session were added as commissioners of justiciary, to the justice general and justice-clerk. The justice general, if present, is constant president of the court, and in his absence the justice-clerk. The kingdom is divided into three districts, and two of the judges are appointed to hold circuits in certain boroughs of each district twice in the year; one judge may proceed to the business in the absence of his colleague. In trials before this court the evidence was always taken down in writing till the act 23 Geo. III. was passed, by which the judges may try and determine all causes by the verdict of an assise, upon examining the witnesses vivâ voce, without reducing the testimony into writing, unless it shall appear more expedient to proceed in the former way, which they have it in their power to do. This act was at first temporary, but is now made perpetual by 27, Geo. III. c. 18.

By an old statute, the crimes of robbery, rape, murder, and wilful fire-raising (the four pleas of the crown), are said to be reserved to the king's court of justiciary; but the only crime in which, in practice, the jurisdiction of justiciary became at last exclusive of all inferior criminal jurisdiction, was that of high treason. The court of justiciary, when sitting at Edinburgh, has a power of advocating causes from all inferior criminal judges, and of suspending their sentences.

The *circuit court* can also judge in all criminal cases which do not infer death or demembration, upon appeal from any inferior court within their district; and has a supreme civil jurisdiction, by way of appeal, in all causes not exceeding £12 sterling, in which their decrees are subject to review; but no appeal is to lie to the circuit, till the cause be finally determined in the inferior court.

The court of *exchequer* consists of the lord high treasurer of Great Britain, and a chief baron, with four other barons of exchequer; which barons are to be made of sergeants at law, English barristers, or Scottish advocates of five years standing. This court has a private jurisdiction conferred upon it, as to the duties of customs, excise, or other revenues appertaining to the king or prince of Scotland, and as to all honors and estates that may accrue to the crown; in which matters they are to judge by the forms of proceeding used in the English court of exchequer, under the following limitations: that no debt due to the crown shall affect the debtor's real estate in any other manner than such estate may be affected by the laws of Scotland, and that the validity of the crown's title to any honors or lands shall continue to be tried by the court of session. The barons have the powers of the Scots court transferred to them, of passing the accounts of sheriffs or other officers who have the execution of writs issuing from, or returnable to, the court of exchequer, and of receiving resignations, and passing signatures of charters, gifts of casualties, &c. But, though all these must pass in exchequer, it is the court of session only that can judge of their preference after they are completed.

The *high admiral* is declared the king's justice-general upon the seas, on fresh water within flood mark, and below the first bridge, and in all harbours and creeks. His civil jurisdiction extends to all maritime causes, and so comprehends questions of charter-parties, freights, salvages, bottomries, &c. He exercises this supreme jurisdiction by a delegate, the judge of the high court of admiralty; and he may also name inferior deputies, whose jurisdiction is limited to particular districts, and whose sentences are subject to the review of the high court. In causes which are declared to fall under the admiral's cognizance his jurisdiction is sole; insomuch that the session itself, though it may review his decrees by suspension or reduction, cannot carry a maritime question from him by advocation. The admiral has acquired, by usage, a jurisdiction in mercantile causes, even where they are not strictly maritime, cumulative with the judge of the ordinary. All our supreme courts have seals or signets proper to their several jurisdictions.

3. *Of the inferior judges and courts.*—*Sheriff* is the judge ordinary constituted by the crown over a particular division or county. His civil jurisdiction extends to all actions upon contracts, or other personal obligations, forthcomings, poindings of the ground, mails, and duties; and to all possessory actions, as removings, ejections, spuilzies, &c.; to all brieves issuing from the chancery, as of inquest, terce, division, tutory, &c.; and even to adjudications of land estates, when proceeding on the renunciation of the apparent heir. His present criminal jurisdiction extends to certain capital crimes, as theft, and even murder, though it be one of the pleas of the crown, and he is competent to most questions of public police, and has a cumulative jurisdiction with justices of the peace in all riots and breaches of the peace. Sheriffs have a ministerial power, in virtue of which they return juries for trial of causes that require them. The writs for electing members of parliament have been, since the union, directed to the sheriffs, who, after they are executed, return them to the crown office whence they issued. They also execute writs issuing from the court of exchequer; and, in

general, take care of all estates, duties, or casualties, that fall to the crown within their territory, for which they must account to the exchequer. No high sheriff or stewart can judge personally in any cause. One sheriff or stewart-depute is to be appointed by the king in every shire, who must be an advocate of three years standing; and whose office as sheriff or stewart-depute is now, by 28 Geo. III., held ad vitam aut culpam.

The appanage or patrimony of the *prince of Scotland*, has been long erected into a regality jurisdiction called the principality. It is personal to the king's eldest son, upon whose death or succession it returns to the crown. The prince has, or may have, his own chancery, from which his writs issue, and may name his own chamberlain and other officers, for receiving and managing his revenue. The vassals of the prince are entitled to elect, or to be elected, members of parliament for counties, equally with those who hold of the crown

Justices of the peace are magistrates named by the sovereign over the several counties of the kingdom, for the special purpose of preserving the public peace. They may compel workmen or laborers to serve for a reasonable fee, and they can condemn masters in the wages due to their servants. They have power to judge in questions of highways, and to call out the tenants with their cottars (cottagers) and servants to perform six days' work yearly for upholding them; but have no jurisdiction in common actions for debts, except where they are declared competent by special statute.

Since the union, over and above the powers committed to them by the laws of Scotland, they are authorised to exercise whatever belonged to the office of an English justice in relation to the public peace. Two justices can constitute a court. Special statute has given the cognizance of several matters of excise to the justices in which their sentences are final.

A *borough* is a body corporate, made up of the inhabitants of a certain tract of ground erected by the sovereign with jurisdiction annexed to it. Boroughs are erected either to be holden of the sovereign himself, which is the case of royal boroughs; or of the superior of the lands erected, as boroughs of regality and barony. Boroughs royal have power, by their charters, to choose annually certain office-bearers or magistrates, and, in boroughs of regality and barony, the nomination of magistrates is, by their charter, lodged sometimes in the inhabitants, sometimes in the superior. Bailies of boroughs have jurisdiction in matters of debt, services, and questions of possession betwixt the inhabitants. Their criminal jurisdiction extends to petty riots, and reckless fire-raising. The dean of guild is that magistrate of a royal borough who is head of the Merchant Company. He has the cognizance of mercantile causes within the borough; and the inspection of buildings that they encroach neither on private property, nor on the public streets; and he may direct insufficient houses to be pulled down. His jurisdiction has no dependence on the court of the borough, or bailie-court.

A *baron*, in the extensive sense of that word, is one who holds his lands immediately of the crown.

By the jurisdiction act, the civil jurisdiction of a baron is reduced to the power of recovering from his vassals and tenants the rents of lands, and of assessing them in mill-services; and of judging in causes where the debt and damages do not exceed 40*s*. sterling. His criminal jurisdiction is, by the same statute, limited to assaults, batteries, and other similar offences, which may be punished by a fine not exceeding 20*s*. sterling, or by setting the offender in the stocks in the day time not above three hours; the fine to be levied by poinding, or one month's imprisonment.

The *high constable* of Scotland had no fixed territorial jurisdiction, but followed the court; and had, jointly with the marischal the cognisance of all crimes committed within two leagues of it. By the jurisdiction act, all jurisdictions constabulary are dissolved, except that of high constable.

The office of the *Lyon king of arms* was chiefly ministerial, to denounce war, proclaim peace, carry public messages, &c. But he has also a right of jurisdiction whereby he can punish all who usurp arms contrary to the law of arms, and deprive or suspend messengers, heralds, or pursuivants (who are officers named by himself); but he has no cognizance of the damage arising to the private party through the messenger's fault.

4. *Of ecclesiastical persons.*—Upon abolishing the pope's authority, the regular clergy were totally suppressed; and in place of all the different degrees which distinguished the secular clergy, we had at first only parochial presbyters or ministers, and superintendants, who had the oversight of the church within a certain district: soon afterwards the church government became episcopal, by archbishops, bishops, &c.; and after some intermediate turns, is now presbyterian, by kirk-sessions, presbyteries, synods, and general assemblies.

The term prelate, in the statutes, signifies a bishop, abbot, or other dignified clergyman Since the reformation, the crown, as coming in place of the pope, is considered as universal patron, where no right of patronage appears in a subject. Where two churches are united, which had different patrons, each patron presents by turns. Where a fund is gifted for the establishment of a second minister, in a parish where the cure is thought too heavy for one, the patronage of such benefice does not belong to the donor, but to him who was patron of the church, unless either where the donor has reserved to himself the right of patronage in the donation, or where he and his successors have been in the constant use of presenting the second minister, without challenge from the patron.

The right of presenting incumbents was, by act 1650, c. 23, taken from patrons, and vested in the heritors and elders of the parish, upon payment to be made by the heriters to the patron of 600 merks; but it was again restored to patrons, 10 Ann. c. 12, with the exception of the presentations sold in pursuance of the former act. Patrons were not simply administrators of the church; for they held the fruits of the vacant benefice as their own, for some time after the re-

formation. But that right is now no more than a trust in the patron who must apply them to pious uses within the parish, at the sight of the heritors, yearly as they fall due. If he fail, he loses his right of administering the vacant stipend for that and the next vacancy. The king, who is exempted from this rule, may apply the vacant stipend of his churches to any pious use, though not within the parish. If one should be ordained to a church, in opposition to the presentee, the patron, whose civil right cannot be affected by any sentence of a church court, may retain the stipend as vacant. Patrons are to this day entitled to a seat and burial place in the churches of which they are patrons, and to the right of all the teinds (i. e. tithes) of the parish not heritably disponed.

That kirks may not continue too long vacant, the patrons must present to the presbytery a fit person for supplying the cure, within six months from his knowledge of the vacancy, otherwise the right of presentation accrues to the presbytery jure devoluto. Since the revolution a judicial act of admission by the presbytery, proceeding either upon a presentation, or upon a call from the heritors and elders, or upon their own jus devolutum, completes the minister's right to the benefice.

The expedients for the maintenance of the clergy having proved ineffectual, a commission of parliament was appointed, in the reign of James VI., for planting kirks and modifying stipends to ministers out of the teinds; and afterwards several other commissions were appointed with the more ample powers of dividing large parishes, erecting new ones, &c., all of which were, in 1707, transferred to the court of session, with this limitation, that no parish should be disjoined, nor new church erected, nor old one removed to a new place, without the consent of three-fourths of the heritors, computing the votes, not by their own numbers, but by the valuation of their rents within the parish. The judges of session, when sitting in that court, are considered as a commission of parliament, and have their proper clerks, macers, and other officers of court, as such.

By a subsequent law, a fund has been set apart for raising all the stipends in Scotland below £150 to at least that sum.

Where a certain quantity of stipend is modified to a minister out of the teinds of a parish, without proportioning that stipend among the several heritors, the decree is called a decree of modification; but where the commissioners also fix the particular proportions payable by each heritor it is a decree of modification and locality. Where a stipend is only modified it is secured on the whole teinds of the parish, so that the minister can insist against any one heritor to the full extent of his teinds; such heritor being always entitled to relief against the rest for what he shall have paid above his just share; but, where the stipend is also localled, each inheritor is liable in no more than his own proportion.

Few of the reformed ministers were, at first, provided with dwelling-houses; most of the popish clergy having, upon the first appearance of the reformation, let their manses in feu, or in long tacks. Ministers therefore got a right, in 1563, to as much of these manses as would serve them, notwithstanding such feus or tacks. Where there was no parson's nor vicar's manse, one was to be built by the heritors, at the sight of the bishop (now the presbytery) the charge not exceeding £1000 Scots, nor below 500 merks. Under a manse are comprehended stable, barn, and byre (cow-house), with a garden: for all which it is usual to allow half an acre of ground.

Every incumbent is entitled at his entry to have his manse put in good condition; for which purpose the presbytery may appoint a visitation by tradesmen, and order estimates to be laid before them of the sums necessary for the repairing, which they may proportion among the heritors according to their valuations. The presbytery, after the manse is made sufficient, ought, upon application of the heritors, to declare it a free manse; which lays the incumbent under an obligation to uphold it in good condition during his incumbency, otherwise he or his executors shall be liable in damages; but they are not bound to make up the loss arising from the necessary decay of the building by the waste of time.

All ministers, where there is any landward or country parish, are, over and above their stipend, entitled to a glebe, which comprehends four acres of arable land, or sixteen sowms of pasture ground, where there is no arable land (a sowm is what will graze ten sheep, or one cow); and it is to be designed or marked by the bishop or presbytery out of such kirk lands within the parish as lie nearest to the kirk, and in default of kirk lands, out of temporal lands.

A right of relief is competent to the heritors, whose lands are set off for the manse or glebe, against the other heritors of the parish. Manses and glebes, being once regularly designed, cannot be feued or sold by the incumbent in prejudice of his successors, which is in practice extended even to the case where such alienation evidently appears profitable to the benefice.

Ministers, besides their glebe, are entitled to grass for a horse and two cows. And if the lands, out of which the grass may be designed, either lie at a distance, or are not fit for pasture, the heritors are to pay to the minister £20 Scots yearly an equivalent. Ministers have also freedom of foggage, pasturage, fuel, feal, divot, loaning, and free ish and entry, according to use and wont; but what these privileges are, must be determined by the local customs of the several parishes.

The legal terms at which stipends become due to ministers are Whitsunday, and Michaelmas. If the incumbent be admitted to his church before Whitsunday (till which term the corns are not presumed to be fully sown), he has right to that whole year's stipend; and if he is received after Whitsunday, and before Michaelmas, he is entitled to the half of that year; because, though the corns were sown before his entry, he was admitted before the terms at which they are presumed to be reaped. If he dies, or is translated to another benefice before Whitsunday, he has right to no part of that year; if before Michaelmas, to the half; and, if not till after Michaelmas, to the whole.

After the minister's death, his executors have right to the annat; which, in the sense of the canon law, was the right reserved to the pope of the first year's fruits of every benefice. Upon a threatened invasion from England, 1547, the annat was given, by our parliament, to the executors of such churchmen as should fall in battle in defence of their country; but the word annat or ann, as it is now understood, is the right which law gives to the executors of ministers, of half a year's benefice over and above what was due to the minister himself for his incumbency.

The executors of a minister need make up no title to the ann by confirmation: neither is the right assignable by the minister, or affectable with his debts; for it never belonged to him, but is a mere gratuity given by law to those for whom it is presumed the deceased could not sufficiently provide; and law has given it expressly to executors; and, if it were to be governed by the rules of succession in executory, the widow, in case of no children, would get one-half, the other would go to the next of kin; and, where there are children, she would be entitled to a third, and the other two-thirds would fall equally among the children. But the court of session have in this last case divided the ann into two equal parts, of which one goes to the widow, and the other among the children in capita.

At the Reformation all episcopal jurisdiction, exercised under the authority of the pope, was abolished. As the course of justice in consistorial causes was thereby stopped, queen Mary, besides naming a commissary for every diocese, did, by a special grant, establish a new commissary court at Edinburgh, consisting of four judges or commissaries. This court is vested with a double jurisdiction; one diocesan, which is exercised in the special territory, contained in the grant, viz. the counties of Edinburgh, Haddington, Linlithgow, Peebles, and a great part of Stirlingshire; and another universal, by which the judges confirm the testaments of all who die in foreign parts, and may reduce the decrees of all inferior commissaries, provided the reduction be pursued within a year after the decree.

The commissaries retain to this day an exclusive power in judging of declarators of marriage, and of the nullity of marriage; in actions of divorce and of non-adherence; of adultery, bastardy, and confirmation of testaments; because all these matters are still considered to be properly consistorial. Inferior commissaries are not competent to questions of bastardy and adherence, when they have a connexion with the lawfulness of marriage, or with adultery.

Commissaries have now no power to pronounce decrees in absence for any sum above £40 Scots, except in causes properly consistorial; but they may authenticate tutorial and curatorial inventories, and all bonds, contracts, &c., which contain a clause for registration in the books of any judge competent; and protests on bills may be registered in their books.

Chap. II.—Of Persons in their Private Relation.

1. *Of Marriage.*—Marriage is a contract, and requires the consent of parties. Idiots therefore, and furious persons, cannot marry. As no person is presumed capable of consent within the years of pupillarity, which, by our law, lasts till the age of fourteen years in males, and twelve in females, marriage cannot be contracted by pupils; but, if the marriage pair shall cohabit after puberty, such acquiescence gives force to the marriage. Marriage is fully perfected by consent, which founds all the conjugal rights and duties. The consent requisite to marriage must be de præsenti.

It is not necessary that marriage should be celebrated by a clergyman. The consent of parties may be declared before any magistrate, or simply before witnesses, which, if copula follows, constitutes a marriage; and, though no formal consent should appear, marriage is presumed from the cohabitation, or living together at bed and board, of a man and woman who are generally reputed husband and wife. A man's acknowledgment of his marriage to the midwife whom he called to his wife, and to the minister who baptized his child, was found sufficient presumptive evidence of marriage, without the aid either of cohabitation, or of habit and repute. Children may enter into marriage, not only without the knowledge, but even against the remonstrances, of a father.

Marriage is forbidden within certain degrees of blood. By the laws of Moses (Leviticus xviii.), which, by the act 1567, c. 15, has been adopted by us, cousins german, and all remoter degrees, may lawfully marry. Marriage, in the direct line, is forbidden in infinitum. Marriage also, where either of the parties is naturally unfit for generation, or stands already married to a third person, is ipso jure, null.

To prevent bigamy and incestuous marriages, the church has introduced proclamation of banns, that all persons who know any objection to the marriage may offer it. When the order of the church is observed, the marriage is called regular; when otherwise, clandestine. Marriage is valid when entered into in either of these ways; but, when clandestine, there are certain penalties imposed upon the parties, as well as on the celebrator and witnesses.

Rights by marriage.—It is only moveable subjects, or the fruits produced by heritable subjects during the marriage, that become common to man and wife. The husband, as the head of the wife, has the sole right of managing the goods in communion, which is called jus mariti. The husband can sell, or even gift, at his pleasure, the whole goods falling under communion; and his creditors may affect them for the payment of his proper debts. But a stranger may convey an estate to a wife, so as it shall not be subject to the husband's administration; or the husband himself may, in the marriage contract, renounce his jus mariti in all or any part of his wife's moveable estate.

From this right are excepted paraphernal goods, which, as the word is understood in our law, comprehends the wife's wearing apparel, and the ornaments to her proper person; as necklaces, ear-rings, breast or arm jewels, buckles, &c. These are neither alienable by the husband, nor affectable by his creditors.

The right of the husband to the wife's moveable estate is burdened with the moveable debts contracted by her before her marriage, though they should far exceed her moveable estate. The husband is only cited as administrator of the society goods. As soon therefore as the marriage is dissolved, and the society goods thereby suffer a division, the husband is no farther concerned in the share belonging to his deceased wife; and consequently is no longer liable to pay her debts, which must be recovered from her representatives, or her separate estate.

This obligation upon the husband is, however, perpetuated against him, 1. Where his proper estate, real or personal, has been affected, during the marriage, by complete legal diligence. 2. The husband continues liable, even after the wife's death, in so far as he is lucratus, or profited by her estate: still however the law does not consider a husband, who has got but a moderate tocher with the wife, as lucratus by the marriage.

Where the wife is debtor in that sort of debt which, if it had been due to her, would have excluded the jus mariti, e. g. in bonds bearing interest, which continue heritable as to the rights of husband and wife, the husband is liable only for the by-gone interests, and those that may grow upon the debt during the marriage.

The husband by marriage becomes the perpetual curator of the wife. From this right it arises, 1. That no suit can proceed against the wife till the husband be cited for his interest; 2. All deeds done by a wife without the husband's consent are null; neither can she sue in any action without the husband's concurrence. Yet where the husband refuses, or by reason of forfeiture cannot concur, &c., or where the action is to be brought against the husband himself, for not performing his part of the marriage articles, the judge will authorise her to sue in her own name.

If the husband should either withdraw from his wife, or turn her out of doors, or if, continuing in family with her, he should by severe treatment endanger her life, the commissaries will authorise a separation à mensâ et thoro, and give a separate alimony to the wife, suitable to her husband's estate, from the time of such separation until either a reconciliation or a sentence of divorce.

Certain obligations of the wife are valid, notwithstanding her being sub curâ mariti, e. g. obligations arising from delict; for wives have no privilege to commit crimes. But, if the punishment resolves into pecuniary mulct, the execution of it must, from her incapacity to fulfil, be suspended till the dissolution of the marriage, unless the wife has a separate estate exempted from the jus mariti.

Obligations arising from contract affect either the person or the estate. The law has been so careful to protect wives, while sub curâ mariti, that all personal obligations granted by a wife, though with the husband's consent, as bonds, bills, &c., are null, with the following exceptions, 1. Where the wife gets a separate peculium, or stock; 2. A wife's personal obligation, granted in the form of a deed, inter vivos, is valid, if it is not to take effect till her death; 3. Where the wife is by the husband, præposita negotiis, intrusted with the management of a particular branch of business or of his whole affairs.

A wife, while she remains in family with her husband, is considered as præposita negotiis domesticis; and, consequently, may provide things proper for the family, for the price whereof the husband is liable, though they should be misapplied, or though the husband should have given her money to provide them elsewhere. A husband may use the remedy of exhibition against her, by which all persons are interpelled from contracting with her, or giving her credit.

As to rights granted by the wife, affecting her estate, she has no moveable estate, except her paraphernalia, and these she may alienate without consent of the husband. She can, without the husband, bequeath by testament her share of the goods in communion. All donations, whether by the wife to the husband or by the husband to the wife, are recoverable by the donor; but if the donor dies without revocation the right becomes absolute.

When dissolved.—Marriage, by the law of Scotland, cannot be dissolved till death, except by divorce, proceeding either upon account of adultery or of wilful desertion.

Marriage is dissolved by death, either within year and day from its being contracted, or after year and day. If it is dissolved within year and day, all rights in consideration of the marriage, unless guarded against in the contract, become void, and things return to the same condition in which they stood before the marriage, with this restriction, that the husband is considered as a bonâ fide posssesor, in relation to what he has consumed upon the faith of his right; but he is liable to repay the tocher without any deduction in consideration of his family expense during the marriage. If things cannot be restored on both sides, equity hinders the restoring of one party and not the other. Where a marriage had been dissolved within the year, without a living child, by the death of the husband the widow was entitled to be alimented out of an estate of which he died possessed.

Upon the dissolution of a marriage, after year and day, the surviving husband becomes the irrevocable proprietor to the tocher, and the wife, where she survives, is entitled to her jointure, or to her legal provisions. She has also right to mournings, suitable to the husband's quality, and to alimony from the day of his death till the term at which her life-rent provision, either legal or conventional, commences. If a living child be procreated of the marriage, the marriage has the same effect as if it subsisted beyond the year.

Divorce.—Divorce is such a separation of married persons, during their lives, as loosens them from the nuptial tie, and leaves them at freedom to intermarry with others. But neither adultery nor wilful desertion are grounds which must necessarily dissolve marriage; they are only handles which the injured party may take hold of to be free. In the case of divorce upon adultery, marriage is, by a special statute (1600, c. 20), prohibited betwixt the two adulterers.

Where either party has deserted from the other for four years together, that other may sue for adherence. If this has no effect the church is to proceed, first by admonition, then by excommunication; all which previous steps are declared to be a sufficient ground for pursuing a divorce. In practice, however, the commissaries pronounce sentence in the adherence, after one year's desertion, but four years must intervene between the first desertion and the decree of divorce.

The legal effects of divorce on the head of desertion are, that the offending husband shall restore the tocher and forfeit to the wife all her provisions, legal and conventional; and, on the other hand, the offending wife shall forfeit to the husband her tocher and all the rights that would have belonged to her in the case of her survivance. This was also esteemed the rule in divorces upon adultery. But by a decision of the court of session in 1662, founded on a tract of ancient decisions recovered from the records, the offending husband was allowed to retain the tocher!

2. *Of minors and their tutors and curators.*—A child is under pupillarity from the birth to fourteen years of age if a male, and till twelve if a female. Minority begins where pupillarity ends, and continues till majority; which, by the law of Scotland, is the age of twenty-one years complete, both in males and females; but minority, in a large sense, includes all under age, whether pupils or puberes. Because pupils cannot in any degree act for themselves, and minors seldom with discretion: pupils are put by law under the power of tutors, and minors may put themselves under the direction of curators. Tutory is a power and faculty to govern the person, and administer the estate of a pupil. Tutors are either nominate, of law, or dative.

A tutor nominate is he who is named by a father, in his testament or other writing, to a lawful child.

If there be no nomination by the father, or if the tutors nominate do not accept, or if the nomination falls by death or otherwise, there is place for a tutor of law. This sort of tutory devolves upon the nearest related by the father, though females intervene.

Where there are two or more equally near to the pupil, he who is entitled to the pupil's legal succession is preferred to the others. But, as the law suspects that he may not be over careful to preserve a life estate which stands in the way of his own interest, this sort of tutor is excluded from the custody of the pupil's person, which is commonly committed to the mother, while a widow, until the pupil be seven years old; and in default of the mother, to the highest relation by the mother. The tutor of law must be at least twenty-five years of age. He is served or declared by a jury of sworn men, who are called upon a brief issuing from the chancery, which is directed to any judge having jurisdiction. He must give security before he enters upon the management.

If no tutor of law demands the office, any person, even a stranger, may apply for a tutory dative. If a pupil be without tutors of any kind, the court of session will, at the suit of any kinsman, name a factor (steward) for the management of the pupil's estate.

After the years of pupillarity are over, the minor is considered as capable of acting by himself, if he has confidence enough of his own capacity and prudence. The only two cases in which curators are imposed upon minors are, 1. Where they are named by the father, in a state of health; 2. Where the father is himself alive. If the minor *chooses* to be under the direction of curators, he may fix on any he pleases.

These curators are styled ad negotia, to distinguish them from another sort, called curators ad lites, who are authorised by the judge to concur with a pupil or minor in actions of law, either where he is without tutors and curators, or where his tutors and curators are parties to the suit. Women are capable of being tutors and curators under certain restrictions.

In this, tutory differs from curatory, that, as pupils are incapable of consent, they have no person capable of acting: which defect the tutor supplies. Hence, the tutor subscribes alone all deeds of administration; but in curatory it is the minor who subscribes as the proper party; the curator does no more than consent. Hence, also, the persons of pupils are under the power either of their tutors, or of their nearest cognates; but the minor, after pupillarity, has the disposal of his own person and may reside where he pleases.

Both tutors and curators must, previous to their administration, make a judicial inventory, subscribed by them and the next of kin, before the minor's judge ordinary, of his whole estate personal and real.

Tutors and curators cannot grant leases of the minor's lands, to endure longer than their own office; nor under the former rental, without either a warrant from the court of session, or some apparent necessity.

They have power to sell the minor's moveables; but cannot sell their pupil's land estate, without the authority of a judge; yet this restraint reaches not to such alienations as the pupil could by law be compelled to grant.

Tutors and curators cannot, contrary to the nature of their trust, authorise the minor to do any deed for their own benefit; nor can they acquire any debt affecting the minor's estate. It seems, however, that such purchase would be considered as valid, provided it were bonâ fide acquired at a public sale.

Persons named to the offices of tutory or curatory, may either accept or decline; and where a father, in liege poustie (when in a state of health), names certain persons both as tutors and curators to his children, though they have acted as tutors, they may decline the office of curatory. Tutors and curators, having once accepted, are liable in diligence, that is, are accountable for the consequences of their neglect in any part of their duty from the time of their acceptance. They are accountable singuli in solidum, i. e. every one of them is answerable, not only for his own diligence, but for that of his co-tutors; and any one may be sued without citing the rest; but he who is condemned in the whole has action of relief against his co-tutors.

From this obligation to diligence are excepted, 1. Fathers or administrators in law, who, from the presumption that they act to the best of their power for their children, are liable only for actual intromissions. 2. Tutors and curators named by the father in consequence of the act 1696, with the special provisos, that they shall be liable barely for intromissions, not for omissions; and that each of them shall be liable only for himself, and not in solidum for the co-tutors; but this power of exemption from diligence is limited to the estate descending from the father himself. Tutors or curators are not entitled to any salary or allowance for pains, unless a salary has been expressly contained in the testator's nomination; for their office is presumed to be gratuitous.

Though no person is obliged to accept the office of tutor or curator, yet having once accepted he cannot throw it up, or renounce it, without sufficient cause; but if he should be guilty of misapplying the minor's money, or fail in any other part of his duty, he may be removed at the suit of the minor's next in kin, or by a co-tutor or co-curator. When the misconduct proceeds merely from indolence or inattention, the court, in place of removing the tutor, either join a curator with him, or, if he be a tutor nominate, they oblige him to give caution (surety) for his past and future management.

The offices of tutory and curatory expire also by the pupil's attaining the age of puberty, or the minor's attaining the age of twenty-one years complete; and by the death either of the minor, or of his tutor and curator. Curatory also expires by the marriage of a female minor, who becomes thereby under the coverture of her own husband.

Deeds either by pupils, or by minors having curators, without their consent, are null; but they oblige the grantors, in as far as relates to sums profitably applied to their use. A minor under curators can indeed make a testament by himself; but, whatever is executed in the form of a deed inter vivos, requires the curator's consent. Deeds by a minor, who has no curators, are as effectual as if he had curators and signed them with their consent; he may even alienate his heritage without the interposition of a judge.

Minors may be restored against all deeds granted in their minority that are hurtful to them.

A minor cannot be restored against his own delict or fraud, e. g. 1. If he should induce one to bargain with him by saying he was major. 2. If at any time after majority he has approved of the deed. 3. A minor who has taken himself to business, as a merchant, shopkeeper, &c., cannot be restored against any deed granted by him in the course of that business. 4. A minor cannot be restored in a question against a minor, unless some gross unfairness shall be qualified in the bargain.

Curators are given not only to minors, but in general to every one, who, either through defect of judgment, or unfitness of disposition, is incapable of rightly managing his own affairs. The way of appointing this sort of curators is by a jury summoned from the chancery.

Persons, let them be ever so profuse, or liable to be imposed upon, if they have the exercise of reason, can effectually oblige themselves till they are fettered by law. This may be done by interdiction, which is a legal restraint laid upon such persons from signing any deed to their own prejudice, without the consent of their curators or interdictors. An interdiction, duly registered, has this effect, that all deeds done thereafter by the person interdicted, without the consent of his interdictors, affecting his heritable estate, are subject to reduction.

Registration in the general register secures all his lands from alienation, wherever they lie; but, where the interdiction is recorded in the register of a particular shire, it covers no lands except those situated in that shire.

3. *Of children.*—Children are either born in wedlock, or out of it. All children born in lawful marriage are presumed to be begotten by the person to whom the mother is married; and consequently to be lawful children. This presumption is so strongly founded, that it cannot be defeated but by direct evidence that the mother's husband could not be the father of the child. A father has the absolute right of disposing of his children's persons, of directing their education, and of moderate chastisement; and even after they become puberes he may compel them to live in family with him, and contribute their labor and industry, while they continue there, towards his service. A child who gets a separate stock from the father for carrying on any trade or employment, even though he should continue in his father's house, may be said to be emancipated or foris-familiated, in so far as concerns that stock; for the profits arising from his are his own. Foris-familiation, when taken in this sense, is also inferred by the child's marriage, or by his living in a separate house with his father's permission or good will.

Children born out of wedlock are styled natural children or bastards. Bastards may be legitimated or made lawful, 1. By the subsequent intermarriage of the mother of the child with the father; and this legitimation entitles the child to all the rights of lawful children. The subsequent marriage which produces legitimation is considered by the law to have been entered into when the child legitimated was begotten; and hence, if he be a male, he excludes by his right of primogeniture the sons procreated after the marriage from the succession of the father's heritage, though these sons were lawful children from the birth. Hence, also, those children only can be thus legitimated who are begotten of a woman whom the father might at that period have lawfully married. Bastards are legitimated by letters of legitimation from the sovereign.

4. *Of servants.*—As to the power of masters over their servants, all servants now enjoy the same rights and privileges with other subjects, unless in so far as they are tied down by their engagements of service. Servants are either necessary or voluntary. Necessary are those whom law obliges to work without wages. Voluntary servants engage without compulsion, either for mere subsistence, or for wages also. Those who earn their bread in this way, if they

should refuse to engage, may be compelled to it by the justices of the peace, who have power to fix the rate of their wages.

Colliers, coalbearers, salters, and other persons necessary to colliers and salt-works, as they are particularly described by act 1661, were formerly tied down to perpetual service at the works to which they had once entered. Upon a sale of the works, the right of their service was transferred to the new proprietor. All persons were prohibited to receive them into their service without a testimonial from their last master; and if they deserted to another work, and were redemanded within a year thereafter, he who had received them was obliged to return them within twenty-four hours, under a penalty. But though the proprietor should neglect to require the deserter within the year, he did not, by that short prescription, lose his property in him. Colliers, &c., where the colliery to which they were restricted was either given up or not sufficient for their maintenance, might lawfully engage with others; but, if the former work should be again set a-going, the proprietor might reclaim them back to it.

But by 15 Geo. III., c. 28, these restraints, the only remaining vestiges of slavery in the law of Scotland, were abrogated; and, after the 1st of July, 1775, all colliers, coal-bearers, and salters, were declared to be upon the same footing with other servants or laborers. The act subjects those who are bound prior to the 1st of July, 1775, to a certain number of years' service for their freedom, according to the age of the person.

5. *Of the poor.*—Indigent children may be compelled to serve any of the king's subjects without wages, till the age of thirty years. Vagrants and sturdy beggars may be also compelled to serve any manufacturer. And, because few persons are willing to receive them into their service, public work-houses are ordained to be built for setting them to work. The poor who cannot work must be maintained by the parishes in which they were born; and, where the place of their nativity is not known, the burden falls upon the parishes where they have had their most common resort for the three years immediately preceding their being apprehended, or their applying for the public charity. Where the contributions collected at the churches to which they belong are not sufficient for their maintenance, they are to receive badges from the minister and kirk session, in virtue of which they may ask alms at the dwelling-houses of the inhabitants of the parish.

Chap. III.—Of Property and its Acquisition in General.

1. *Of rights relating to property.*—The right of enjoying and disposing of a subject at one's pleasure is called 'property.' Proprietors are restrained by law from using their property to their neighbour's prejudice; and, on this principle, nuisances of every kind are reprobated by law. In particular, such as corrupt the air, render the neighbourhood unwholesome; or in short, to use the words of lord Mansfield, 'render the enjoyment of life and property uncomfortable.' Every state or sovereign has a power over private property, called by some lawyers dominium eminens, in virtue of which the proprietor may be compelled to sell his property for an adequate price, where an evident utility on the part of the public demands it.

Certain things are by nature incapable of appropriation; as the air, the light, the ocean, &c., none of which can be brought under the power of any one person, though their use be common to all. Others are by law exempted from private commerce, in respect of the uses to which they are destined. Of this last kind are, 1. Res publicæ, as navigable rivers, highways, bridges, &c.; the right of which is vested in the king, chiefly for the benefit of his people, whence they are called regalia. 2. Res universitatis, things which belong in property to a particular corporation or society, and whose use is common to every individual in it; but both property and use are subject to the regulations of the society; as town-houses, corporation-halls, market-places, church-yards, &c. The lands or other revenue belonging to a corporation do not fall under this class, but are juris privati, in so far as regards the corporation.

2. *Of the means of acquiring property.*—Property may be acquired either by occupation or accession; and transferred by tradition or prescription; but prescription, being also a way of losing property, will be explained under a separate title. Occupation, or occupancy, is the appropriating of things which have no owner, by apprehending them or seizing their possession. This was the original method of acquiring property; and accorded, under certain restrictions, with the doctrine of the Roman law, quod nullius est, fit occupantis: but this doctrine can have no place in the feudal plan, by which the king is looked on as the original proprietor of all the lands within his dominions.

Even in that sort of moveable goods which is presumed to have once had an owner, this rule obtains by the law of Scotland, quod nullius est, fit domini regis. Thus the right of treasure hid under ground is not acquired by occupation, but accrues to the king. Thus, also, where one finds strayed cattle or other moveables, which have been lost by the former owner, the finder acquires no right in them, but must give public notice thereof; and if, within a year and a day after such notice, the proprietor does not claim his goods, they fall to the king, sheriff, or other person to whom the king has made a grant of such escheats.

In that sort of moveables which never had an owner, as wild beasts, fowls, fishes, or pearls found on the shore, the original law takes place, that he who first apprehends becomes proprietor; insomuch, that though the right of hunting, fowling, and fishing, are restrained by statute under certain penalties, yet all game, even what is caught in contravention of the law, becomes the property of the catcher (unless where the confiscation thereof is made part of the penalty); the contravener being obnoxious, however, to the penal enactment of the statutes, in consequence of his transgression. It was not for a long time a fixed point, whether a person, though

possessed of the valued rent by law entitling him to kill game, could hunt upon another person's grounds without consent; but it was lately found, by the court of session, and affirmed upon appeal, that he could not; it being repugnant to the idea of property, that any person, however qualified, should have it in his power to traverse and hunt upon another's grounds without consent of the proprietor. Although certain things become the property of the first occupant, yet there are others which fall not under this rule. Thus whales, thrown in, or killed on our coasts, belong neither to those who killed them, nor to the proprietor of the grounds on which they are cast, but to the king, providing they are so large as that they cannot be drawn by a wain with six oxen.

Accession is that way of acquiring property, by which, in two things which have a connexion with, or dependence on one another, the property of the principal thing draws after it the property of its accessory. Thus a house belongs to the owner of the ground on which it stands, though built with materials belonging to, and at the charge of another; trees taking root in our ground though planted by another become ours. Thus also the insensible addition made to one's ground by what a river washes from other grounds (which is called alluvio) accrues to the master of the ground which receives the addition. The Romans excepted from this rule the case of paintings drawn on another man's board or canvas, in consideration of the excellency of the art; which exception our practice has, for a like reason, extended to similar cases. Under accession is comprehended specification; by which is meant, a person's making a new species or subject from materials belonging to another.

Though the new species should be produced from the commixtion or confusion of different substances belonging to different proprietors, the same rule holds; but, where the mixture is made by the common consent of the owner, such consent makes the whole a common property, according to the shares that each proprietor had formerly in the several subjects.

Property is carried from one to another by tradition, which is the delivery of possession by the proprietor, with an intention to transfer the property to the receiver. Two things are therefore requisite in order to the transmitting of property in this way, 1. The intention or consent of the former owner to transfer it on some proper title of alienation, as sale, exchange, gift, &c.; 2. The actual delivery in pursuunce of that intention.

Tradition is either real, where the ipsa corpora of moveables are put into the hands of the receiver; or symbolical, which is used where the thing is incapable of real delivery, or even when actual delivery is only inconvenient.

Possession, which is essential both to the acquisition and enjoyment of property, is defined, the detention of a thing, with a design, or animus, in the detainer, of holding it as his own. It cannot be acquired by the sole act of the mind, without real detention; but, being once acquired, it may be continued solo animo. Possession is either natural or civil. Natural possession is when one possesses by himself; thus, we possess lands by cultivating them and reaping their fruits, houses by inhabiting them, moveables by detaining them in our hands. Civil possession is our holding the thing either by the sole act of the mind, or by the hands of another who holds it in our name.

A bonâ fide possessor is he who, though he is not really proprietor of the subject, yet believes himself, on probable grounds, to be proprietor. A malâ fide possessor is he who knows, or is presumed to know, that what he possesses is the property of another. By our customs, perception alone, without consumption, secures the possessor. If he has sown the ground, while his bona fides continued, he is entitled to reap the crop. But this doctrine does not reach to civil fruits, e. g. the interest of money, which the bonâ fide receiver must restore, together with the principal, to the owner.

Bona fides necessarily ceases by the conscientia rei alienæ in the possessor, whether such consciousness should proceed from legal interpellation, or private knowledge. Mala fides is sometimes induced by the true owner's bringing his action against the possessor, sometimes not till litiscontestation, and, in cases uncommonly favorable, not till sentence be pronounced against the possessor.

The property of moveable subjects is presumed by the bare act of possession, until the contrary be proved; but possession of an immoveable subject, though for 100 years together, if there is no seisin, does not create even a presumptive right to it; nulla sesina, nulla terra. Such subject is considered as caduciary, and so accrues to the sovereign. Where the property of a subject is contested, the lawful possessor is entitled to continue till the point of right be discussed; and, if he has lost it by force or stealth, the judge will, upon summary application, immediately restore it to him.

Where a possessor has several rights in his person affecting the subject possessed, the general rule is, that he may ascribe his possession to which of them he pleases; but one cannot ascribe his possession to a title, other than that on which it commenced, in prejudice to him from whom his title flowed.

3. *Of the general nature of heritable and moveable rights.*—Since the introduction of feus, wherever there are two or more in the same degree of consanguinity to one who dies intestate, and who are not all females, such rights belonging to the deceased as are either properly feudal, or have any resemblance to feudal rights, descend wholly to one of them, who is considered as his proper heir; the others, who have the name of next of kin, or executors, must be contented with that portion of the estate which is of a more perishable nature. Hence has arisen the division of rights to be explained under this title. The subjects descending to the heir are styled heritable; and those that fall to the next of kin moveable.

All rights of, or affecting lands, under which are comprehended houses, mills, fishings, teinds (or tithes), and all rights of subjects that are fundo annexa, whether completed by seisin or not, are heritable ex suâ naturâ. On the other

hand, every thing that moves itself or can be moved, and, in general, whatever is not united to land, is moveable: as household furniture, corn, cattle, cash, arrears of rent and interest, even though they should be due on a right of annual rent; for, though the arrears last mentioned are secured on land, yet, being presently payable, they are considered as cash.

Debts (nomina debitorum) when due by bill, promisory note, or account, are moveable. When constituted by bond, they do not fall under any one head; but are divided into heritable and moveable by the following rules:—all debts constituted by bond, bearing an obligation to infeft the creditor in any heritable subject, are heritable. Bonds merely personal are moveable as to succession, but they are heritable with respect to the fisk, and to the rights of husband and wife. Bonds taken payable to heirs and assignees, secluding executors, are heritable in all respects, from the destination of the creditor. But a bond which is made payable to heirs, without mention of executors, descends, not to the proper heir in heritage, though heirs are mentioned in the bond, but to the executor; for the word heir, which is a generic term, points out him who is to succeed by law in the right; and the executor, being the heir in mobilibus, is considered as the person to whom such bond is taken payable. But, where a bond is taken to heirs male, or to a series of heirs one after another, such bond is heritable, because its destination necessarily excludes executors.

Subjects originally moveable become heritable, 1. By the proprietor's destination; 2. Moveable rights may become heritable by the supervening of an heritable security.

Heritable rights do not become moveable by accessory moveable securities; the heritable right being in such case the jus nobilius, which draws the other after it.

Certain subjects partake in different respects of the nature both of heritable and moveable. Personal bonds are moveable in respect of succession, but heritable as to the fisk and the rights of husband and wife. All bonds, whether merely personal or even heritable, on which no seisin has followed, may be affected at the suit of creditors, either by adjudication, which is a diligence proper to heritage, or by arrestment which is peculiar to moveables. Bonds secluding executors, though they descend to the creditor's heir, are payable by the debtor's executors without relief against the heir.

All questions, whether a right be heritable or moveable, must be determined according to the condition of the subject at the time of the ancestor's death. If it was heritable at that period, it must belong to the heir; if moveable it must fall to the executor, without regard to any alterations that may have affected the subject in the intermediate period between the ancestor's death and the competition.

Chap. IV.—Of Heritable Property.

1. *By charter and seisin.*—Heritable rights are governed by the feudal laws. In feudal questions, therefore, Scotland is governed, in the first place, by its own statutes and customs; where these fail, regard must be had to the practice of neighbouring countries, if the genius of the law appears to be the same; and, should the question still remain doubtful, we may have recourse to books written concerning feus, as to the original plan on which all feudal systems have proceeded.

This military grant got the name first of beneficium, and afterwards of feudum; and was defined a gratuitous right to the property of lands, made under the conditions of fealty and military service, to be performed to the grantor by the receiver; the radical right of the lands still remaining in the grantor.

Under lands in this definition are comprehended all rights or subjects so connected with land, that they are deemed a part thereof, as houses, mills, fishings, jurisdictions, patronages, &c. Though feus in their original nature were gratuitous, they soon became the subject of commerce; services of a civil or religious kind were frequently substituted in place of military; and now services of every kind have been entirely dispensed with in certain feudal tenures. He who makes this grant is called superior, and he who receives it the vassal. The subject of the grant is commonly called the feu; though that word is at other times, in our law, used to signify one particular tenure. The interest retained by the superior in the feu is styled dominium directum, or the superiority; and the interest acquired by the vassal dominium utile or the property. The word fee is promiscuously applied to both.

Allodial goods are opposed to feus; by which are understood goods enjoyed by the owner, independent of a superior. All moveable goods are allodial; lands only are so when they are given without the condition of fealty or homage. By the feudal system, the sovereign, who is the fountain of feudal rights, reserves to himself the superiority of all the lands of which he makes the grant; so that, with us, no lands are allodial, except those of the king's own property, the feudal or allodial lands of Orkney, the superiorities which the king reserves in the property lands of his subjects, and manses and glebes, the right of which is completed by the presbytery's designation without any feudal grant.

Every person who is in the right of an immoveable subject, provided he has the free administration of his estate, and is not debarred by statute or by the nature of his right, may dispose of it to another. Nay a vassal, though he has only the dominium utile, can subfeu his property to a subvassal by a subaltern right, and thereby raise a new dominium directum in himself, subordinate to that which is in his superior, and so on in infinitum. The vassal who thus subfeus is called the subvassal's immediate superior, and the vassal's superior is the subvassal's mediate superior.

All persons who are not disabled by law may acquire and enjoy feudal rights. Papists could not formerly purchase a land estate by any voluntary deed; but now, by 33 Geo. III. c. 44, their situation is assimilated in that respect to that of Roman Catholics in England. Aliens, who owe allegiance to a foreign prince, cannot

hold a feudal right without naturalisation: and therefore, where such privilege was intended to be given to favored nations or persons, statutes of naturalisation were necessary, either general or special; or, at least, letters of naturalisation by the sovereign.

Every heritable subject capable of commerce may be granted in feu. From this general rule are excepted, 1. The annexed property of the crown. 2. Tailzied lands, which are devised under condition that they shall not be aliened. 3. An estate in hereditate jacente cannot be effectually alienated by the heir apparent that is not entered; but such alienation becomes effectual upon his entry, the supervening right accruing in that case to the purchaser; which is a rule applicable to the alienation of all subjects not belonging to the vendor at the time of the sale.

The feudal right, or, as it is called, investiture, is constituted by charter and seisin. By the charter we understand that writing which contains the grant of the feudal subject to the vassal, whether it be executed in the proper form of a charter or of a disposition. Charters by subject superiors are granted either, 1. A me de superiore meo, when they are to be holden, not of the grantor himself, but of his superior. This sort is called a public holding, because vassals were in ancient times publicly received in the superior's court before the pares curiæ or co-vassals. Or, 2. De me, where the lands are to be holden of the grantor. These were called sometimes base rights, from bas 'lower;' and sometimes private, because, before the establishment of our records, they were easily concealed from third parties. An original charter is that by which the fee is first granted: a charter by progress is a renewed disposition of that fee to the heir or assignee of the vassal. All doubtful clauses in charters by progress ought to be construed agreeably to the original grant; and all clauses in the original charter are understood to be implied in the charters by progress, if there be no express alteration.

A seisin is the instrument or attestation of a notary, that possession was actually given the superior or his bailie, to the vassal or his attorney; which is considered as so necessary a solemnity, as not to be suppliable, either by a proof of natural possession, or even of the special fact that the vassal was duly entered to the possession by the superior's bailie.

The symbols by which the delivery of possession is expressed are, for lands, earth and stone; for rights of annual rent, payable out of land, it is also earth and stone, with the addition of a penny money; for parsonage teinds, a sheaf of corn; for jurisdiction, the book of the court; for patronages, a psalm book and the keys of the church; for fishings, net and cable; for mills, clap and hopper, &c. The seisin must be taken upon the ground of the lands, except where there is a special dispensation in the charter from the crown.

All seisins must be registered within sixty days after their date, either in the general register of seisins at Edinburgh, or in the register of the particular shire appointed by the act 1617: which it must be observed is not, in every case, the shire within which the lands lie. Burgage seisins are ordained to be registered in the books of the borough.

Unregistered seisins are ineffectual against third parties, but they are valid against the grantors and their heirs. Seisins regularly recorded are preferable, not according to their own dates, but the dates of their registration.

Seisin necessarily supposes a superior by whom it is given. The right therefore, which the sovereign who acknowledges no superior has over the whole lands of Scotland, is constituted jure coronæ, without seisin. In several parcels of land that lie contiguous to one another, one seisin serves for all unless the right of the several parcels be either holden of different superiors, or derived from different authors, or enjoyed by different tenures under the same superior. In discontiguous lands, a separate seisin must be taken on every parcel, unless the sovereign has united them into one tenantry by a charter of union; in which case, if there is no special place expressed, a seisin taken on any part of the united lands will serve for the whole, even though they be situated in different shires. The only effect of union is to give the discontiguous land the same quality as if they had been contiguous or naturally united. Union, therefore, does not take off the necessity of separate seisins, in lands holden by different tenures, or the rights of which flow from the different superiors; these being incapable of natural union.

The privilege of barony carries a higher right than union does, and consequently includes union in it as the less degree. The right of barony can neither be given nor transmitted, unless by the crown; but the quality of simple union, being once conferred on lands by the sovereign, may be communicated by the vassal to a subvassal. Though part of the lands united or erected into a barony be sold by the vassal to be holden a me, the whole union is not thereby dissolved: what remains unsold retains the quality.

A charter not perfected by seisin is a right merely personal, which does not transfer the property, and a seisin of itself bears no real faith without its warrant. It is the charter and seisin joined together that constitutes the feudal right, and secures the receiver against the effect of all posterior seisins, even though the charters on which they proceed should be prior to his.

No quality which is designed as alien, or real burden on a feudal right, can be effectual against singular successors, if it be not inserted in the investiture. If the creditors in the burden are not particularly mentioned, the burden is not real; for no perpetual unknown encumbrance can be created upon lands. Where the right itself is granted with the burden therein mentioned, or where it is declared void if the sum be not paid against a certain day, the burden is real; but, where the receiver is simply obliged by his acceptance to make payment, the clause is effectual only against him and his heirs.

2. *Of the several kinds of holding.*—Feudal subjects are chiefly distinguished by their different manners of holding. *Feu* holding is that whereby the vassal is obliged to pay to the su-

perior a yearly rent in money or grain, and sometimes also in services proper to a farm, as ploughing, reaping, carriages for the superior's use, &c., nomine feudi firmæ. This kind of tenure was introduced for the encouragement of agriculture, the improvement of which was considerably obstructed by the vassal's obligation to military service. It appears to have been a tenure known in Scotland as far back as leges burgorum.

Blanch holding is that whereby the vassal is to pay the superior an elusory yearly duty, as a penny-money, a rose, a pair of gilt spurs, &c., merely in acknowledgment of the superiority nomine albæ firmæ. This duty where it is a thing of yearly growth, if it be not demanded within the year, cannot be exacted thereafter; and, where the words si petatur tantum are subjoined to the reddendo, they imply a release to the vassal whatever the quality of the duty may be, if it is not asked within the year.

Burgage holding is that by which boroughs royal hold of the sovereign the lands which are contained in the charters of erection. As the royal borough is the king's vassal, all burgage holders hold immediately of the crown. The magistrates, therefore, when they receive the resignations of the particular burgesses and give seisin to them, act, not as superiors, but as the king's bailies especially authorised thereto.

Feudal subjects granted to churches, monasteries, or other societies for religious or charitable uses, are said to be mortified or granted ad manum mortuum; either because all casualties must necessarily be lost to the superior, where the vassal is a corporation which never dies; or becauses the property of these subjects is granted to a dead hand, which cannot transfer it to another. Lands may be mortified to any lawful purpose, either by blanch or by feu holding. But as the superior must lose all the casualties of superiority in the case of mortifications to churches, universities, &c., therefore lands cannot be mortified without the superior's consent.

3. *Of the casualties due to the superior.*—The right of the superior continues unimpaired, notwithstanding the feudal grant, unless in so far as the dominium utile, or property is conveyed to his vassal. The superiority carries a right to the services and annual duties contained in the reddendo of the vassal's charter. The duty payable by the vassal is a debitum fundi; i. e. it is recoverable not only by a personal action against himself, but by a real action against the lands.

Besides the constant fixed rights of superiority, there are others, which, because they depend upon uncertain events, are called casualties.

The tenure of the lands holden ward of the crown or prince is turned in blanch for payment of one penny Scots yearly, si petatur tantum, and the tenure of those holden of subjects into feu for payment of such yearly feu-duty in money victual or cattle, in place of all services, as should be fixed by the court of session.

The only casualty, or rather forfeiture, is the loss or tinsel of the feu right, by the neglect of payment of the feu duty for two full years. Yet where there is no conventional irritancy in the feu right, the vassal is allowed to purge the legal irritancy, by making payment before sentence; but where the legal irritancy is fortified by a conventional, he is not allowed to purge, unless where he can give a good reason for the delay of payment.

The casualties common to all holdings are non-entry, relief, liferent, escheat, disclamation, and purpresture.

Non-entry is that casualty which arises to the superior out of the rents of the feudal subject, through the heir's neglecting to renew the investiture after his ancestor's death. The amount is ascertained by the retoured duties, or valued rent, made by the inquest, according to which the public taxes, as well as private dues, are regulated.

In feu-holdings, the feu-duty is returned as the rent, because the feu-duty is presumed to be, and truly was at first, the rent. The superior of teinds gets the fifth part of the retoured duty as non entry; because the law considers teinds to be worth a fifth part of the rent. The heir, after he is cited by the superior in the action of general declarator, is subjected to the full rents till his entry, because his neglect is less excusable after citation. The decree of declarator, proceeding on this action, entitles the superior to the possession, and gives him right to the rents downward from the citation. Non-entry does not obtain in burgage holdings, because the incorporation of inhabitants holds the whole incorporated subjects of the king; and there can be no non-entry due in lands granted to communities, because there the vassal never dies. It is also excluded as to a third of the lands by the terce, during the widow's life; and as to the whole of them by the courtesy during the life of the husband. But it is not excluded by a precept of seisin granted to the heir, till seisin be taken thereupon.

Relief is that casualty which entitles the supepior to an acknowledgment or consideration from the heir for receiving him as vassal. It is called relief, because, by the entry of the heir, his fee is relieved out of the hands of the superior. It is not due in feu-holdings flowing from subjects, unless where it is expressed in charter by a special clause for doubling the feu-duty at the entry of an heir; but in feu-rights holden of the crown it is due, though there should be no such clause in the charter. In blanch and feu holdings, where this casualty is expressly stipulated, a year's blanch or feu duty is due in name of relief, beside the current year's duty, payable in name of blanch or feu farm.

Escheat, from escheoir, to fall, is that forfeiture which falls through a person's being denounced rebel. It is either single or life rent.

Single escheat falls, without denunciation, upon sentence of death pronounced in any criminal trial; and, by special statute, upon one's being convicted of certain crimes, though not capital; as perjury, bigamy, deforcement, breach of arrestment, and usury. All moveables belonging to the rebel at the time of his rebellion, or afterwards acquired by him until relaxation, fall under single escheat. Bonds bearing interest, because they continue heritable quoad fiscum, fall not under it, nor such fruits of heritable subjects as become due after the term next ensuing

the rebellion, these being reserved for the life-rent escheat. The king never retains the right of escheat to himself, but makes it over to a donatory, whose gift is not perfected till, upon an action of general declarator, it be declared that the rebel's escheat has fallen to the crown by his denunciation, and that the right of it is now transferred to the pursuer by the gift in his favor. Every creditor, therefore, of the rebel, whose debt was contracted before rebellion, and who has used diligence before declarator, is preferable to the donatory. But the escheat cannot be affected by any debt contracted, nor by any voluntary act of the rebel after rebellion. The rebel, if he continues unrelaxed for year and day after rebellion, is construed to be civilly dead; and therefore, where he holds any feudal right, his superiors, as being without a vassal, are entitled each of them to the rents of such of the lands belonging to the rebel as hold of himself, during all the days of the rebel's natural life, by the casualty of life-rent escheat; except where the denunciation proceeds upon treason, or proper rebellion, in which case the life rent falls to the king. It is that estate only, to which the rebel has a proper right of life rent in his own person, that falls under his life-rent escheat.

Though neither the superior nor his donatory can enter into possession in consequence of this casualty, till decree of declarator, yet that decree, being truly declaratory, has a retrospect, and does not so properly confer a new right as declare the right formerly constituted to the superior, by the civil death of his vassal. Hence all charters are heritable bonds, though granted prior to the rebellion, and all adjudications, though led upon debts contracted before that period, are ineffectual against the life escheat, unless seisin be taken thereon within year and day after the grantor's rebellion. Here, as in single escheat, no debt contracted after rebellion can hurt the donatory, nor any voluntary right granted after that period, though in security or satisfaction of prior debts.

Disclamation is that casualty whereby a vassal forfeits his whole feu to his superior, if he disowns or disclaims him, without ground, as to any part of it.

Purpresture draws likewise a forfeiture of the whole feu after it; and is incurred by the vassal's encroaching upon any part of his superior's property, or attempting, by building, enclosing, or otherwise, to make it his own. In both these feudal delinquencies the least color of excuse saves the vassal.

4. *Of rights annexed to the feu.*—Under the dominium utile, which the vassal acquires by the feudal right, is comprehended the property of whatever is considered as part of the lands, whether of houses, woods, enclosures, &c., above ground; or of coal, limestone, minerals, &c., under ground. Mills have, by the generality of our lawyers, been deemed a separate tenement, and so not carried by a charter or disposition, without either a special clause conveying mills, or the erection of the lands into a barony. Yet it is certain that, if a proprietor builds a mill on his own lands, it will be carried by his entail, or by a retour without mentioning it, although the lands are not erected into a barony. If the lands disponed be astricted or thirled to another mill, the purchaser is not allowed to build a new corn mill on his property, even though he should offer security that it shall not hurt the thirl.

Proprietors are prohibited to hold dove-cotes, unless their yearly rent, lying within two miles thereof, extend to ten chalders of victual. A purchaser of lands with a dove cote is not obliged to pull it down though he should not be qualified to build one; but, if it become ruinous, he cannot rebuild it. The right of brewing, though not expressed in the grant, is implied in the nature of property, as are also the rights of fishing, fowling, and hunting, in so far as they are not restrained by statute. Every proprietor is entitled to a grant of the mines within his own lands with the burden of delivering to the crown a tenth of what shall be brought up.

Salmon fishing is likewise a right understood to be reserved by the crown, if it be not expressly granted; but forty years' possession thereof, where the lands are either erected into a barony, or granted with the general clause of fishings, establishes the full right of the salmon fishing in the vassal. A charter of lands, within which any of the king's forests lie, does not carry the property of such forests to the vassal.

All the subjects which were by the Roman law accounted respublicæ, as rivers, highways, ports, &c., are, since the introduction of feus, held to be inter regalia, or in patrimoniâ principis; and hence encroachment upon a highway is said to infer purpresture. No person has the right of a free port without a special grant, which implies a power in the grantee to levy anchorage and shore-dues, and obligation upon him to uphold the port in good condition. In this case of things our forefathers reckoned fortalices or small places of strength originally built for the defence of the country, either against foreign invasions or civil commotions; but these now pass with the lands in every charter.

The vassal acquires right by his grant, not only to the lands specially contained in the charter, but to those that have possessed forty years as pertinent thereof. But, 1. If the lands in the grant are marked out by special limits, the vassal is circumscribed by the tenor of his own right, which excludes every subject, without these limits, from being pertinent of the lands. 2. A right, possessed under an express infeftment, is preferable, cæteris paribus, to one possessed only as pertinent. 3. Where neither party is infeft per expressum, the mutual promiscuous possession by both, of a subject as pertinent, resolves into a commonty of the subject possessed. But if one of the parties has exercised all the acts of property of which the subject was capable, while the possession of the other was confined to pasturage only, or to casting feal and divot, the first is to be deemed sole proprietor, and the other to have merely a right of servitude.

As *barony* is a nomen universitatis, and unites the several parties contained in it into one individual right, the general conveyance of a barony carries with it all the different tenements of which it consists, though they should not be

specially enumerated; and this holds, even without erection into barony, in lands that have been united under a special name. Hence likewise the possession by the vassal of the smallest part of the barony lands preserves to him the right of the whole. The vassal is entitled in consequence of his property to levy the rents of his own lands, and to recover them from his tenants by an action for rent before his own court; and from all other possessors and intromitters, by an action of mails and duties before the sheriff. He can also remove from his lands tenants who have no leases; and he can grant tacks or leases to others.

A *tack* is a contract of location, whereby the use of lands, or any other immoveable subject, is set to the lessee or tacksman for a certain yearly rent, either in money, the fruits of the ground, or services. It ought to be reduced into writing, as it is a right concerning lands: tacks, therefore, that are given verbally, to endure for a term of years, are good against neither party for more than one year. An obligation to grant a tack is as effectual against the grantor as a formal tack. A life-renter, having a temporary property in the fruits, may grant tacks to endure for the term of his own life rent.

The tacksman's right is limited to the fruits which spring up annually from the subject set, either naturally, or by his own industry; he is not therefore entitled to any of the growing timber above ground, and far less to the minerals, coal, clay, &c., under ground, the use of which consumes the substance. Tacks are, like other contracts, personal rights in their own nature; and consequently ineffectual against singular successors in the lands; but, for the encouragement of agriculture, they were, by act 1449, declared effectual to the tacksman for the full time of their endurance, into whose hands soever the lands might come.

To give a written tack the benefit of this statute, it must mention the special tack-duty payable to the proprietor, which, though small, if it be not elusory, secures the tacksman; and it must be followed by possession, which supplies the want of a seisin. If a tack does not express the term of entry, the entry will commence at the next term after its date, agreeably to the rule quod purè debetur, præsenti die debetur. If it does not mention the ish, i. e. the term at which it is to determine, it is good for one year only; but, if the intention of parties to continue it for more than one year should appear from any clause in the tack (e. g. if the tacksman should be bound to certain annual prestations), it is sustained for two years as the minimum. Tacks granted to perpetuity, or with an indefinite ish, have not the benefit of the statute. Tacks of houses within borough do not fall within this act, it being customary to let these from year to year. The conveyance of a tack which is not granted to assignees is ineffectual without the landlord's consent. A right of tack, though it be heritable, falls under the jus mariti. This implied exclusion of assignees, is, however, limited to voluntary, and does not extend to assignments; but a tack expressly excluding assignees cannot be carried even by adjudication. Life-rent tacks may be assigned, unless assignees be specially excluded. If neither the setter nor tacksman shall properly discover their intention to have the tack dissolved at the term fixed for its expiration, they are presumed to have entered into a new tack upon the same terms with the former, which is called tacit relocation, which continues till the landlord warns the tenant to remove, or the tenant renounces his tack to the landlord. This obtains also in the case of moveable tenants, who possess from year to year without written tacks. In judicial tacks, however, by the court of session, tacit relocation does not take place.

No relief is afforded in the reduction of rent unless where a total loss arises from the act of God or the king's enemies.

Tacks may be evacuated during their currency, 1. In the same manner as feu rights, by the tacksman running in arrear of his tack duty for two years together. This irritancy may be prevented by the tenant's making payment at the bar before sentence. 2. Where the tenant either runs in arrear of one year's rent, or leaves his farm uncultivated at the usual season; in which case he may be ordained to give security for the arrears, and for the rent of the five following crops, otherwise to remain as if the tack were at an end.

The landlord, when he intends to remove a tenant whose tack is expiring, or who possesses without a tack, must warn the tenant forty days preceding the term, personally or at his dwelling-house. This precept must be also executed on the ground of the lands, and thereafter read in the parish church where the lands lie, and affixed to the door. A landlord's title in a removing cannot be brought under question by a tenant; but, if he is to insist against tenants not his own, his right must be perfected.

The defender in a removing must, before offering any defence which is not instantly verified, give security to pay to the pursuer the violent profits if they should be awarded against him. These are so called because the law considers the tenant's possession after the warning as violent.

The landlord has in security of his tack-duty, over and above the tenant's personal obligation, a tacit pledge or hypothec, not only on the fruits, but on the cattle pasturing on the ground. The corn and other fruits are hypothecated for the rent of that year whereof they are the crop. The landlord is entitled to a preference over any creditor. This right, however, cannot compete with an extent issued for a debt due to the crown. A superior has also a hypothec for his feu-duty. In tacks of houses, breweries, shops, and other tenements, which have no natural fruits, the furniture, and other goods brought into the subject set, are hypothecated to the landlord for one year's rent. But the tenant may by sale impair this hypothec, as he might that of cattle in rural tenements.

5. *Of the transmission of rights.*—A vassal may transmit his feu either to universal successors, as heirs; or to singular successors, i. e. those who acquire by gift, purchase, &c. This last sort of transmission is either voluntary, by disposition; or necessary, by adjudication.

The superior is entitled, for the entry of singular successors, in all cases where such entries are not taxed, to a year's rent of the subject, deducting the feu-duty, and likewise all annual burdens and repairs. Base-rights, i. e. dispositions to be holden of the disponer, are transmissions only of the property, the superior remaining as formerly.

Public rights, i. e. dispositions to be holden of the grantor's superior, may be perfected either by confirmation or resignation. When the receiver is to complete his right in the first way, he takes seisin upon the precept, but such seisin is ineffectual without the superior's confirmation, for the disponee cannot be deemed a vassal till the superior receive him as such, or confirm the holding. Where two several public rights of the same subject are confirmed by the superior, their preference is governed by the dates of the confirmations, not of the infeftments confirmed, because it is the confirmation which completes a public right.

Resignation is that form of law by which the vassal surrenders his feu to his superior. In resignation ad remanentiam, where the feu is resigned that it may remain with the superior, he acquires the property also of the lands resigned.

Resignations in favorem are made, not with an intention that the property resigned should remain with the superior, but that it should be again given by him in favor either of the resignor himself or of a third party. The grantor even of a personal right of lands is not so divested by conveying a right to one person, but that he may effectually make it over afterwards to another; and the preference between the two does not depend on the dates of the dispositions, but on the priority of the seisins following upon them.

6. *Of redeemable rights, and first of wadsets and mortages.*—A wadset (from wad, a pledge) is a right by which lands, or other heritable subjects, are impignorated by the proprietor to his creditor in security of his debt. The debtor who grants is called the reverser, and the creditor is called the wadsetter.

Rights of reversion are generally esteemed stricti juris; yet they go to heirs unless there be some clause discovering the intention of parties that the reversion should be personal to the reverser himself. Though the right should not express it, redemption will be competent against the heir. Reversions cannot be assigned unless they are taken to assignees, but they may be adjudged.

Reversions commonly leave the reverser at liberty to redeem the lands without restriction in point of time; but sometimes if the debt be not paid against a determinate day, the lands become the irredeemable property of the wadsetter. Where the sum lent falls short of the value of the lands, the right of redemption is continued to the reverser while the irritancy is not declared. This indulgence is limited to forty years. If the reverser would redeem his lands, he must use an order of redemption against the wadsetter. In the voluntary redemption of a right of wadset holden base, a renunciation duly registered re-establishes the reverser in the full right of the lands. If the wadsetter either does not appear at the time and place appointed, or refuses the redemption money, the reverser must consign it under form of instrument in the hands of the person appointed in the right of reversion, or, if no person be named, in the hands of the clerk to the bills in the court of session, a clerk of the session, or any responsible person.

After decree of declarator is obtained, by which the lands are declared to return to the debtor, the consigned money, which comes in place of the lands, becomes the wadsetter's, who therefore can charge the consignatory upon letters of horning, to deliver it up to him.

A *proper* wadset is that whereby it is agreed that the use of the land shall go for the use of the money; so that the wadsetter takes his hazard of the rents, and enjoys them in satisfaction of his interest.

In an *improper* wadset, the reverser, if the rent should fall short of the interest, is taken bound to make up the deficiency; if it amounts to more, the wadsetter is obliged to *impute* the excrescence towards extinction of the capital.

If the wadsetter be entitled by his right to enjoy the rents without accounting, and if at the same time the reverser be subjected to the hazard of that deficiency, such contract is declared usurious. Infeftments of annual rent are also redeemable rights. A right of annual rent does not carry the property of the lands; but it creates a real burden upon the property for payment of the interest or annual rent contained in the right.

7. *Of servitudes or burdens.*—Servitude is a burden affecting lands, or other heritable subjects, whereby the proprietor is either restrained from the full use of what is his own, or is obliged to suffer another to do something upon it. Legal servitudes are established by statute or custom.

Conventional servitudes are constituted either by grant, where the will of the party burdened is expressed in writing, or by prescription where his consent is presumed from his acquiescence in the burden for forty years. Servitudes constituted by grant are not effectual in a question with the superior of the tenement burdened with the servitude, unless his consent be adhibited. But, where the servitude is acquired by prescription, the consent of the superior, whose right afforded him a good title to interrupt, is implied.

Predial servitudes are burdens imposed upon one tenement in favor of another tenement.

Predial servitudes are divided into rural servitudes, or of lands; and urban servitudes, or of houses. Servitudes may be constituted of a foot-road, horse-road, cart-road, dams and aqueducts, watering of cattle, and pasturage. Common pasturage is sometimes constituted by a general clause of pasturage in a charter or disposition, without mentioning the lands burdened, in which case the right comprehends whatever had been formerly appropriated to the lands disponed out of the grantor's own property, and likewise all pasturage due to them out of other lands. When a right of pasturage is given to

several neighbouring proprietors, on a moor or common belonging to the grantor, indefinite as to the number of cattle to be pastured, the extent of their several rights is to be apportioned according to the number that each of them can fodder in winter upon his own dominant tenement.

The servitudes of houses, where different floors or stories of the same house belong to different persons, the property of the house cannot be said to be entirely divided. The proprietor of the ground floor must uphold it for the support of the upper, and the owner of the highest story must uphold that as a cover to the lower. When the higher floor is divided among the several proprietors, each proprietor is obliged, according to this rule, to uphold that part of the roof which covers his own garret.

No proprietor can build, so as to throw the rain water from his own house, immediately upon his neighbour's ground, without a special servitude, which is called of stillicide; but if it fall within his own property, though at the smallest distance from the march, the owner of the inferior tenement must receive it. The servitudes altius non tollendi, et non officiendi luminibus vel prospectui, restrain proprietors from raising their houses beyond a certain height, or from making any building whatsoever that may hurt the light or prospect of the dominant tenement.

There are two other predial servitudes; that of fuel or feal and divot, and of thirlage. The first is a right by which the owner of the dominant tenement may turn up peats, turfs, feals or divots from the ground of the servient, and carry them off either for fuel or thatch, or the other uses of his own tenement.

Thirlage is that servitude by which lands are astricted or thirled to a particular mill; and the possessors bound to grind their grain there, for payment of certain multures and sequels as the agreed price of grinding.

Multure is the quantity of grain or meal payable to the proprietor of the mill, or to the multurer his tacksman.

The *sequels* are the small quantities given to the servants under the name of knaveship, bannock, and lock or gowpen.

Thirlage is either, 1. Of grindable corns; or, 2. Of all growing corns; or, 3. Of the invecta et illata, i.e. of all the grain brought within the thirl, though of another growth. Where the thirlage is of grindable grain, it is restricted to the corns which the tenants have occasion to grind, either for the support of their families, or for other uses; the surplus may be carried out of the thirl unmanufactured, without being liable in multure. Where it is of the grana crescentia, the whole grain growing upon the thirl is astricted with the exceptions, 1. Of seed and horse-corn; and 2. Of the farm-duties due to the landlord, if they are delivered in grain not ground. But if the rent be payable in meal, flour, or malt, the grain of which these are made must be manufactured in the dominant mill.

The thirlage of invecta et illata is seldom constituted but against the inhabitants of a borough or village, that they shall grind all the unmanufactured grain they import thither at the dominant mill.

Thirlage, in the general case, cannot be established by the prescription alone, except 1. Where one pays to a mill a certain sum, or quantity of grain yearly, in the name of multure, whether he grinds at it or not, called dry multure. 2. In mills of the king's property. This is extended to mills belonging to church lands, where thirty years' possession is deemed equivalent to a title in writing.

The possessors of the lands astricted are bound to uphold the mill, repair the dam-dykes and aqueducts, and bring home the mill-stones. The right of thirlage may be commuted into a fixed or annual payment in money, at the instance of the proprietor either of the mills or of the thirled lands.

Servitudes being restraints upon property are stricti juris. They are not therefore presumed.

Servitudes are extinguished, 1. Confusione, when the person comes to be proprietor of the dominant and servient tenements; 2. By the perishing either of the dominant or servient tenement; 3. Servitudes are lost by the dominant tenement neglecting to use the right for forty years.

Personal servitudes are those by which the property of a subject is burdened, in favor, not of a tenement, but of a person. The only personal servitude known in our law, is usufruct or life-rent; which is a right to use and enjoy a thing during life, the substance of it being preserved.

A *simple life-rent* is that which is granted by the proprietor in favor of another. And this sort requires seisin in order to affect singular successors.

A life-rent *by reservation* is that which a proprietor reserves to himself in the same writing by which he conveys the fee to another. It requires no seisin.

Life-rents *by law* are the terce and the courtesy. The terce (tertia) is a life-rent competent by law to widows, who have not accepted of special provisions in the third of the heritable subjects in which their husbands died infeft, and takes place only where the marriage has subsisted for a year and a day, or where a child has been born alive of it.

The terce is not limited to lands, but extends to teinds, and to servitudes and other burdens affecting lands; thus the widow is entitled to a life-rent of the third of the sum secured, either by rights of annual rent, or, by rights in security. In improper wadsets the terce is the third of the sum lent. In those that are proper, it is a third of the wadset lands, or in case of redemption, a third of the redemption money. Neither rights of reversion, superiority, nor patronage, fall under the terce. Where a terce is due out of lands burdened with a prior terce still subsisting, the second tercer had only right to a third of the two-thirds. But upon the death of the first widow, whereby the lands are disburdened of her terce, the smaller terce becomes enlarged. A widow who has accepted of a special provision from her husband is excluded from the terce, unless such provision shall contain a clause that

she shall have right to both. The widow has no title of possession, and so cannot receive the rents in virtue of her terce, till she be served to it; and, in order to this, she must obtain a brief out of the chancery directed to the sheriff, who calls an inquest to take proof that she was wife to the deceased, and that her husband died infeft in the subjects contained in the brief.

Courtesy is a life-rent given by law to the surviving husband of all his wife's heritage in which she died infeft, if there was a child of the marriage born alive. The child born of the marriage must be the mother's heir. If she had a child of the former marriage, the husband has no right to the courtesy while such child is alive.

The husband is considered as her temporary representative; and is liable for the burdens chargeable on the subject, and of the current interest of all her debts to the value of the yearly rent he enjoys.

All life-renters must use their right salvâ rei substantiâ. Whatever therefore is part of the fee itself, cannot be encroached on by the life-renter, e. g. woods or growing timber, even for the necessary uses of the life-rented tenement. Life-renters are bound to keep the subject life-rented in proper repair. They are also burdened with the alimony of the heir where he has not enough for maintaining himself.

8. *Of teinds or tithes.*—Teinds are that proportion of rents or goods which is due to churchmen for performing divine service, or exercising the other spiritual functions proper to their several offices. The crown, by the final abolition of episcopacy, is now in the right of the teinds and superiorities of bishop's lands.

Ministers or stipendiaries are, in the first place, to be supported from the teinds, which are of four classes, viz. 1. Such as are in the hands of the crown, never disponed or erected. 2. Such as are in the hands of laymen. 3. Such as are in lease from the crown, titulars or patrons. 4. Those heritably disponed by the titulars. The two first are called free teind, and are modified primo loco to their real extent or tack-duty paid, and then the surplus teind of the tacksman (after paying the tack-duty which was previously allocated), in consideration of which the commissioners grant him a prorogation. And lastly, the teinds heritably disponed are burdened in proportion with the patron's own lands when all the free and surplus tack-teinds are exhausted. If the titular warranted against future augmentations, he is liable solely. The patron may modify upon any one heritor, to the extent of his teinds, until citation in an action of valuation: and the minister may sue any one heritor to the like extent upon a modification of stipend. But a locality prevents this.

The commission, with consent of two-thirds of the valuation, may remove or erect churches. Horning is obtained upon decrees of the presbytery for realising the legal provisions of ministers, of manses, glebes, stipends, &c.

9. *Of rights which may be affected at the suit of creditors.*—*Diligences* are forms of law whereby a creditor endeavours to make good his payment, either by affecting the person of his debtor, by securing the subjects belonging to him from alienation, or by carrying the property of these subjects to himself. Real diligence is that which is proper to heritable or real rights; personal is that by which the person of the debtor may be secured, or his personal estate affected. Of the first sort we have two, viz. inhibition and adjudication.

Inhibition is a personal prohibition against the party inhibited to contract any debt, or do any deed, by which any part of his lands may be aliened or carried off in prejudice of the creditor inhibiting.

Adjudications and judicial sales.—Heritable rights may be carried from the debtor to the creditor, either by the diligence of adjudication, or by a judicial sale carried on before the court of session.

Such part of the debtor's lands is to be adjudged as is equivalent to the principal sum and interest of the debt, with the composition due to the superior, and expenses of infeftment; and a fifth part more, in respect the creditor is obliged to take land for his money. The adjudger lies under no obligation to account for the surplus rents. The debtor may redeem in five years; and the creditor attaining possession upon it can use no farther execution against the debtor, unless the lands be evicted from him.

Where the debtor does not produce a sufficient right to the lands, or is not willing to renounce the possession, and ratify the decree, the statute makes it lawful for the creditor to adjudge all right belonging to the debtor in the same manner, and under the same reversion of ten years, as he could by the former laws have apprised it. In this last kind, which is called general adjudication, the creditor must limit his claim to the principal sum, interest, and penalty, without demanding a fifth part more. Abbreviates are ordained to be made of all adjudications, which must be recorded within sixty days after the date of the decree.

Where the debtor's apparent heir formally renounces the succession, the creditor may obtain a decree cognitionis causâ; in which, though the heir renouncing is cited for the sake of form, no sentence condemnatory can be pronounced against him in respect of his renunciation; the only effect of it is to subject the hæreditas jacens to the creditor's diligence.

Adjudications contra hæreditatem jacentem carry not only the lands themselves that belonged to the deceased, but the rents thereof fallen due since his death. This sort of adjudication is declared redeemable within seven years by any coadjudging creditor, either of the deceased debtor, or of the heir renouncing. Adjudications in implement are declared against those who have granted deeds without procuratory of resignation or precept of seisin and refuse to divest themselves.

All adjudications led within year and day of that which has been made first effectual by seisin (where seisin is necessary), or exact diligence for obtaining seisin, are preferable pari passu. The year and day runs from the date of the adjudication, and not of the seisin or diligence for obtaining it. After the days of that period they are preferable according to their dates.

All the coadjudgers within the year are preferable pari passu, as if one adjudication had been led for all their debts.

Sequestration is a diligence that generally ushers in actions of sale. Sequestration of lands is a judicial act of the court of session, whereby the management of an estate is put into the hands of a factor or steward named by the court, who gives security and is to be accountable for the rents to all having interest. The court of session, who decree the sequestration, have the nomination of the factor, in which they are directed by the recommendation of the creditors.

The court of session, without sequestration, name a factor to preserve the rents from perishing. The estates of those engaged in trade and manufactures may be sequestered at the suit of a creditor to the extent of £100, two creditors to the extent of £150, and three or more to the extent of £200. The bankrupt's funds are placed under the management, first of a factor, then of a trustee, chosen by the creditors.

The word *bankrupt* is sometimes applied to persons whose funds are not sufficient for their debts; and sometimes, not to the debtor, but to his estate. The court of session are empowered, at the suit of any real creditor, to try the value of a bankrupt's estate, and sell it for the payment of his debts. No process of sale at the suit of a creditor, can proceed without a proof of the debtor's bankruptcy, or at least that his lands are so charged with debts that no prudent person will buy from him. The debtor or his apparent heir, and all the real creditors in possession, must be made parties to the suit; but it is sufficient if the other creditors be called by an edictal citation.

As processes of ranking and sale are designed for the common interest of all the creditors, no diligence carried on or completed during their pendency ought to give any preference in the competiton.

It is a rule in all real diligences, that where a creditor is preferable on several different subjects, he cannot use his preference arbitrarily, by favoring one creditor more than another: but must allocate his universal debt proportionally against all the subjects or parties whom it affects.

Chap. V.—Of Moveable Property.

1. *Of obligations and contracts.*—Obligations are either, 1. Merely *natural*, where one person is bound to another by the law of nature, but cannot be compelled by any civil action to the performance. Or, 2. Merely *civil*, which may be sued upon by an action, but are elided by an exception in equity, as in the case of obligations granted through force or fear, &c. 3. Proper or full obligations are those which are supported both by equity and the civil sanction.

Obligations may be also divided into 1. Pure, to which neither day nor condition is adjected. These may be exacted immediately. 2. Obligations ex die, which have a day adjected to their performance. 3. Conditional obligations, in which there is no proper debt till the condition be purified, because it is possible the condition may never exist.

Obligations when considered with regard to their cause are sometimes called obediential. Such are the obligation on parents to aliment or maintain their children. Under parents are comprehended, the mother, grandfather, and grandmother, in their proper order. This obligation on parents extends to the providing of their issue in all the necessaries of life, and giving them suitable education. It ceases when the children can earn a livelihood by their own industry; but the obligation on parents is perpetual. This obligation is on the father's death transferred to the eldest son, the heir of the family. The brothers are only entitled to alimony till the age of twenty-one, after which they are presumed able to do for themselves; but the obligation to maintain the sisters in families of rank continues till their marriage.

A *contract* is the voluntary agreement of two or more persons, whereby something is to be given or performed upon one part, for a valuable consideration, either present or future, on the other part. Consent, which is implied in agreement, is excluded, 1. By error in the essentials of the contract. 2. By such a degree of restraint, upon any of the contracting parties, as extorts the agreement.

Loan or *mutuum* is that contract which obliges a person, who has borrowed any fungible subject from another, to restore to him as much of the same kind, and of equal goodness. Whatever receives its estimation in number, weight, or measure, is a fungible; as corn, wine, current coin, &c.

Commodate is a species of loan, gratuitous on the part of the lender, where the thing lent may be used, without either its perishing or its alienation. Hence, in this sort of loan, the property continues with the lender; the only right the borrower acquires in the subject is its use, after which he must restore the individual thing that he borrowed; consequently if the subject perishes, it perishes to the lender, unless it has perished by the borrower's fault.

Depositation is a bilateral contract by which one who has the custody of a thing committed to him is obliged to restore it to the depositor. If a reward is bargained for by the depositary for his care, it resolves into the contract of location. As this contract is gratuitous, the depositary is only answerable for the consequences of gross neglect; but, after the deposit is redemanded, he is accountable even for casual misfortunes. He is entitled to a full indemnification for the losses he has sustained by the contract, and to the recovery of all sums expended by him on the subject.

An obligation arises without formal paction, barely by a traveller's entering into an inn, ship, or stable, and there depositing his goods, or putting up his horses, whereby the inkeeper, &c., is accountable not only for his own acts and those of his servants, but of the other guests or passengers; and indeed in every case, unless where the goods have been lost by pirates or house-breakers. Carriers fall within the intendment of this law; and practice has extended it to vintners within borough. The extent of the damage sustained by the party may be proved by his oath in litem.

Sequestration, whether voluntarily consented

to by the parties or authorised by the judge, is a kind of deposit. Consignation of money is also a deposit. The risk of the consigned money lies on the consigner, where he ought to have made payment, and not consignation, or has consigned only a part, or has chosen for consignatory a person neither named by the parties nor of good credit.

Pledge is a contract by which a debtor puts into the hands of his creditor a special moveable subject in security of the debt. Tradesmen and ship-carpenters have a hypothec, on the house or ship repaired, for the materials and other charges of reparation, but not for the expense of building a new ship; but no hypothec exists for the expense of repairs done in a home port. Owners of ships have a hypothec on the cargo for the freight, heritors on the fruits of the ground, and landlords on the invecta et illata for their rents. Writers also, and agents, have a right of hypothec, or more properly of retention, in their constituents' writings for their claim of pains and disbursements. A creditor cannot, for his own payment, sell the subject impignorated without applying to the judge-ordinary for a warrant to put it up to public sale, and to this application the debtor ought to be made a party.

2. *Of obligations by word or writing.*—Agreement implies the intervention of two different parties who come under mutual obligations to one another. Where nothing is to be given or performed but on one part, it is properly called a promise; which, as it is gratuitous, does not require the acceptance of him to whom the promise is made. An offer, which must be distinguished from a promise, implies something to be done by the other party; and, consequently, is not binding on the offerer till it be accepted, with its limitations or conditions, by him to whom the offer is made; after which it becomes a proper agreement.

Writing must necessarily intervene in all obligations and bargains concerning heritable subjects, though they should be only temporary, as tacks, which, when they are verbal, last but for one year. In these no verbal agreement is binding, though it should be referred to the oath of the party. If, upon a verbal bargain of lands, part of the price shall be paid, the payment creates a valid obligation, and gives a beginning to the contract of sale. An agreement, whereby a real right is passed from, or restricted, called pactum liberatorium, may be perfected verbally. Writing is also essential to bargains made under condition that they shall be reduced into writing. In the same manner verbal, or nuncupative testaments are rejected; but verbal legacies are sustained where they do not exceed £100 Scots. Anciently, when writing was little used, deeds were executed by the party appending his seal to them in presence of witnesses. The subscription, also, of the grantor was afterwards required; and, if he could not write, that of a notary. In subscription of the parties by initials, proof must be given that the grantor used to subscribe in that way and had subscribed the deed in question.

Writings carrying any heritable right, and other deeds of importance, must be subscribed by the principal parties, if they can subscribe, otherwise, by two notaries before four witnesses specially designed. The designation of the witnesses is now necessary where the parties themselves subscribe. Sums exceeding £100 Scots are held obligations of importance. In a divisible obligation, e. g. for a sum of money, though exceeding £100, the subscription of one notary is sufficient if the creditor restricts his claim to £100. But in an obligation indivisible, e. g. for the performance of a fact, if it be not subscribed in terms of the statute it is void. When notaries thus attest a deed, the attestation, or docquet, must specially express that the grantor gave them a mandate to sign; nor is it sufficient that this be mentioned in the body of the writing.

In every deed the name of him who writes it, with his dwelling-place, or other mark of distinction, must be inserted. The witnesses must both subscribe as witnesses, and their names and designations be inserted in the body of the deed; and all subscribing witnesses must know the grantor, and either see him subscribe or hear him acknowledge his subscription, otherwise they are declared punishable as accessary to forgery.

Instruments of seisin are valid if subscribed by one notary, before a reasonable number of witnesses, which is extended by practice to instruments of resignation. Two witnesses are deemed a reasonable number to every deed that can be executed by one notary. Another requisite is that deeds must be executed on stamped paper or parchment.

Bonds were frequently executed without filling up the creditor's name, and they passed like notes payable to the bearer; but now, all writings taken in blank in the creditor's name are declared null, with the exception of indorsations of bills of exchange.

Certain privileged writings do not require the ordinary solemnities. 1. Holograph deeds (written by the grantor himself) are effectual without witnesses. 2. Testaments, if executed where men of skill and business cannot be had, are valid, though they should not be quite formal. Clergymen were frequently notaries before the Reformation; and, though they were afterwards prohibited to act as notaries, the case of testaments is excepted; so that these are supported by the attestation of one minister with two witnesses. 3. Discharges to tenants are sustained without witnesses; 4. Missive letters, commissions, and fitted accounts in the course of trade, and bills of exchange, though they are not holograph, are sustained without the ordinary solemnities.

A bill of exchange is an obligation whereby the drawer desires him to whom it is directed to pay a certain sum, at the day and place therein mentioned, to a third party. Bills drawn blank, in the creditor's name, fall under the statutory nullity; for, though indorsations of bills are excepted from it, bills themselves are not. Not only the person drawn upon must sign his acceptance, but the drawer must sign his draught, before any obligation can be formed against the acceptor. Yet it is sufficient that the drawer signs before the bill be produced in judgment, though it should be after the death both of the

creditor and acceptor. A creditor in a bill may transmit it to another by indorsation, though the bill should not bear to his order.

Bills, when drawn payable at any considerable distance of time after date, are denied the privileges of bills; for bills are intended for currency, and not to lie as a security in the creditor's hands. Bills are not valid which appear ex facie to be donations.

Promissory notes are placed upon the same footing as bills, and declared to have the same privileges. Both prescribe in six years after the term of payment. Bank notes and post bills are excepted from this prescription; nor does it run during the years of the creditor's minority. Inland bills and promissory notes must be protested within the days of grace to secure recourse; and the dishonor notified within fourteen days after the protest.

3. *Of contracts by consent and of accessory obligations.*—Contracts consensual, i. e. which might be perfected by sole consent, without the intervention either of things or of writing, are, sale, permutation, location, society, and mandate. Where the subject of any of these contracts is heritable, writing is necessary.

Sale is a contract by which one becomes obliged to give something to another in consideration of a certain price in current money to be paid for it. Things consisting merely in hope may be the subject of this contract, as the draught of a net. Commodities, where their importation or use is absolutely prohibited, cannot be the subject of sale; and even in contraband goods, no action lies against the vender for not delivery if the buyer knew the goods were contraband. But where the foreign merchant was not a native of Scotland, no ways amenable to its laws, he has been allowed action for the price of such goods unless it were shown that he had in fact been particeps criminis by aiding the smuggling.

Though this contract may be perfected before delivery of the subject, the property remains till then with the vender: yet, till delivery, the hazard of its deterioration falls on the purchaser, because he has all the profits arising from it after the sale. On the other hand the subject itself perishes for the vender, 1. If it should perish through his fault or after his undue delay to deliver it; 2. If a subject is sold as a fungible, and not as an individual, or corpus, e. g. a quantity of farm wheat, sold without distinguishing the parcel to be delivered from the rest of the farm; 3. The periculum lies on the vender till delivery, if he be obliged by special article in the contract to deliver the subject at a certain place.

Location is that contract where a hire is stipulated for the use of things or for the service of persons. In the location of things the lessor is obliged to deliver the subject fitted for the use it was let for; and the lessee must preserve it carefully, put it to no other use, and, after that is over, restore it. Where a workman, or artificer, lets his labor, and if the work is either not performed according to contract, or if it be insufficient even from mere unskilfulness, he is liable to his employer in damages. A servant hired for a certain term is entitled to his full wages, though from sickness, or other accident, he should be disabled for a part of his time; but, if he die before the term, his wages are only due for the term he actually served. If a master dies, or without good reason turns off, before the term, a servant who eats in his house, the servant is entitled to his full wages and to his maintenance till that term: and, on the other part, a servant who without grounds deserts his service, forfeits his wages and maintenance, and is liable to his master in damages.

Society or *copartnership* is a contract whereby the several partners agree concerning the communication of loss and gain arising from the subject of the contract. A copartnership may be so constituted that one of the partners shall be entitled to a certain share of the profits without being subject to loss. No partner can, without a special power, transfer any part of his share to another. All the partners are bound in solidum by the obligation of any one of them, if he subscribe by the firm, or name of the company, unless it be a deed that falls not under the common course of administration. The company effects are the common property of the society, subjected to its debts, so that no partner can claim a division thereof till these are paid, and consequently no creditor of a partner can by diligence carry to himself the property of any part of the common stock in prejudice of a company creditor; but he may, by arrestment, secure his debtor's share in the company's hands, to be made forthcoming to him at the close of the copartnership, in so far as it is not exhausted by the company's debts.

Society is dissolved not only by the renunciation but by the death of any of them if not otherwise covenanted. Not only natural but civil death, e. g. arising from a sentence inflicting capital punishment, makes one incapable to perform the duties of a partner, and consequently dissolves the society. In both cases, of death and renunciation, the remaining partners may continue the copartnership, either expressly, by entering into a new contract, or tacitly, by carrying on their trade as formerly.

A *joint trade* is not a co-partnership, but a momentary contract, where two or more persons agree to contribute a sum to be employed in a particular course of trade, the produce whereof is to be divided among adventurers, according to their several shares, after the voyage is finished. If, in joint trade, that partner who is intrusted with the money for purchasing the goods should, in place of paying them in cash, buy them upon credit, the furnisher, who followed his faith alone in the sale, has no recourse against the other adventurers; he can only recover from them what of the buyer's share is yet in their hands. Where any one of the adventurers in a joint trade becomes bankrupt, the others are preferable to his creditors, upon the common stock, as long as it continues undivided, for their relief of all the engagements entered into by them on account of the adventure.

Mandate is a contract by which one employs another to manage any business for him. It may be constituted tacitly, by one's suffering another to act in a certain branch of his affairs, for a tract of time together, without challenge.

Where no special rules are prescribed, the mandatory, if he acts prudently, is secure, whatever the success may be. Mandates may be general, containing a power of administering the mandant's whole affairs; but no mandate implies a power of disposing gratuitously of the constituent's property, nor even of selling his heritage for an adequate price; but a general mandatory may sell such of the moveables as must otherwise perish. No mandatory can, without special powers, transact doubtful claims belonging to his constituent, or refer them to arbiters.

Mandates expire, 1. By the revocation of the employer, though only tacit; 2. By the renunciation of the mandatory, even after he has executed part of his commission, if his office be gratuitous; 3. By the death either of the mandant or mandatory. But, if the matters are not entire, the mandate continues in force, notwithstanding such revocation, renunciation, or death.

Masters of ships are empowered to contract in name of their executors, or employers, for repairs, ship-provisions, and whatever else may be necessary for the ship or crew. Whoever has the actual charge of the ship is deemed the master. The furnisher or lender must prove that the ship needed repairs, provisions, &c.; but he is under no necessity to prove the application of the money or materials to the ship's use. If there are several exercitors they are liable singuli in solidum. In the same manner, the undertaker of any branch of trade, manufacture, or other land negotiation, is bound by the contracts of the institors whom he sets over it, in so far as relates to the subject of the præpositura.

Contracts and obligations receive strength by the contractor or his heirs doing any act thereafter which imports an approbation of them. This is called homologation. It cannot be inferred, 1. By the act of a person who was not in the knowledge of the original deed; 2. Where the act or deed, which is pleaded as such, can be ascribed to any other cause.

Quasi contracts are formed without explicit consent by one of the parties doing something which by its nature either obliges him to the other party, or the other party to him.

Indebiti solutio, or the payment to one of what is not due to him, if made through any mistake either of fact or even of law, founds him who made the payment in an action against the receiver for repayment; condictio indebiti. This action does not lie, 1. If the sum paid was due ex æquitate, or by a natural obligation. 2. If he who made the payment knew that nothing was due.

Where two or more persons become common proprietors of the same subject by legacy, &c., an obligation is thereby created among the proprietors to communicate the profit and loss arising from the subject, while it remains common; and the subject may be divided at the suit of any having interest.

The throwing of goods overboard, for lightening a ship in a storm, creates an obligation whereby the owners of the ship and goods saved are obliged to contribute for the relief of those whose goods are thrown overboard. In this contribution, the ship's provisions suffer no estimation. A master, who cut his mast, or parted with his anchor, to save the ship, is entitled to this relief; but if he has lost them by the storm, the loss falls only on the ship and freight. If the ejection does not save the ship, the goods preserved from shipwreck are not liable in contribution. Ejection may be lawfully made, if the master and a third part of the mariners judge that measure necessary, though the owner of the goods should oppose it; and the goods ejected are to be valued at the price that the goods of the same sort which are saved shall be afterwards sold for.

There are certain obligations which cannot subsist by themselves, but are *accessions* to, or make a part of, other obligations. Of this sort are fidejussion, and the obligation to pay interest. Cautionary or fidejussion is that obligation by which one becomes engaged as security for another, that he shall either pay a sum or perform a deed.

A right of relief is competent de jure to the cautioner who pays against his co-cautioner, unless where the cautioner appears to have renounced it. Cautionary is also judicial, as in a suspension. It is sufficient to loose the cautioner, that, when he became bound, the suspender had good reason to suspend. Obligations for sums of money are frequently accompanied with an obligation for the annual rent or interest thereof.

Interest is the profit due by the debtor of a sum of money due to the creditor, for the use of it, which is fixed at five per cent. Bills of exchange and inland bills, though they should not be protested, carry interest from their date in case of non-acceptance; or from the day of their falling due in case of acceptance and non-payment.

Donation, so long as the subject is not delivered to the donee, may be justly ranked among obligations; and it is that obligation which arises from the mere good will and liberality of the granter. Donations made in contemplation of death or mortis causâ, are of the nature of legacies, and like them revocable; consequently, not being effectual in the grantor's life, they cannot compete with any of his creditors; not even with those whose debts were contracted after the donation. They are understood to be given from a personal regard of the donee, and therefore fall by his predecease. No deed, after delivery, is to be presumed a donatio mortis causâ; for revocation is excluded by delivery.

Deeds are not presumed, in dubio, to be donations. Hence a deed by a debtor to his creditor, if donation be not expressed, is presumed to be granted in security or satisfaction of the debt; but bonds of provision to children are, from the presumption of paternal affection, construed to be intended as an additional patrimony; yet a tocher given to a daughter in her marriage contract is presumed to be in satisfaction of all former bonds and debts, because the marriage contracts usually contain the whole provisions in favor of the bride.

4. *Of the dissolution of obligations.*—Obligation may be dissolved by performance or implement, consent, compensation, novation, or confusion.

Payment made by the debtor upon a mistake in fact, to one whom he believed, upon probable grounds, to have the right of receiving payment, extinguishes the obligation. But payment made to one, to whom the law denies the power of receiving it, has not this effect.

Obligations are extinguishable by the consent of the creditor, who without full implement, or even any implement, may renounce the right constituted in his own favor.

A *discharge*, though it should be general, of all that the grantor can demand, extends not to debts of an uncommon kind, which are not presumed to have been under the grantor's eye. Where the same person is both creditor and debtor to another, the mutual obligations, if they are for equal sums, are extinguished by compensation; if for unequal, still the less obligation is extinguished, and the greater diminished, as far as the concourse of debt and credit goes.

The right of *retention*, which bears a near resemblance to compensation, is chiefly competent where the mutual debts, not being liquid, cannot be the ground of compensation; and it is sometimes admitted ex æquitate, in liquid debts where the compensation is excluded by statute.

Obligations are dissolved by novation, whereby one obligation is changed into another without changing either the debtor or creditor. The first obligation being thereby extinguished, the cautioners in it are loosed, and all its consequences discharged, so that the debtor remains bound only by the last. Obligations are extinguished confusione, where the debit and credit meet in the same person either by succession or singular title.

5. *Of assignations or assignments.*—Heritable rights, when they are clothed with infeftment, are transmitted by disposition, which is a writing containing procuratory of resignation and precept of seisin; but those which either require no seisin, or on which seisin has not actually followed, are transmissible by simple assignation. He who grants the assignation is called the cedent; and he who receives it, the assignee or cessionary. If the assignee conveys his right to a third person, the deed of conveyance is called a translation; and, if he assigns it back to the cedent, a retrocession.

Assignations must not only be delivered to the assignee, but intimated by him to the debtor, Intimations are considered as so necessary for completing the conveyance, that, in a competition between two assignations, the last, if first intimated, is preferred. Though, regularly, intimation to the debtor is made by an instrument taken in the hands of a notary, by the assignee or his procurator, yet the law admits equipollencies where the notice of the assignment given to the debtor is equally strong.

6. *Of arrestments and poindings, or attachment of property.*—The diligences, whereby a creditor may affect his debtor's moveable subjects, are arrestment and poinding. Arrestment is the order of a judge, by which he who is debtor in a moveable obligation to the arrester's debtor, is prohibited to make payment or delivery till the debt to the arrester be paid or secured. The arrester's debtor is usually called the common debtor, because, where there are two or more competing creditors, he is debtor to all of them. The person in whose hands the diligence is used is styled the arrestee.

Arrestment may be laid on by the authority either of the supreme court, or of an inferior judge.

All debts in which one is personally bound, though they should be heritably secured, are grounds upon which the creditor may arrest the moveable estate belonging to his debtor. Arrestment may proceed on a debt, the term of payment whereof is not yet come, in case the debtor be vergens ad inopiam.

Moveable debts are the proper subject of arrestment; under which are comprehended conditional debts, and even depending claims. Certain moveable debts are not arrestable: 1. Debts due by bill, which pass from hand to hand, as bags of money. 2. Future debts. Claims, depending on the issue of a suit, are not considered as future debts; for the sentence, when pronounced, has a retrospect to the period at which the claim was first founded. The like doctrine holds in conditional debts. 3. Alimentary debts; but the past interest due upon such debts may be arrested by the person who has furnished the alimony. The surplus fee, over and above what is necessary for a servant's personal uses, may be arrested. If the arrestee shall make payment of the sum, or deliver the goods arrested, to the common debtor, he is not only liable criminally for breach of arrestment, but he must pay the debt again to the arrester.

Arrestment is not merely prohibitory, as inhibitions are, but is a step of diligence, which founds the user in a subsequent action, whereby the property of the subject arrested may be adjudged to him.

Where arrestment proceeds on a depending action, it may be loosed by the common debtor's giving security to the arrester for his debt in the event it shall be found due. Arrestment founded on decrees, or on registered obligations, cannot be loosed but upon payment or consignation; except, 1. Where the term of payment of the debt is not yet come, or the condition has not yet existed. 2. Where the arrestment has proceeded on a registered contract, in which the debts or mutual obligations are not liquid. 3. Where the decree is suspended, or turned into a libel.

Arrestment is only an inchoated or begun diligence; to perfect it there must be an action brought by the arrester against the arrestee, to make the debt or subject arrested forthcoming.

In all competitions regard is had to the dates, not of the grounds of debt, but of the diligences proceeding upon them. In the competition of arrestments, the preference is governed by their dates, according to the priority even of hours, where it appears with any certainty which is the first. All arrestments which shall have been used for attaching any effects of a bankrupt, within sixty days prior to the bankruptcy, or within four calendar months thereafter, shall be ranked, pari passu, as if they had been of the same date.

Poinding is that diligence affecting moveable subjects, by which their property is carried di-

rectly to the creditor. No poinding can proceed, till a charge be given to the debtor to pay or perform, and the days thereof be expired, except poindings against vassals for their feu duties, and poindings against tenants for rent, proceeding upon the landlord's own decree, in which the ancient custom of poinding without a previous charge continues. A debtor's goods may be poinded by one creditor, though they have been arrested before by another; for arrestment, being but an imperfect diligence, leaves the right of the subject still in the debtor, and so cannot hinder any creditor from using a perfect diligence, which has the effect of carrying the property directly to himself. No cattle pertaining to the plough, nor instrument of tillage, can be poinded in the time of laboring or tilling the ground, unless where the debtor has nc other goods.

Ministers may poind for their stipends, upon one appraisement, on the ground of the lands; and landlords were always in use to poind so for their rents.

No poinding of the moveables belonging to a bankrupt, within forty days from his bankruptcy, or within four calendar months thereafter, shall give a preference to such poinder; but every other creditor of the bankrupt, having liquidated grounds of debt or decrees for payment, and summoning such poinder before the four months are elapsed, shall be entitled to a proportional share of the goods so poinded, effeiring to his debt.

7. *Of title by prescription.*—Positive prescription is generally defined, the acquisition of property by the possessor's continuing his possession for the time which law has declared necessary for that purpose: negative is the loss or omission of a right, by neglecting to follow it forth, or use it, during the whole time limited by law.

Whoever shall have possessed his lands, annual rents, or other heritages, peaceably, in virtue of infeftments, for forty years continually after their dates, shall not thereafter be disquieted in his right by any person pretending a better title. Under heritages are comprehended every right that is fundo annexum, and capable of continual possession.

8. *Of limitation of claims.*—Actions of spuilzie, ejection, and others of that nature, must be pursued within three years after the commission of the fact on which the action is founded. Under the general words are comprehended all actions, where the pursuer is admitted to prove his libel by his own oath in litem.

Servants' fees, house rents, men's ordinaries (i. e. money due for board), and merchants' accounts, fall under the triennial prescription. There is also a general clause subjoined to this statute, of other the like debts, which includes alimentary debts, wages due to workmen, and accounts due to writers, agents, or procurators.

In accounts, prescription does not begin till the last article; for a single article cannot be called an account. Actions of removing must also be pursued within three years after the warning. Reductions of erroneous retours prescribe, if not pursued within twenty years. Ministers' stipends and multures prescribe in five years after they are due; and arrears of rent five years after the tenants' removing from the lands.

Bargains concerning moveables, or sums of money which are proveable by witnesses, prescribe in five years after the bargain. Under these are included sales, locations, and all other consensual contracts, to the constitution of which writing is not necessary. But all the abovementioned debts may, after the five years, be proved, either by the oath or the writing of the debtor. A quinquennial prescription is established in arrestments, whether on decrees or depending actions: the first prescribe in five years after using the arrestment, and the last in five years after sentence is pronounced on the depending action.

No person binding for or with another, either as cautioner or co-principal, in a bond or contract for a sum of money, continues bound after seven years from the date of the bond, provided he has either a cause of relief in the bond, or a separate bond of relief, intimated to the creditor at his receiving the bond. But all diligence used within the seven years against the cautioner shall stand good. The statute excludes all cautionaries for the faithful discharge of offices; these not being obligations in a bond or contract for sums of money: and practice has denied the benefit of it to all judicial cautioners, as cautioners in a suspension. Actions of count and reckoning, competent either to minors against their tutors or curators, or vice versâ, prescribe in ten years after the majority or death of the minor.

Holograph bonds, missive letters, and books of accounts, not attested by witnesses, prescribe in twenty years, unless the creditor shall thereafter prove the verity of the subscription by the debtor's oath. The duration of bills is limited to six years.

Prescription does not run contra non valentem agere, against one who is barred, by some legal incapacity, from pursuing; for, in such case, neither negligence nor dereliction can be imputed to him. Prescription may be interrupted by any deed, whereby the proprietor or creditor uses his right or ground of debt.

Diligence used upon a debt, against any one of two or more co-obligants, preserves the debt itself, and so interrupts prescription against all of them; except in the special case of cautioners, who are not affected by any diligence used against the principal debtor.

Chap. VI.—Of the Title to Property by Succession or Descent.

1. *Of succession in heritable rights:—and, first, of heirs general.*—Singular successors are those who succeed to a person yet alive, in a special subject by singular titles; but succession, in its proper sense, is a method of transmitting rights from the dead to the living. Heritable rights descend by succession to the heir, properly so called; moveable rights to the executors, who are sometimes said to be heirs in moveables. Succession is either by special destination, which descends to those named by the proprietor him-

self; or legal, which devolves upon the persons whom the law marks out for successors, from a presumption that the proprietor would have named them had he made a destination. The first is in all cases preferred to the other, as presumption must yield to truth.

In the succession of heritage, the heirs at law are otherwise called heirs general, heirs whatsoever, or heirs of line; and they succeed, by the right of blood, in the following order:—First, descendants; among these, sons are preferred to daughters, and the eldest son to all the younger. Where there are daughters only, they succeed equally, and are called heirs proportioners. Failing immediate descendants, grand-children succeed; and, in default of them, great-grand-children, and so on ad infinitum: preferring, as in the former case, males to females, and the eldest male to the younger. Next, after descendants, collaterals succeed; among whom the brothers german of the deceased have the first place. The immediate younger brother of the deceased excludes the rest, according to the rule that heritage descends. If there are no brothers german, the sisters german succeed equally; then brothers consanguinean, in the same order as brothers german; and, failing them, sisters consanguinean equally. Next, the father succeeds. After him, his brothers and sisters; then the grandfather; failing him, his brothers and sisters; and so upwards, as far back as propinquity can be proved. Though children succeed to their mother, a mother cannot to her child; nor is there any succession, through the mother of the deceased.

In heritage there is a right of representation, by which one succeeds, not from any title in himself but in the place, and as representing some of his deceased ascendants. In the succession of heirs portioners, indivisible rights, e. g. titles of dignity, fall to the eldest sister. A single right of superiority goes also to the eldest. The principal seat of the family falls to the eldest with the garden and orchard belonging to it, without recompence to the youngest sisters; but all other houses are divided amongst them, together with the lands on which they are built as parts and pertinents of these lands.

(2.) *Heirs by entail.*—The heir of line is entitled to the succession, not only of subjects properly heritable, but to that sort of moveables called heirship, which is the best of certain kinds. This doctrine has been probably introduced that the heir might not have a house and estate to succeed to, quite dismantled by the executor.

The appellation of *tailzie*, or *entail*, is chiefly used in the case of a land estate, which is settled on a long series of heirs substituted one after another. The person first called in the tailzie is the institute; the rest the heirs tailzie, or substitutes.

Tailzies, when considered in relation to their several degrees of force, are either, 1. Simple destinations; 2. Tailzies with prohibitory clauses; 3. Tailzies with prohibitory, resolutive, and irritant clauses. That is a simple destination where the persons called to the succession are substituted one after another, without any restraint laid on the exercise of their property. The heirs therefore, succeeding to such estate, are absolute fiars, and consequently may alter the destination at pleasure.

In tailzies with clauses prohibitory, e. g. declaring that it shall not be lawful to the heirs to contract debts or alien the lands in prejudice of the succession, none of the heirs can alien gratuitously. But the members of entail may contract debts which will be effectual to the creditors, or may dispose of the estate for onerous causes. In both these sorts, the maker himself may alter the tailzie, except, 1. Where it has been granted for an onerous cause, as in mutual tailzies; or 2. Where the maker is expressly disabled, as well as the institute or the heirs. Where a tailzie is guarded with irritant and resolutive clauses, the estate entailed cannot be carried off by the debt or deed of any of the heirs succeeding thereto, in prejudice of the substitutes. The entail must be registered in a special register established for that purpose; and the irritant and resolutive clauses must be inserted, not only in the procuratories, precepts, and seisins, by which the tailzies are first constituted, but in all the after conveyances thereof; otherwise they can have no force against singular successors. But a tailzie, even without these requisites, is effectual against the heir of the grantor or against the institute who accepts of it. An heir of entail has full power over the entailed estate, except in so far as he is expressly fettered. Heirs of entail are entitled (notwithstanding any restrictions in the deed of entail) to improve their estates by granting leases, building farm-houses, draining, enclosing, and excambing, under certain limitations, and to claim repayment of three-fourths of the expense from the next heir of entail. An heir, who counteracts the directors of the tailzie, by alienating any part of the estate, charging it with debt, &c., is said to contravene. It is not the simple contracting of debt that infers contravention; the lands entailed must be actually adjudged upon the debt contracted.

When the heirs of the last person specially called in a tailzie come to succeed, the irritancies have no longer any person in favor of whom they can operate; and consequently the fee, which was before tailzied, becomes simple and unlimited in the person of such heirs. The king may purchase lands within Scotland notwithstanding the strictest entail; and, where the lands are in the hands of minors or fatuous persons, his majesty may purchase them from the curators or guardians. And heirs of entail may sell to their vassals the superiorities belonging to the entailed estate; but, in all these cases, the price is to be settled in the same manner that the lands or superiorities sold were settled before the sale.

Rights, not only of land estates, but of bonds, are sometimes granted to two or more persons in conjunct fee. Where a right is so granted to two strangers, without any special clause adjected to it, each of them has an equal interest in the fee, and the part of the deceased descends to his own heir. If the right be taken to the two jointly, and the longest liver and their heirs, the several shares of the conjunct fiars are affectable by their creditors during their lives: but, on the death of any of them, the survivor has the fee of the whole in so far as the share of the predeceased remains free after payment of his debts.

Where a right is taken to a husband and wife, in conjunct fee and life-rent, the husband is the only fiar; the wife's right resolves into a life rent, unless it be presumable that the fee was intended to be in the wife. Where a right of moveables is taken to husband and wife, the heirs of both succeed equally.

(3.) *Heirs by provision.*—Heirs of provision are those who succeed to any subject, in virtue of a provision in the investiture or other deed of settlement. Though all provisions to children by marriage contract, conceived in the ordinary form, being merely rights of succession, are postponed to every onerous debt of the grantor, even to those contracted posterior to the provisions; yet where a father executes a bond of provision to a child actually existing, whether such child be the heir of a marriage or not, a proper debt is thereby created, which, though it be without doubt gratuitous, is not only effectual against the father himself and his heirs, but is not reducible at the instance even of his prior onerous creditors, if he was solvent at the time of granting it.

In marriage contracts, the conquest, or certain part of it, is often provided to the issue; by which is meant whatever real addition shall be made to the father's estate during the marriage by purchase or donation. Conquest therefore must be free, i. e. what remains after payment of the father's debts. Where heritable rights are provided to the heirs of a marriage, they fall to the eldest son, for he is the heir at law in heritage. Where a sum of money is so provided, the word heir is applied to the subject of the provision, and so marks out the executor, who is the heir in moveables. When an heritable right is provided to the bairns (or issue) of a marriage, it is divided equally among the children, if no division be made by the father; for such destination cuts off the exclusive right to the legal heir. No provision granted to bairns gives a special right of credit to any one child, as long as the father lives: the right is granted familiæ; so that the whole must go to one or other of them: but the father has a power inherent in him to divide it among them, in such proportions as he thinks best, yet so as none of them may be entirely excluded, except in extraordinary cases. A clause of return is that by which a sum in a bond or other right is, in a certain event, limited to return to the grantor himself or his heirs.

(4.) *Rights and liabilities of heirs.*—An heir is, in the judgment of law, eadem persona cum defuncto, and so represents the deceased universally, not only in his rights, but in his debts: in the first view he is said to be heir active; in the second passive.

Before an heir can have an active title to his ancestor's rights, he must be entered by service and retour. He who is entitled to enter heir is, before his actual entry, called apparent heir. The bare right of apparency carries certain privileges with it. An apparent heir may defend his ancestor's titles against any third party who brings them under challenge. Tenants may safely pay them their rents; and, after they have once acknowledged by payment, he may compel them to continue it; and the rents not uplifted by the apparent heir belong to his executors upon his death.

As an heir is by his entry subjected universally to his ancestor's debts, apparent heirs have therefore a year (annus deliberandi) allowed to them from the ancestor's decease to deliberate whether they will enter or not; till the expiration of which, though they may be charged by creditors to enter, they cannot be sued in any process founded upon such charge.

The service of heirs is either general or special. A *general* service vests the heir in the right of all heritable subjects, which either do not require seisin, or which have not been perfected by the seisin in the person of the ancestor. A *special* service, followed by seisin, vests the heir in the right of the special subjects in which the ancestor died infeft.

If an heir within the annus deliberandi exhibit upon oath a full inventory to the clerk of the shire, his subsequent entry will subject him no farther than to the value of such inventory. Creditors are not obliged to acquiesce in the value of the estate given up by the heir; but may bring the estate to a public sale in order to discover its true value.

An heir by immixing with his ancestor's estate without entry, subjects himself to his debts as if he had entered; or incurs a passive title. This passive title is excluded, if the heir's intromission be by order of law; or if it be founded on singular titles, and not as heir to the deceased. But an apparent heir's purchasing any right to his ancestor's estate, otherwise than at public *roup* (auction), or his possessing it in virtue of rights settled in the person of any near relation of the ancestor, to whom he himself may succeed as heir, otherwise than upon purchase by public sale, is deemed behaviour as heir. Behaviour as heir is also excluded where the intromission is small, unless an intention to defraud the ancestor's creditors be presumable from the circumstances attending it.

Another passive title in heritage may be incurred by the apparent heir's accepting a gratuitous right from the ancestor to any part of the estate to which he himself might have succeeded as heir. If the right be onerous there is no passive title; if the consideration paid first does not amount to its full value, the creditors of the deceased may reduce it in so far as it is gratuitous, but still it infers no passive title. The heir incurring this passive title is no farther liable, than if he had, at the time of his acceptance, entered heir to the grantor, and so subjected himself to the debts that were then chargeable against him.

Neither of these passive titles takes place, unless the subject intermeddled with, or disponed, be such as the intromitter or receiver would succeed to as heir. In this also, these two passive titles agree, that the intromission in both must be after the death of the ancestor; for there can be no termini habiles of a passive title while the ancestor is alive. An apparent heir, who is cited by the ancestor's creditor in a process for payment, if he offers any peremptory defence against the debt, incurs a passive title. Every

person passing over his immediate ancestor, who had been three years in possession, and serving heir to one more remote, shall be liable for the debts and deeds of the person interjected, to the value of the estate to which he is served.

(5.) *Death-bed deeds.*—Deeds affecting heritage, if they be granted by a person on death-bed (i. e. after contracting that sickness which ends in death), to the danger of the heir, are ineffectual, except where the debts of the grantor have laid him under a necessity to alien his lands.

The allegation of death-bed is also excluded by the grantee having lived sixty days after signing the deed. The legal evidence of convalescence is the grantor's having been after the date of the deed at kirk or market unsupported, when the people are met together for any public meeting civil or ecclesiastical or at the time of public market. Where a deed is consented to or ratified by the immediate heir, it is secured against all challenge, even from the remoter.

In a competition between the creditors of the deceased and of the heir the creditors of the deceased are preferred. But this preference is limited to the case where the creditors of the deceased have used due diligence within three years from his death; and the heir's creditors may, after that period, affect it for their own payment. All dispositions by an heir of the ancestor's estate, within a year after his death, are null, in so far as they are hurtful to the creditors of the ancestor.

2. *Of succession in moveables.*—In the succession of moveable rights, it is a universal rule, that the next in degree to the deceased, or next of kin, succeeds to the whole; and, if there are two or more equally near, all of them succeed by equal parts. Neither does the right of representation obtain in the succession of moveables, except in the single case of competition between the full blood and the half blood. Where the estate of a person deceased consists partly of heritage and partly of moveables, if there are others as near in degree to the deceased as himself, but where the heir, in such case finds it his interest to renounce his exclusive claim to the heritage, and betake himself to his right as one of the next of kin, he may collate or communicate the heritage with the others, who in their turn must collate the moveables with him, so that the whole is thrown into one mass and divided equally among all of them.

One may settle his moveable estate upon whom he pleases, excluding the legal successor by a testament; which is a written declaration of what a person wills to be done with his moveable estate after his death. If the executor nominated be a stranger, he is merely a trustee, accountable to the next of kin; but he may retain a third of the dead's part for his trouble in executing the testament; in payment of which, legacies, if any be left to him, must be imputed. The heir, if he be named executor, has right to the third as a stranger; but if one be named who has an interest in the legal succession, he has no allowance unless such interest be less than a third. Nuncupative or verbal testaments are not by the law of Scotland effectual for supporting the nomination of executor, let the subject of the succession be ever so small: but verbal legacies, not exceeding £100 Scots, are sustained; and, even where they are granted for more, they are ineffectual only as to the excess.

A *legacy* is a donation by the deceased to be paid by the executor to the legatee. It may be granted either in the testament or in a separate writing. Legacies are not due till the grantor's death, and consequently they can transmit no right to the executors of the legatee in the event that the grantor survives him.

Legacies where they are general, i. e. of a certain sum of money indefinitely, give the legatee no right in any one debt or subject; he can only insist in a personal action against the executor for payment out of the testator's effects. A special legacy, i. e. of a particular debt due to the deceased or of a particular subject belonging to him, is of the nature of an assignation, by which the property of the special debt or subject vests, upon the testator's death, in the legatee, who can therefore directly sue the debtor or possessor; yet, as no legacy can be claimed till the debts are paid, the executor must be cited in such process, that it may be known whether there are free effects sufficient for answering the legacy. Where there is not enough for payment of all the legacies each of the general legatees must suffer a proportional abatement; but a special legatee gets his legacy entire, though there should be nothing over for payment of the rest; and, on the contrary, he has no claim if the debt or subject bequeathed should perish, whatever the extent of the free executry may be.

Minors, after puberty, can test without their curators, wives without their husbands, and persons interdicted without their interdictors; but bastards cannot test, except in the cases afterwards set forth.

If a person deceased leaves a widow, but no child, his testament, or, in other words, the goods in communion, divide in two; one half goes to the widow; the other is the dead's part, i. e. the absolute property of the deceased on which he can test, and which falls to his next of kin, if he dies intestate. Where he leaves children, one or more, but no widow, the children get one-half as their legitime; the other half is the dead's part, which falls also to the children, if the father has not tested upon it. If he leaves both widow and children, the division is tripartite; the wife takes one-third by herself; another falls, as legitime, to the children equally among them, or even to an only child, though he should succeed to the heritage; the remaining third is the dead's part. Where the wife pre-deceases, without children, one-half is retained by the husband, the other falls to her next of kin. Where she leaves children, two-thirds remain with the surviving father, as if one-third were due to him proprio nomine, and another as administrator of the legitime for his children; the remaining third, being the wife's share, goes to her children.

Before a testament can be divided, the debts owing by the deceased are to be deducted. As the husband has the full power of burdening the goods in communion, his debts affect the whole, and so lessen the legitime and the share of the relict as well as the dead's part. His funeral charges and the mournings and alimony due to

the widow are considered as his proper debts; but legacies, or other gratuitous rights granted by him on death-bed, affect only the dead's part. Bonds bearing interest, due by the deceased, cannot diminish the relict's share, because such bonds, when due to the deceased, do not increase it. The funeral charges of the wife pre-deceasing, fall wholly on her executors, who have right to her share. Where the deceased leaves no family, neither husband, wife, nor child, the testament suffers no division, but all is the dead's part.

The whole issue of the husband, not only by that marriage which was dissolved by his death, but by any former marriage, has an equal interest in the legitime. But no legitime is due, 1. Upon the death of a mother. 2. Neither is it due to grandchildren, upon the death of a grandfather. Nor, 3. To children who having renounced the legitime are no longer considered as in familia.

As the right of legitime is strongly founded in nature it is not to be inferred by implication. The child who has got a provision from his father is obliged to collate it with others, and impute it towards his own share of the legitime; but, if from the deed of provision, the father shall appear to have intended it as a præcipuum to the child, collation is excluded. A child is not bound to collate an heritable subject provided to him, because the legitime is not impaired by such provision.

An executor is not vested in the right of the moveable estate of the deceased without confirmation.

Confirmation proceeds upon an edict which is affixed on the door of the parish church where the deceased dwelt, and serves to intimate to all concerned the day of confirmation, which must be nine days at least after publishing the edict. In a competition for the office of executor, the commissary prefers, primo loco, the person named to it by the deceased himself, whose nomination he ratifies or confirms, without any previous decerniture: this is called the confirmation of a testament testamentary. In default of an executor named by the deceased, universal disponees are by the present practice preferred; after them the next of kin; then the relict; then creditors; and lastly, special legatees.

A creditor, whose debtor's testament is already confirmed, may sue the executor, who holds the office for all concerned, to make payment of his debt. Where there is no confirmation, he may himself apply for the office, and confirm as executor-creditor.

A creditor, whose debt has not been constituted, or his claim not closed by decree, during the life of his debtor, has no title to demand directly the office of executor qua creditor: but he may charge the next of kin who stands off, to confirm, who must either renounce within twenty days after the charge, or be liable for the debt.

There are certain debts of the deceased, called privileged debts, which were always preferable to every other. Under that name are comprehended medicines furnished to the deceased on death-bed, physicians' fees during that period, funeral charges, and the rent of his house, and his servants' wages for the year or term current at his death. These the executors are in safety to pay on demand. If no diligence be used within six months, the executor may retain for his own debt. Such creditors of the deceased as have used diligence within a year after their debtor's death are preferable, on the subject of his testament, to the creditors of his next of kin.

The only *passive* title in moveables is vicious intromission; which may be defined, an unwarrantable intermeddling with the moveable estate of a person deceased, without the order of the law. This is not confined, as the passive titles in heritage are, to the persons interested in the succession, but strikes against all intromitters whatever. Where an executor confirmed intromits with more than he has confirmed, he incurs a passive title; fraud being in the common case presumed from his not giving up an inventory of the full subject intermeddled with. Vicious intromission is also presumed where the repositories of a dying person are not sealed up, as soon as he becomes incapable of sense, by his nearest relations; or, if he dies in a house not his own, they must be sealed up by the master of such house, and the keys delivered to the judge ordinary, to be kept by him, for the benefit of all having interest.

The passive title of vicious intromission does not take place where there is any probable title or circumstance that takes off the presumption of fraud. In consequence of this rule, necessary intromission, or custodiæ causa, by the wife or children, who only continue the possession of the deceased in order to preserve his goods for the benefit of all concerned, infers no passive title.

The whole of a debtor's estate is subjected to the payment of his debts; and therefore both his heirs and executors are liable for them, in a question with creditors: but, as succession is by law divided into the heritable and the moveable estate, each of these ought, in a question between the several successors, to bear the burdens which naturally affect it. Action of relief is accordingly competent to the heir who has paid a moveable debt, against the executor; and vice versâ. This relief is not cut off by the deceased's having disponed either his land estate or his moveables with the burden of his *whole* debts.

3. *Of last heirs and bastards.*—Where a vassal dies, without having any heir who can prove the remotest propinquity to him, the king succeeds as last heir, both in the heritable and moveable estate of the deceased.

If the lands to which the king succeeds be holden immediately of himself, the property is consolidated with the superiority, as if resignation had been made in the sovereign's hands. If they are holden of a subject, the king, who can not be vassal to his own subject, names a donatory; who, to complete his title, must obtain a decree of declarator. The whole estate of the deceased is in this case subjected to his debts, and to the widow's legal provisions. Neither the king nor his donatory is liable beyond the value of the succession.

A bastard can have no legal heirs except those of his own body. The king therefore succeeds

to him, failing his lawful issue, as last heir. Though the bastard, as absolute proprietor of his own estate, can dispose of his heritage in liege poustie, and of his moveables by any deed inter vivos; yet he is disabled, ex defectu natalium, from bequeathing by testament without letters of legitimation from the sovereign. If the bastard has lawful children, he may test without such letters, and name tutors and curators to his issue.

The legal rights of succession, being founded in marriage, can be claimed only by those who are born in lawful marriage. A bastard, though he cannot succeed jure sanguinis, may succeed by destination, where he is specially called to the succession by an entail or testament.

Aliens are incapable of succeeding in feudal rights, without naturalisation. Children born in a foreign state, whose fathers were natural born subjects and not attainted, are held to be natural born subjects.

Chap. VII.—Of Remedies and Mode of Procedure.

1. *Of the nature of actions for enforcing rights.*—Actions are either real or personal. A real action is that which arises from a right in the thing itself; and which therefore may be directed against all possessors of that thing. A personal action is founded only on an obligation undertaken for the performance of some fact, or the delivery of some subject; and therefore can be carried on against no other than the person obliged, or his heirs.

Actions, again, are either ordinary or rescissory. All actions are, in the sense of this division, ordinary, which are not rescissory. Rescissory actions are divided, 1. Into actions of proper improbation. 2. Actions of reduction-improbation. 3. Actions of simple reduction. Reduction-improbation is an action whereby a person, who may be hurt or affected by a writing, insists for producing or exhibiting it in court in order to have it set aside, or its effect ascertained under the certification that the writing if not produced shall be declared false and forged. As the certification in this process draws after it so heavy consequences, two terms are assigned to the defenders for production.

In an action of simple reduction, the certification is only temporary, declaring the writings called for null, until they be produced; so that they recover their full force after production.

The most usual grounds of reduction of writings are, the want of the requisite solemnities; that the grantor was minor, or interdicted, or inhibited; or that he granted it in prejudice of his lawful creditors.

In reductions on the head of force or fear, or fraud and circumvention, the pursuer must libel the particular circumstances from which his allegation is to be proved. Reduction is not competent upon every degree of force or fear; it must be such as would shake a man of constancy and resolution. Neither is it competent on that fear which arises from the just authority of husbands or parents over their wives or children, nor upon the fear arising from the regular execution of lawful diligence by caption, provided the deeds granted under that fear relate to the ground of debt contained in the diligence; but, if they have no relation to that debt, they are reducible ex metu.

Alienations granted by debtors after contracting lawful debts, in favor of conjunct or confident persons, without just and necessary causes, and without a just price really paid, are null. One is deemed a prior creditor whose ground of debt existed before the right granted by the debtor; though the written voucher of the debt should bear a date posterior to it.

Rights, though gratuitous, are not reducible, it the grantor had at the date thereof a sufficient fund for the payment of his creditors. Provisions to children are, in the judgment of law, gratuitous; so that their effect, in a question with creditors, depends on the solvency of the grantor; but settlements to wives, either in marriage contracts, or even after marriage, are onerous, in so far as they are rational; and consequently are not reducible even though the grantor was insolvent. This rule holds also in rational tochers contracted to husbands: but it must, in all cases, be qualified with this limitation, 'if the insolvency of the grantor was not publicly known;' for, if it was, fraud is presumed in the receiver of the right, by contracting with the bankrupt.

The receiver of the deed, if he be a conjunct or confident person, must instruct or support the onerous cause of his right, not merely by his own oath, but also by some circumstances or adminicles. But, where a right is granted to a stranger, the narrative of it, expressing an onerous cause, is sufficient per se to secure it against reduction. Persons are accounted conjunct whose relation to the granter is so near as to bar them from judging in his cause. Confident persons are those who appear to be in the granter's confidence by being employed in his affairs, as a steward or servant.

All voluntary payments or rights made by a bankrupt to one creditor, to disappoint the more timeous diligence of another, are reducible at the instance of that creditor who has used the prior diligence. But the creditor who neglects to complete his diligence within a reasonable time is not entitled to reduce any right granted by the debtor, after the time that the diligence is considered as abandoned.

A prohibited alienation, when conveyed by the receiver to another who is not privy to the fraud, subsists in the person of the bonâ fide purchaser. In the case of moveable rights, this nullity is receivable by exception; but it must be declared by reduction where the right is heritable. All alienations by a bankrupt, within sixty days before his bankruptcy, to one creditor in preference to another, are reducible at the instance even of such creditors as had not used the least step of diligence.

Actions are divided into rei persecutoriæ, and pœnales. By the first the pursuer insists barely to recover the subject that is his, or the debt due to him; and this includes the damage sustained. In penal actions, which always arise ex delicto, something is also demanded by way of penalty.

Actions of spuilzie, ejection, and intrusion,

are penal. An action of spuilzie is competent to one dispossessed of a moveable subject violently or without order of law, against the person dispossessing. Ejection and intrusion are, in heritable subjects, what spuilzie is in moveables. The difference between the two first is, that, in ejection, violence is used; whereas the intruder enters into the void possession, without either a title from the proprietor, or the warrant of a judge.

The action of contravention of law-borrows is also penal. It proceeds on letters of law-borrows (from borgh a cautioner) which contain a warrant to charge the party complained upon, that he may give security not to hurt the complainer in his person, family, or estate.

The most marked division of actions is into petitory, possessory, and declaratory.

Petitory actions are those where something is demanded from the defender, in consequence of a right of property or of credit in the pursuer.

Possessory actions are those which are founded either upon possession alone, as spuilzies; or upon possession joined with another title, as removings; and they are competent either for getting into possession, for holding it, or for recovering it.

A declaratory action is that in which some right is craved to be declared in favor of the pursuer, but nothing sought to be paid or performed by the defender.

The action of double or multiple-poinding may be also reckoned declaratory. It is competent to a debtor who is distressed, or threatened with distress, by two or more persons claiming right to the debt. In these competitions, any of the competitors may bring an action of multiple-poinding in the name of the tenants or other debtors, without their consent, or even though they should disclaim the process. By the bankrupt statute it is competent, in the case of a forthcoming or multiple-poinding raised on an arrestment used within sixty days prior, or four calendar months subsequent to a bankruptcy, for any other creditor, who has used an arrestment, producing his interest, and making his claim in the process, at any time before the expiration of the four months, to be ranked.

A process of wakening is of the same class. An action is said to sleep when it lies over not insisted on for a year, in which case its effect is suspended; but even then it may at any time within the years of prescription be revived or wakened by a summons.

An action that stands upon any of the inner house rolls cannot sleep; nor an action in which the decree is pronounced, because it has got its full competition.

An action of transumpt falls under the same class. It is competent to those who have a partial interest in writings that are not in their own custody, against the possessors thereof, for exhibiting them, that they may be transumed for their behoof: after which full duplicates are made out, collated, and signed, by one of the clerks of court, which are called transumpts, and are as effectual as an extract from the register.

A summons, when applied to actions pursued before the session, is a writ in the king's name, issuing from his signet upon the pursuer's complaint authorising messengers to cite the defender to appear before the court and make his defences.

The days indulged by law to a defender between his citation and appearance, to prepare for his defence, are called induciæ legales. If he is within the kingdom, twenty-seven days must be allowed him for that purpose; and, out of it, two diets of sixty and fifteen. Defenders residing in Orkney or Zetland must be cited on forty days. In certain summonses, which are privileged, the induciæ are shortened. Spuilzies and ejections proceed on fifteen days; wakenings and transferences, being but incidental, on six.

Defences are pleas offered by a defender for eliding an action. They are either dilatory, which do not enter into the cause itself, and so can only procure an absolvitor from the lis pendens; or peremptory, which entirely cut off the pursuer's right of action.

By *litiscontestation* a judicial contract is understood to be entered into by the litigants, by which the action is perpetuated against heirs, even when it arises ex delicto. Litiscontestation is not formed till an act is extracted admitting the libel or defence to proof.

2. *Of probation or evidence.*—All allegations by parties to a suit must be supported by proper proof. Probation is either by writing, by the party's own oath, or by witnesses. In the case of allegations, which may be proved by either of the three ways, a proof is said to be admitted prout de jure, because in such case all the legal methods of probation are competent to the party; if the proof he brings by writing be lame, he may have recourse either to witnesses or to his adversary's oath; but, if he should first take himself to the proof by oath, he cannot thereafter use any other probation. As obligations or deeds signed by the party himself, or his ancestors or authors, must be of all evidence the least liable to exception; therefore every debt or allegation may be proved by proper evidence in writing. Books of account kept by merchants, tradesmen, and other dealers, though not subscribed, are probative against him who keeps them; and, in case of furnishings by a shopkeeper, such books, if they are regularly kept by him, supported by the testimony of a single witness, afford a semiplena probatio in his favor, which becomes full evidence by his own oath in supplement. Notarial instruments and executions by messengers bear full evidence that the solemnities therein set forth were used, not to be invalidated otherwise than by a proof of falsehood; but they do not prove any other extrinsic facts therein averred against third parties.

Regularly, no person's right can be proved by his own oath, nor taken away by that of his adversary; because these are the bare averments of parties in their own favor. But, where the matter in issue is referred by one of the parties to the oath of the other, such oath, though made in favor of the deponent himself, is decisive of the point; because the reference is a virtual contract between the litigants, by which they are

understood to put the issue of the causes upon what shall be deposed. A defender, though he cannot be compelled to swear to facts in a libel properly criminal; yet may in trespasses, where the conclusion is limited to a fine or to damages.

Oaths of verity are sometimes referred by the judge to either party, ex officio; which, because they are not founded on any implied contract between the litigants, are not finally decisive, but may be traversed on proper evidence afterwards produced. These oaths are commonly put by the judge for supplying a lame or imperfect proof, and are therefore called oaths in supplement.

To prevent groundless allegations, oaths of calumny have been introduced, by which either party may demand his adversary's oath, that he believes the fact contained in his libel or defences to be just and true.

In all oaths, whether of verity or of calumny, the citation carries, or at least implies, a certification, that, if the party does not appear at the day assigned for deposing, he shall be held pro confesso. Though an oath which resolves into a non memini cannot be said to prove any point, yet where one so deposes upon a recent fact, to which he himself was privy, his oath is considered as a dissembling of the truth, and he is held pro confesso, as if he had refused to swear.

An oath in litem is that which the judge refers to a pursuer, for ascertaining either the quantity or the value of goods which have been taken from him by the defender without order of law, or the extent of his damages.

The law of Scotland rejects the testimony of witnesses, 1. In payment of sums above £100 Scots, which must be proved either scripto vel juramento; 2. In all gratuitous promises, though for the smallest trifle; 3. In all contracts where writing is either essential to their constitution, or where it is usually adhibited, as in the borrowing of money. On the other part, probation by witnesses is admitted to the extent of £100 Scots, in payments, nuncupative legacies, and verbal agreements, which contain mutual obligations, and it is received in certain cases to the highest extent.

No person, whose near relation to another bars him from being a judge in his cause, can be admitted as a witness for him; but he may against him, except a wife or child, who cannot be compelled to give testimony against the husband or parent. The testimony of persons is rejected who have been guilty of crimes that the law declares to infer infamy.

All witnesses, before they are examined in the cause, are purged of partial counsel; that is, they must declare that they have no interest in the suit, nor have given advice how to conduct it; that they have got neither bribe nor promise, nor have been instructed how to depose; and that they bear no enmity to either of the parties.

Where facts do not admit a direct proof, presumptions are received as evidence, which in many cases make as convincing a proof as the direct. Presumptions are consequences deduced from facts known or proved, which infer the certainty, or at least a strong probability, of another fact to be proved. This kind of probation is therefore called artificial, because it requires a reasoning to infer the truth of the point in question. Presumptions are either, 1. Juris et de jure; 2. Juris; or, 3. Hominis or judicis. The first sort obtains where statute or custom establishes the truth of any point upon a presumption; and it is so strong, that it rejects all proof that may be brought to elide it in special cases.

Presumptiones juris are those which the lawbooks or decisions have established. Most of this kind are founded merely on the want of a contrary proof; thus the legal presumptions for freedom, for life, for innocence, &c., are in effect so many negative propositions. All of them may be elided, not only by direct evidence, but by other conjectures affording a stronger degree of probability to the contrary.

A fictio juris differs from a presumption: things are presumed which are likely to be true; but a fiction of law assumes for truth what is either certainly false, or at least is as probably false as true.

3. *Of sentences.*—Decrees of the court of session are either in foro contradictorio, where both parties have litigated the cause in the absence of the defender. Decrees of the session in foro cannot be again brought under the review of the court, either on points which the parties neglected to plead before sentence (which are called competent and omitted), or upon points pleaded and found insufficient (proponed and repelled). But decrees, though in foro, are reversible by the court where either they labor under essential nullities, e. g. where they are ultra petita, or not conformable to their grounds and warrants, or founded on an error in calculation, &c.; or where the party against whom the decree is obtained has thereafter recovered evidence sufficient to overturn it, of which he knew not before. No appeal is to be received from sentences of the session after five years from extracting the sentence, unless the person entitled to such appeal be minor, clothed with a husband, non compos mentis, imprisoned, or out of the kingdom. Sentences pronounced by the lord ordinary have the same effect, if not reclaimed against, as if they were pronounced in presence; and all petitions against the interlocutor of an ordinary must be preferred within a certain number of days after signing such interlocutor.

Decrees in absence of the defender have not the force of res judicatæ as to him. A party therefore may be restored against those upon paying to the other his costs. The sentences of inferior courts may be reviewed by the court of session, before decree by advocation, and after decree by suspension or reduction.

Reduction is the proper remedy, either where the decree has already received full execution by payment, or where it decrees nothing to be paid or performed, but simply declares a right in favor of the pursuer.

Suspension is that form of law by which the effect of a sentence condemnatory, that has not yet received execution, is stayed or postponed till the cause be again considered. The first step towards suspension is a bill preferred to the lord ordinary on the bills. Suspensions of decrees in foro cannot pass, but by the whole lords in

time of session, and by three in vacation time; but other decrees may be suspended by any one of the judges. As suspension has the effect of staying the execution of the creditor's legal diligence, it cannot pass without caution given by the suspender to pay the debt, in the event it shall be found due. Where the suspender cannot, from his low or suspected circumstances, procure unquestionable security, the lords admit juratory caution, i. e. such as the suspender swears is the best he can offer; but the reasons of suspension are, in that case, to be considered with particular accuracy at passing the bill. Decrees in favor of the clergy, of universities, hospitals, or parish schoolmasters, for their stipends, rents, or salaries, cannot be suspended, but upon production of discharges, or on consig ation of the sums charged for. Though he, in whose favor the decree suspended is pronounced, be always called the charger, yet a decree may be suspended before a charge be given on it. And suspension is competent even where there is no decree for putting a stop to any illegal act whatsoever. Letters of suspension are considered merely as a prohibitory diligence; so that the suspender, if he would turn provoker, must bring an action of reduction. If, upon discussing the letters of suspension, the reason shall be sustained, a decree is pronounced, suspending the letters of diligence on which the charge was given simpliciter, which is called a decree of suspension, and takes off the effect of the decree suspended. If the reasons of suspension be repelled, the court find the letters of diligence orderly proceeded, i. e. regularly carried on; and they ordain them to be put to farther execution.

4. *Of executions.*—Decrees are carried into execution, by diligence, either against the person, or against the estate of the debtor. The first step of personal execution is by letters of horning, which pass by warrant of the court of session, on the decrees of magistrates of boroughs, sheriffs, admirals, and commissaries. If the debtor does not obey the letters of horning, within the days of the charge, the charger, after denouncing him rebel, and registering the horning, may apply for letters of caption, which contain a command, not only to messengers, but to magistrates, to apprehend and imprison the debtor.

Law secures peers, married women, and pupils, against personal execution by caption upon civil debts. Such commoners also as are elected to serve in parliament are secured against personal execution by the privilege of parliament. No caption can be executed against a debtor within the precincts of the king's palace of Holyrood House; but this privilege of sanctuary affords no security to criminals. Where the personal presence of a debtor under caption is necessary, in any of our supreme courts, the judges are empowered to grant him a protection, for such time as may be sufficient for his coming and going, not exceeding a month. Protection from diligence is also granted by the court of session under the bankrupt statutes, where it is appl ed for with concurrence of the trustee, or a certain number of the creditors, as the case may require.

After a debtor is imprisoned, he ought not to be indulged the benefit of the air, not even under a guard. Any magistrate or jailer who shall suffer the prisoner to go abroad, without a proper attestation, upon oath, of the dangerous state of his health, is liable subsidiariè for the debt Magistrates are in like manner liable if they shall suffer a prisoner to escape through the insufficiency of their prison; but if he shall escape under night by the use of instruments, or by open force, or by any other accident which cannot be imputed to the magistrates or jailer, they are not chargeable with the debt; provided they shall have, immediately after his escape, made all possible search for him.

Insolvent debtors may apply for a release from prison upon a cessio bonorum, i. e. upon their making over to their creditors all their estate real and personal. This must be insisted for by way of action, to which all the creditors of the prisoner ought to be made parties. The prisoner must in this action, which is cognizable only by the court of session, exhibit a particular inventory of his estate, and make oath that he has no other estate than is therein contained, and that he has made no conveyance of any part of it since his imprisonment, to the hurt of his creditors. He must also make oath whether he has granted any disposition of his effects before his imprisonment, and condescend on the persons to whom, and on the cause of granting it.

A fraudulent bankrupt is not allowed this privilege; nor a criminal, who is liable in any assythment or indemnification to the party injured or his executors, though the crime itself should be extinguished by a pardon. A disposition granted on cessio bonorum is merely in farther security to the creditors, not in satisfaction, or in solutum of the debts.

Where a prisoner for debt declares upon oath, before the magistrate of the jurisdiction, that he has not wherewith to maintain himself, the magistrate may set him at liberty, if the creditor does not aliment him within ten days after intimation made for that purpose. But the magistrate may detain him in prison, if the creditor chooses to bear the burden of the aliment. The statute authorising this release, which is usually called the act of grace, is limited to the case of prisoners for civil debts.

Decrees are executed against the moveable estate of the debtor by arrestment or poinding, and against his heritable estate by inhibition, or adjudication.

5. *Of arbitrations.*—A decree arbitral is a sentence proceeding on a submission to arbiters. A submission is a contract entered into by two or more parties, who have disputable rights or claims, whereby they refer their differences to the final determination of an arbiter or arbiters, and oblige themselves to acquiesce in what shall be decided. Where the day, within which the arbiters are to decide, is left blank in the submission, practice has limited the arbiter's power of deciding to a year. Where a submission is indefinite, like all other contracts, it subsists for forty years. Submissions, like mandates, expire by the death of any of the parties' submitters before sentence. As arbiters are not vested with

urisdiction, they cannot compel witnesses to make oath before them, or havers of writings to exhibit them; but this defect is supplied by the court of session, who at the suit of the arbiters, or of either of the parties, will grant warrant for citing witnesses, or for the exhibition of writings. For the same reason, the power of arbiters is barely to decide; the execution of the decree belongs to the judge. Where the submitters consent to the registration of the decree arbitral, performance may be enforced by summary diligence.

The power of arbiters is wholly derived from the consent of parties. Hence, where their powers are limited to a certain day, they cannot pronounce sentence after that day; nor can they subject parties to a penalty higher than that which they have agreed to in the submission; and where a submission is limited to special claims, sentence pronounced on subjects not specified in the submission is null. But on the other hand, as submissions are designed for a most favorable purpose, the amicable composing of differences, the powers thereby conferred on arbiters receive an ample interpretation. Decrees arbitral are not reducible upon any ground, except corruption, bribery, or falsehood.

CRIMINAL LAW.

Chap. I.—Of Crimes.

1. *Their nature.*—The word crime in its most general sense includes every breach either of the law of God, or of our country; in a more restricted meaning it signifies such transgressions of law as are punishable by courts of justice. By the Scottish law, no private party, except the party injured, or his next of kin, can accuse criminally; but the king's advocate, who in this question represents the community, has a right to prosecute all crimes in vindictam publicam, though the party injured should refuse to concur. Smaller offences, as petty riots, injuries, &c., which do not demand the public vengeance, pass generally by the appellation of delicts, and are punished either by fine or imprisonment.

The essence of a crime is, that there be an intention in the actor to commit; for an action in which the will of the agent has no part is not a proper object either of reward or punishment. Simple negligence does not therefore constitute a proper crime. Yet, where it is extremely gross, it may be punished arbitrarily. Far less can we reckon in the number of crimes, those committed by an idiot or furious person; but smaller degrees of fatuity, which only darken reason, will not afford a total defence, though they may save from the pœna ordinaria. Actions committed in drunkenness are not to be considered as involuntary, seeing the drunkenness itself, which was the first cause of the action, is both voluntary and criminal.

On the same principle, such as are in a state of infancy, or in the confines of it, are incapable of a criminal action, dole not being incident to that age; but the precise age at which a person becomes capable of dole, being fixed neither by nature nor by statute, is by our practice to be gathered by the judge, as he best can, from the understanding and manners of the person accused. Where the guilt of a crime arises chiefly from statute, the actor, if he is under puberty, can hardly be found to be guilty; but, where nature itself points out its deformity, he may, if he is proximus pubertati, be more easily presumed capable of committing it; yet, even in that case he will not be punished pœnâ ordinariâ.

One may be guilty of crime, not only by perpetrating it himself, but being accessory to a crime committed by another. A person may be guilty, art and part, either, 1. By giving advice or counsel to commit the crime: or, 2. By giving warrant or mandate to commit it; or, 3. By actually assisting the criminal in the execution. It is generally agreed by doctors that, in the more atrocious crimes, the adviser is equally punishable with the criminal; and that, in the slighter, the circumstance arising from the adviser's smaller age, the jocular or careless manner of giving advice, &c., may be received as pleas for softening the punishment. One who gives mandate to commit a crime, as he is the first spring of action, seems more guilty than the person employed as the instrument in executing it; yet the actor cannot excuse himself under the pretence of orders which he ought not to have obeyed.

Assistance may be given to the committer of a crime not only in the actual execution but previous to it, by furnishing him, intentionally, with poison, arms, or the other means of perpetrating it. That sort of assistance which is not given till after the criminal act, and which is commonly called abetting, though it be of itself criminal, does not infer art and part of the principal crime; as if one should favor the escape of a criminal knowing him to be such, or conceal him from justice.

Those crimes that are in their consequences most hurtful to society are punished capitally, or by death; others escape with a smaller punishment, sometimes fixed by statute, and sometimes arbitrary, i. e. left to the discretion of the judge, who may exercise his jurisdiction, either by fine, imprisonment, or a corporal punishment. Where the punishment is left by law to the discretion of the judge, he can in no case extend it to death. The single escheat of the criminal falls, on conviction, in all capital trials, though the sentence should not express it.

2. *Of crimes against religion.*—Certain crimes are committed more immediately against God himself; others against the state; and a third kind against particular persons. The chief crime in the first class, cognisable by temporal courts, is blasphemy, under which is included atheism. This crime consists in the denying or vilifying the Deity by speech or writing. All who curse God, or any of the persons of the blessed Trinity, are to suffer death even for a single act; and those who deny him, if they persist in their denial. The denial of a providence, or of the authority of the Holy Scriptures, is punishable capitally for the third offence. No prosecution can now be carried on for witchcraft or conjuration. But all who undertake, from their skill in any occult science, to tell fortunes, or discover stolen goods, are to suffer imprisonment for a

year, stand in the pillory four times in that year, and find surety for their future good behaviour.

3. *Of crimes against the state and government.*—Some crimes against the state are levelled directly against the supreme power, and strike at the constitution itself: others discover such a contempt of law as tends to baffle authority, or slacken the reins of government. *Treason*, crimen majestatis, is that crime which is aimed against the majesty of the state, and can be committed only by those who are subjects of that state either by birth or residence. Soon after the union of the two kingdoms, in 1707, the laws of treason then in force in England were extended to Scotland by 7 Ann. c. 21, both with regard to the facts constituting that crime, to the forms of trial, the corruption of blood, and all the penalties and forfeitures consequent on it.

It is high treason by the law of England to imagine the death of the king, queen consort, or of the heir apparent to the crown; to levy war against the king, or adhere to his enemies; to counterfeit the king's coin, or his great or privy seal; to kill the chancellor, treasurer, or any of the twelve judges of England, while they are doing their offices; which last article is, by the forenamed act 7 Ann., applied to Scotland, in the case of slaying any judge of the session or justiciary sitting in judgment. Those who wash, clip, or lighten the proper money of the realm; who advisedly affirm, by writing or printing, that the pretender has any right to the crown, that the king and parliament cannot limit the succession to it, or who hold correspondence with the pretender, or any person employed by him, are also guilty of treason.

The forms of proceeding in the trial of treason, whether against peers or commoners, are set forth in a small treatise published by order of the house of lords in 1709, subjoined to a collection of statutes concerning treason. By the conviction upon this trial, the whole estate of the traitor becomes forfeited to the crown. His blood is also corrupted, so that, on the death of an ancestor he cannot inherit; and the estate which he cannot take falls to the immediate superior as escheat, ob defectum hæredis without distinguishing whether the lands be held of the crown or of a subject. No attainder for treason shall, after the death of the pretender and all his sons, hurt the right of any person, other than that of the offender during his natural life: the rights of creditors and other third parties, in the case of forfeiture on treason, must be determined by the law of England.

Misprision of treason, from meprendre, is the overlooking or concealing of treason. It is inferred by one's bare knowledge of the crime, and not discovering it to a magistrate or other person entitled by his office to take examinations; though he should not in the least degree assent to it. The act 7 Ann. extends the English law of misprision to Scotland. Its punishment is, by the law of England, perpetual imprisonment, together with the forfeiture of the offender's moveables, and of the profits of his heritable estate during his life; that is, in the style of our law, his simple and life-rent escheat.

The crime of *sedition* consists in the raising commotions or disturbances in the state. It is either verbal or real. *Verbal* sedition, or leasing-making, is inferred from the uttering of words tending to create discord between the king and his people. It is punished either by imprisonment, fine, or banishment, at the discretion of the judge. *Real* sedition is generally committed by convocating together any considerable number of people, without lawful authority, under the pretence of redressing some public grievance, to the disturbance of the public peace. Those who are convicted of this crime are punished with the confiscation of their goods; and their lives are at the king's will. If any persons, to the number of twelve, shall assemble, and, being required by a magistrate or constable to disperse, shall nevertheless continue together for an hour after such command, the persons disobeying shall suffer death and confiscation of moveables.

4. *Of crimes against public justice and policy.*—Judges who wilfully, or through corruption, use their authority as a cover to injustice or oppression, are punished with the loss of honor, fame, and dignity. Under this head may be classed theftbote (from bote, compensation), which is the taking a consideration in money or goods from a thief to exempt him from punishment, or connive at his escape from justice. A sheriff or other judge, guilty of this crime, forfeits his life and goods. And even a private person who takes theftbote, suffers as the principal thief. The buying of disputed claims concerning which there is a pending process, by any judge or member either of the session or of an inferior court, is punished by the loss of the delinquent's office, and all the privileges thereto belonging.

Deforcement is the opposition given, or resistance made, to messengers or other officers while they are employed in executing the law. The court of session is competent to this crime. It is punishable with the confiscation of moveables, the one half to the king, and the other to the creditor at whose suit the diligence was used. Armed persons, to the number of three or more, assisting in the illegal running, landing, or exporting of prohibited or uncustomed goods, or any one who shall resist, wound, or maim, any officer of the revenue in the execution of his office, are punishable with death and the confiscation of moveables.

Breach of arrestment is a crime of the same nature with deforcement, as it imports a contempt of the law and of the judges. It subjects to an arbitrary corporal punishment, and the escheat of moveables; with a preference to the creditor for his debt, and for such further sum as shall be modified to him by the judge. Under this head, of crimes against good government and police, may be reckoned the forestalling of markets; that is, the buying of goods intended for a public market before they are carried thither; which, for the third criminal act, infers the escheat of moveables, as also slaying salmon in forbidden time, destroying plough-graith in time of tillage, slaying or boughing-horses or cows in time of harvest, and destroying or spoiling growing timber.

5. *Crimes against individuals.* (1.) *Murder.*—Crimes against particular persons may be di

rected either against life, limb, liberty, chastity, goods, or reputation. Murder is the wilful taking away of a person's life without a necessary cause. The law makes no distinction between premeditated and sudden homicide; both are punished capitally. Casual homicide where the actor is in some degree blameable, and homicide in self-defence, where the just bourds of defence have been exceeded, are punished arbitrarily: but the slaughter of night-thieves, house-breakers, assistants in masterful depredations, or rebels denounced for capital crimes may be committed with impunity. The crime of demembration, or the cutting off of a member, is joined with that of murder; but, in practice, its punishment has been restricted to the escheat of moveables, and an assythment or indemnification to the party. Mutilation, or the disabling of a member, is punished at the discretion of a judge.

(2.) *Self-murder.*—Self-murder is as highly criminal as the killing our neighbour; and for this reason the law has, contrary to the rule crimina morte extinguuntur, allowed a proof of the crime after the offender's death, that his single escheat might fall to the king or his donatory. To this end an action must be brought, not before the justiciary, but the session, because it is only intended ad civilem effectum, for proving and declaring the self-murder; and the next of kin to the deceased must be made a party to it

(3.) *Parricide.*—The punishment of parricide, or the murder of a parent, is not confined by the Scottish law to the criminal himself. All his posterity in the right line are declared incapable of inheriting, and the succession devolves on the next collateral heir. Even the cursing or beating of a parent infers death, if the person guilty be above sixteen years; and an arbitrary punishment if he be under it. A presumptive or statutory murder is constituted by 1690, c. 21, by which any woman who shall conceal her pregnancy during its whole course, and shall not call for, or make use of, help in the birth, is to be reputed the murderer, if the child bo dead or missing. This act was intended to discourage the unnatural practice of women making away with their children begotten in fornication, to avoid church censures. A new statute has been since enacted, with a view to improve the law of the act of 1690.

(4.) *Duelling.*—Duelling is the crime of fighting in single combat on previous challenges given and received. Fighting in a duel, without license from the king, is punishable by death; and whatever person, principal, or second, shall give a challenge to fight a duel, or shall accept a challenge, or otherwise engage therein, is punished by banishment and escheat of moveables, though no actual fighting should ensue.

(5.) *Haimsucken.*—Haimsucken (from haim, 'home' and socken, 'to seek or pursue') is the assaulting or beating of a person in his own house. The punishment of this crime is no where defined, except in the books of the Majesty, which make it the same as that of a rape. It is, therefore, like rape, capital by our practice. The assault must be made in the proper house of the person assaulted, where he lies and rises daily and nightly; so that neither a public nor even a private house, where one is only transiently, falls within the law. Any party to a law suit, who shall slay, wound, or otherwise invade his adversary, at any period of time between executing the summons and the complete execution of the decree, or shall be accessory to such invasion, shall lose his cause. The sentence pronounced on this trial, against him who has committed the battery, is not subject to reduction, either on the head of minority, or on any other ground whatever; and if the person prosecuted for this crime shall be denounced for not appearing, his life-rent, as well as single escheat, falls upon the denunciation.

(6.) *Wrongous imprisonment.*—The crime of wrongous imprisonment is inferred by granting warrants of commitment in order to trial, proceeding on informations not subscribed, or without expressing the cause of commitment; by receiving or detaining prisoners on such warrants; by refusing to a prisoner a copy of the warrant of commitment; by detaining him in close confinement above eight days after his commitment; by not releasing him on bail, where the crime is bailable; and by transporting persons out of the kingdom, without either their own consent or a lawful sentence. The persons guilty of a wrongous imprisonment are punished by a pecuniary mulct, from £6000 down to £4000 Scots, according to the rank of the person detained; and the judge, or other person guilty, is over and above subjected to pay to the person detained a certain sum per diem, proportioned to his rank, and is declared incapable of public trust. All these penalties may be insisted for by a summary action before the session, and are subject to no modification.

(7.) *Adultery.*—Adultery is the crime by which the marriage-bed is polluted. This crime could neither by the Roman nor Jewish law be committed, but where the guilty woman was the wife of another. By the law of Scotland it is adultery, if either the man or woman be married The law distinguishes between simple adultery and that which is notorious or manifest. Open and manifest adulterers, who continue incorrigible notwithstanding the censures of the church, are punished capitally. This crime is distinguished by one or other of the following characters; where there is issue procreated between the adulterers, or where they keep bed and company together notoriously, or where they give scandal to the church, and are, upon their obstinately refusing to listen to its admonitions, excommunicated. The punishment of simple adultery, not being defined by statute, is left to the discretion of the judge; but custom has made the falling of the single escheat one of its penalties.

(8.) *Bigamy.*—Bigamy is a person's entering into the engagement of a second marriage, in violation of a former marriage-vow subsisting. Bigamy, on the part of the man, has been tolerated in many states, before the establishment of Christianity, even by the Jews themselves; but it is prohibited by the precepts of the gospel, and it is punished by the Scottish law, whether on the part of the man or of the woman, with the pains of perjury.

(9.) *Incest.*—Incest is committed by persons who stand within the degrees of kindred forbidden in Lev. xviii., and is punished capitally. The same degrees are prohibited in affinity, as in consanguinity, Lev. xviii. 15, et seq. As this crime is repugnant to nature, all children, whether lawful or natural, stand on an equal footing: civilis ratio civilia jura corrumpere potest, non verò naturalia. It is difficult indeed to bring a legal proof of a relation merely natural on the side of the father; but the mother may be certainly known without marriage.

(10.) *Rape.*—There is no explicit statute making rape, or the ravishing of women, capital; but it is plainly supposed in act 1612, c. 4, by which the ravisher is exempted from the pains of death, only in the case of the woman's subsequent consent, or her declaration that she went off with him of her own free will; and even then he is to suffer an arbitrary punishment, either by imprisonment, confiscation of goods, or a pecuniary fine.

(11.) *Theft, robbery, and piracy.*—Theft is defined a fraudulent intermeddling with the property of another, with a view of making gain. The old law of Scotland proportioned the punishment of the theft to the value of the goods stolen; heightening it gradually from a slight corporal punishment to a capital, if the values amounted to thirty-two pennies Scots, which in the reign of David I. was the price of two sheep. In several later acts it was taken for granted that this crime is capital. But where the thing stolen is of small value, it is considered, not as theft but as pickery, which is punished either corporally, or by banishment. The breaking of orchards, and the stealing of green wood, is punished by a fine, which rises as the crime is repeated.

Theft may be aggravated into a capital crime, though the value of the thing stolen be trifling; as theft twice repeated, or committed in the night, or by banded men, or of things set apart for sacred uses. The receivers and concealers of stolen goods, knowing them to be such, suffer as thieves. Those who barely harbour the person of the criminal, within forty-eight hours either before or after committing the crime, are punished as partakers of the theft. Such as sell goods belonging to thieves or lawless persons, who dare not themselves come to market, are punished with banishment and the escheat of moveables.

Theft attended with violence is called *robbery;* and in the old statutes rief or stouthrief, under which class may be included sorning, or the taking of meat and drink by force, without paying for it. Stouthrief came at last to be committed so audaciously, by bands of men associated together, that it was thought necessary to vest all our freeholders with a power of holding courts upon sorners and rievers, and condemning them to death. Nay, all were capitally punished, who to secure their lands from depredation paid to the rievers a yearly contribution, which got the name of *black mail.* An act also passed, commanding to banishment a band of sorners, supposed to come from Egypt, called gypsies, and adjudging to death all that should be reputed Egyptians, if found thereafter within the kingdom. Robbery committed on the seas is called *piracy,* and is punished capitally by the high admiral. Several of the facts which constitute this crime are set forth in statute 8. Geo. I. c. 24.

(12.) *Falsehood and forgery.*—Falsehood, in a large sense, is the fraudulent imitation or suppression of truth, to the damage of another. The lives and goods of persons convicted of using false weights or measures were, by our old law, in the king's mercy; and their heirs could not inherit but upon a remission. The latest statute against this crime punishes it by confiscation of moveables. That particular species of falsehood which consists in the falsifying of writings passes by the name of *forgery.* Our practice has now of a long time, agreeably to the Roman law, made this crime capital; unless the forgery be of executions or other writings of smaller moment; in which case it is punished arbitrarily. The writing must not only be fabricated but put to use, or founded on, in order to infer this crime. And, though it be strictly criminal, yet the trial of it is competent to the court of session. Where improbation is moved against a deed by way of exception, the inferior judge, before whom the action lies, may try the question ad civilem effectum. When it is pleaded as an exception, our practice to discourage affected delays obliges the defender, who moves it, to consign £40 Scots; which he forfeits, if his plea shall appear calumnious. Where a person found guilty of forgery by the court of session, is by them remitted to the justiciary, an indictment is there exhibited against him, and a jury sworn, before whom the decree of session is produced, in place of all other evidence of the crime, in respect of which the jury find the pannel guilty; so that decree being pronounced by a competent court, is held as full proof, or, in the style of the bar, as probatio probata.

(13.) *Perjury and subornation.* — Perjury, which is the judicial affirmation of a falsehood on oath, really constitutes the *crimen falsi;* for he who is guilty of it does in the most solemn manner substitute falsehood in the place of truth. To constitute this crime, the violation of truth must be deliberately intended by the swearer; and therefore reasonable allowance ought to be given to forgetfulness or misapprehension according to his age, health, and other circumstances. The breach of a promissory oath does not infer this crime; for he who promises on oath may sincerely intend performance when he swears, and so cannot be said to call on God to attest a falsehood. Though an oath, however false, if made upon reference in a civil question, concludes the cause, the person perjured is liable to a criminal trial; for the effect of the reference can go no further than the private right of the parties.

Notwithstanding the mischievous consequences of perjury to society, it is not punished capitally, but by confiscation of moveables, imprisonment for a year, and infamy. The court of session is competent to perjury incidenter when in any examination upon oath, taken in a cause depending before them, a person appears to have sworn falsely: but in the common case, that trial is proper to the justiciary. Subornation

of perjury consists in tampering with persons who are to swear in judgment, by directing them how they are to depose; and it is punished with the pains of perjury.

(14.) *Stellionate, double conveyances, fraudulent bankruptcy, &c.*—The crime of stellionate, from stellio, includes every fraud which is not distinguished by a special name; but is chiefly applied to conveyances of the same right granted by the proprietor to different disponees. The punishment of stellionate must necessarily be arbitrary, to adapt it to the various natures and different aggravations of the fraudulent acts. The persons guilty of that kind of it which consists in granting double conveyances, are by our law declared infamous, and their lives and goods at the king's mercy. The cognisance of fraudulent bankruptcy is appropriated to the court of session, who may inflict any punishment on the offender that appears proportioned to his guilt, death excepted.

(15.) *Usury.*—The crime of usury, before the reformation, consisted in the taking of any interest for the use of money; and now in taking a higher rate of interest than is authorised by law. It is divided into usura manifesta, or direct; and velata, or covered. One may be guilty of the first kind either where he covenants with the debtor for more than the lawful interest on the loan money; or where one receives the interest of a sum before it is due, since thereby he takes a consideration for the use of money before the debtor has really got the use of it. Where a debt is clogged with an uncertain condition, by which the creditor runs the hazard of losing his principal, he may covenant for a higher interest than the legal, without the crime of usury; for there the interest is not given merely in consideration of the use of the money, but of the danger undertaken by the creditor.

Covered usury is that which is committed under the mask, not of a loan, but of some other contract; e. g. a sale or an improper wadset. And, in general, all obligations entered into with an intention of getting more than the legal interest for the use of money, however they may be disguised, are usurious. As a further guard against this crime, the taking more than the legal interest for the forbearance of payment of money, merchandise, or other commodities, by way of loan, exchange, or other contrivance whatever, or the taking a bribe for the loan of money, or for delaying its payment when lent, is declared usury. Where usury is proved, the usurious obligation is not only declared void, but the creditor, if he has received any unlawful profits, forfeits the treble value of the sums or goods lent. Usury, when it is to be pursued criminally, must be tried by the justiciary; but where the libel concludes only for voiding the debt, or restitution, the session is the proper court.

(16.) *Injury to character, slander, &c.*—Injury, in its proper acceptation, is the reproaching or affronting our neighbour. Injuries are either verbal or real. A verbal injury, when directed against a private person, consists in the uttering contumelious words, which tend to expose our neighbour's character by making him little or ridiculous. It does not seem that the twitting one with natural defects, without any sarcastical reflections, though it be uncharitable, falls under this description, as these imply no real reproach in the just opinion of mankind. Where the injurious expressions have a tendency to blacken one's moral character, or fix some particular guilt, and are deliberately repeated in different companies, or handed about in whispers to confidants, it then grows up to the crime of slander; and, where a person's moral character is thus attacked, the animus injuriandi is commonly inferred from the injurious words themselves, unless special circumstances be offered to take off the presumption; e. g. that the words are uttered in judgment in one's own defence, or by way of information to a magistrate and had some foundation in fact. Though the cognisance of slander is proper to the commissaries, who, as the judices Christianitatis, are the only judges of scandal; yet, for some time past, bare verbal injuries have been tried by other criminal judges, and even by the session. It is punished either by a fine proportioned to the condition of the persons injuring and injured, and the circumstances of time and place; or if the injury import scandal, by publicly acknowledging the offence; and frequently the two are conjoined. The calling one a bankrupt is not, in strict speech, a verbal injury, as it does not affect the person's moral character; yet, as it may hurt his credit in the way of business, it founds him in an action of damages, which must be brought before the judge ordinary. A real injury is inflicted by any fact by which a person's honor or dignity is affected; as striking one with a cane, or even aiming a blow without striking; spitting in one's face; assuming a coat of arms, or any other mark of distinction proper to another, &c. The composing and publishing defamatory libels may be reckoned of this kind. Real injuries are tried by the judge ordinary, and punished either by fine or imprisonment, according to the demerit of the offenders.

Chap. II.—Of Punishment.

1. *Of criminal jurisdiction.*—Criminal jurisdiction is founded, 1. Ratione domicilii, if the defender dwells within the territory of the judge. Vagabonds, who have no certain domicile, may be tried wherever they are apprehended. 2. Ratione delicti, if the crime was committed within the territory. By a temporary act now expired, treason, committed in certain Scottish counties, was made triable by the court of justiciary, wherever it should sit.

No criminal trial can proceed, unless the person accused is capable of making his defence. Absents, therefore, cannot be tried; nor fatuous, nor furious persons, durante furore, even for crimes committed while they were in their senses. But our practice considers every person who is capable of dole to be also sufficiently qualified for making his defence in a criminal trial.

No person can be imprisoned in order to stand trial for any crime, without a warrant in writing expressing the cause and proceeding upon a subscribed information, unless in the case of indignities done to judges, riots, and other offences,

specially mentioned in act 1701, c. 6. Every prisoner committed for trial, if the crime of which he is accused be not capital, is entitled to be released upon bail, the extent of which is to be modified by the judge, not exceeding 12,000 merks, Scots, for a nobleman, 6000 for a landed gentleman, 2000 for every other gentleman or burgess, and 600 for any other inferior person: or, in the option of the judge, £60 sterling. That persons who, either from the nature of the crime with which they are charged, or from their low circumstances, cannot procure bail, may not be for ever in prison untried, it is lawful for every prisoner to apply to the criminal judge, that his trial may be brought on. The judge must, within twenty-four hours after such application, issue letters directed to messengers, for intimating to the prosecutor to fix a diet for the prisoner's trial, within sixty days after the intimation, under the pain of wrongous imprisonment: and, if the prosecutor does not insist within that time, or, if the trial is not finished withing forty days more when carried on before the justiciary, or in thirty days when before any other judge, the prisoner is, upon a second application, setting forth that the legal time is elapsed, entitled to his freedom, under the same penalty.

Upon one's committing any of the grosser crimes, it is usual for a justice of the peace, sheriff, or other judge, to take a precognition of the facts, i. e. to examine those who were present at the criminal act, upon the special circumstances attending it, in order to know whether there is ground for a trial, and to serve as a direction to the prosecutor how to set forth the facts in the libel; but the persons examined may insist to have their declarations cancelled before they give testimony at the trial. Justices of the peace, sheriffs, and magistrates of boroughs, are also authorised to receive informations concerning crimes to be tried in the circuit courts; which informations are to be transmitted to the justice clerk forty days before the sitting of the respective courts. To discourage groundless criminal trials, all prosecutors, where the defender was absolved, were condemned by statute in costs as they should be modified by the judge; and, besides, were subjected to a small fine to be divided between the fisc and the defender: and, where the king's advocate was the only pursuer, his informer was made liable. This sufficiently warrants the present practice of condemning vexatious prosecutors in a pecuniary mulct, though far exceeding the statutory sum.

2. *Of prosecutions.*—The forms of trial upon criminal accusations differ much from those observed in civil actions, if we except the case of such crimes as the court of session is competent to, and of less offences tried before inferior courts. The trial of crimes proceeds either upon indictment, which is sometimes used when the person to be tried is in prison, or by criminal letters issuing from the signet of the justiciary. In either case, the defender must be served with a full copy of the indictment or letters, and with a list of the witnesses to be brought against him, and of the persons who are to pass on the inquest; and fifteen free days must intervene between his being so served and the day of appearance. When the trial proceeds upon criminal letters, the private prosecutor must give security, at raising the letters, that he will report them, duly executed, to the justiciary in the terms of 1535, c. 35; and the defender, if he be not already in prison, is by the letters required to give caution, within a certain number of days after his citation, for his appearance upon the day fixed for his trial; and, if he gives none within the days of the charge, he may be denounced rebel, which infers the forfeiture of his moveables.

Libel.—That part of the indictment, or of the criminal letters, which contains the grounds of the charge against the defender, and the nature or degree of the punishment he ought to suffer, is called the libel. All libels must be special, setting forth the particular facts inferring the guilt, and the particular place where these facts were done. The time of committing the crime may be libelled in more general terms, with an alternative as to the month, or day of the month; but, as it is not practicable in most cases to libel upon the precise circumstances of accession that may appear in proof, libels against accessories are sufficient, if they mention, in general, that the persons prosecuted are guilty art and part.

Letters of exculpation.—The defender of a criminal trial may raise letters of exculpation, for citing witnesses in proof of his defences against the libel, or of his objections against any of the jury or witnesses, which must be executed on the same day of appearance with that of the indictment or criminal letters.

Diets of appearance.—The diets of appearance, in the court of justiciary, are peremptory. The criminal letters must be called on the very day to which the defender is cited; and hence, if no accuser appears, their effect is lost, instantia perit, and new letters must be raised. If the libel, or any of the executions, shall to the prosecutor appear informal, or if he be diffident of the proof, from the absconding of a necessary witness, or such like, the court will, upon a motion made by him, desert the diet pro loco et tempore; after which new letters become also necessary. A defender who does not appear on the very day to which he is cited is declared fugitive; in consequence of which his single escheat falls. The defender, after his appearance in court, is called the pannel.

The two things to be chiefly regarded in a criminal libel are, 1. The relevancy of the facts, i. e. their sufficiency to infer the conclusion; 2. Their truth. The consideration of the first belongs to the judge of the court; that of the other to the jury of assize. If the facts libelled be found irrelevant, the pannel is dismissed from the bar; if relevant, the court remits the proof thereof to be determined by the jury; which must consist of fifteen men, picked out by the court from a greater number, not exceeding forty-five, who have been all summoned, and given in list to the defender at serving him with a copy of the libel.

Evidence.—Crimes cannot, like debts, be referred to the defender's oath; for no person is compellable to swear against himself where his

life, limb, liberty, or estate, is concerned; nor even in crimes which infer infamy, because one's good name is, in right estimation, as valuable as his life. There is one exception, however, to this rule in trying the crime of usury, which may be proved by the usurer's oath, notwithstanding the rule, nemo tenetur jurare in suam turpitudinem. Crimes, therefore, are, in the general case, proveable only by the defender's free confession, or by writing, or by witnesses. No extra-judicial confession, unless it is adhered to by the pannel in judgment, can be admitted as evidence.

All objections relevant against a witness, in civil cases, are also relevant in criminal. No witness is admitted who may gain or lose by the event of the trial. Socii criminis, or associates in the same crime, are not admitted against one another, except either in crimes against the state, as treason; in occult crimes, where other witnesses cannot be had, as forgery; or in thefts or depredations committed in the Highlands The testimony of the private party injured may be received against the pannel, where the king's advocate is the only prosecutor, if, from the nature of the crime, there must needs be a penury of witnesses, as in rape, robbery, &c.

The jury and their verdict.—After all the witnesses have been examined in court, the jury are shut up in a room by themselves, where they must continue, excluded from all correspondence, till their verdict, or judgment, be subscribed by the foreman, or chancellor, and clerk; and accordingly to this verdict the court pronounces sentence, either absolving or condemning. It is not necessary, by the law of Scotland, that a jury should be unanimous in finding a person guilty; the narrowest majority is as sufficient against the pannel as for him. Juries cannot be punished on account of an erroneous verdict, either for or against the pannel. Though the proper business of a jury be to enquire into the truth of the facts found relevant by the court, for which reason they are sometimes called the inquest, yet, in many cases, they judge, also, in matters of law or relevancy. Thus, though an objection against a witness should be repelled by the court, the jury are under no necessity to give more credit to his testimony than they think just; and, in all trials of art and part, where special facts are not libelled, the jury, if they return a general verdict, are indeed judges, not only of the truth, but of the relevancy of the facts that are sworn to by the witnesses. A general verdict is that which finds, in general terms, that the pannel is guilty, or not guilty, or that the libel or defences are proved or not proved. In a special verdict, the jury finds certain facts proved, the import of which is to be afterwards considered by the court.

Execution.—Criminal judges must now suspend, for some time, the execution of such sentences as affect life or limb, that so condemned criminals, whose cases deserve favor, may have access to apply to the king for mercy. No sentence of any court of judicature south of the river Forth, importing either death or demembration, can be executed in less than thirty days; and, if north of it, in less than forty days, after the date of the sentence. But corporal punishments, less than death, or dismembering, e. g. whipping, pillory, &c., may be inflicted eight days after sentence beyond it.

Extinction or remission of crimes.—Crimes are extinguished (1.) By the death of the criminal; both because a dead person can make no defence, so that his trial would be truly a judging upon the hearing of one side; and because, though his guilt should be ever so notorious, he is, after death, carried beyond the reach of human penalties. Such trials, therefore, can have no effect, but to punish the innocent heir, contrary to that most equitable rule, culpa tenet suos auctores.

(2.) Crimes may be extinguished by a remission from the sovereign. But a remission, though it secures the delinquent from the public resentment, the exercise of which belongs to the crown, cannot cut off the party injured from his claim of damages, over which the crown has no prerogative. Whoever, therefore, founds on a remission, is liable in damages to the private prosecutor, in the same manner as if he had been tried and found guilty. Even general acts of indemnity passed by parliament, though they secure against such penalties as the law inflicts upon the criminal merely per modum pœnæ, yet do not against the payment of any pecuniary fine that is given by the statute to the party injured, nor against the demand of any claim competent to him in name of damages.

Less injuries, which cannot be properly said to affect the public peace, may be extinguished, either by the private party's expressly forgiving him, or by his being reconciled to the offender after receiving the injury. Hence arises the rule, dissimulatione tollitur injuria. But, where the offence is of a higher nature, the party injured, though he may pass from the prosecution, in so far as his private interest is concerned, cannot preclude the king's advocate, or procurator fiscal, from insisting ad vindictam publicam.

Crimes are also extinguished by prescription, which operates by the mere lapse of time, without any act either of the sovereign or of the private sufferer. Crimes prescribe in twenty years; but, in particular crimes, the prescription is limited by statute to a shorter time. No person can be prosecuted, upon the act against wrongous imprisonment, after three years. High treason, committed within his majesty's dominions, suffers likewise a triennial prescription, if indictment be not found against the traitor within that time. All actions, brought upon any penal statute made or to be made, where the penalty is appropriated to the crown, expire in two years after committing the offence; and, where the penalty goes to the crown or other prosecutor, the prosecutor must sue within one year, and the crown within two years after the year ended. Certain crimes are, without the aid of any statute, extinguished, by a shorter prescription than twenty years. By our old law, in the cases of rape, robbery, and hamesucken, the party injured was not heard after a silence of twenty-four hours; from a presumption that persons could not be so grossly injured without immediately complaining: And it is probable that a prosecution for these crimes, if delayed for any considerable time, would be cast

even at this day, or at least the punishment restricted. Less injuries suffer also a short prescription; law presuming forgiveness, from the nature of the offence, and the silence of the party. The particular space of time sufficient to establish this presumption, must be determined by the judge, according to circumstances.

PART IV.

THE LAW OF IRELAND.

Chap. I.—Of the Law before the Union.

Ireland, until the last reign, constituted a distinct, though a dependent and subordinate kingdom. It was entitled the dominion, or lordship of Ireland, and the king's style was, 'lord of Ireland,' till the 33d year of Henry VIII. when he assumed the title of king, which is recognised by act of parliament, 35 Henry VIII. c. 3.

Scotland and England, though now one and the same kingdom, yet differ in their municipal laws. But England and Ireland, although so recently distinct kingdoms, yet in general agree in their laws.

On the conquest of Ireland by Henry II. the laws of England were received and sworn to by the Irish nation, assembled at the council of Lismore. At the time of this conquest the Irish were governed by what they called the Brehon law, so styled from the Irish name of judges, who were denominated Brehons. But king John, in the twelfth year of his reign, went into Ireland, and carried over with him many sages of the law, and there, by his letters patent in right of the dominion of conquest, is said to have ordained and established, that Ireland should be governed by the laws of England: which letters patent Sir Edward Coke apprehends to have been there confirmed in parliament. But to this ordinance many of the Irish were averse to conform, and still stuck to their Brehon law: so that both Henry III. and Edward I. were obliged to renew the injunction; and at length, in a parliament holden at Kilkenny, 40 Edw. III., under Lionel, duke of Clarence, the then lieutenant of Ireland, the Brehon law was formally abolished, it being unanimously declared to be indeed no law, but a lewd custom crept in of later times. And yet, even in the reign of queen Elizabeth, the wild natives still kept and preserved their Brehon law; which is described to have been 'a rule of right unwritten, but delivered by tradition from one to another, in which oftentimes there appeared great show of equity in determining the right between party and party, but in many things repugnant quite both to God's law, and man's.' The latter part of this character is alone ascribed to it, by the laws before cited of Edward I. and his grandson. But as Ireland was a distinct dominion, and had parliaments of its own, it is to be observed, that though the immemorial customs, or common law of England, were made the rule of justice in Ireland also, yet no acts of the English parliament, since the 12th of king John, extended into that kingdom; unless they were specially named, or included under general words, such as, 'within any of the king's dominions.' And this is particularly expressed, and the reason given in the year books: 'a tax granted by the parliament of England shall not bind those of Ireland, because they are not summoned to our parliament;' and again, 'Ireland hath a parliament of its own, and maketh and altereth laws; and our statutes do not bind them, because they do not send knights to our parliament: but their persons are the king's subjects, like as the inhabitants of Calais, Gascoigny, and Guienne, while they continued under the king's subjection.' The general run of laws, enacted by the superior state, are supposed to be calculated for its own internal government, and do not extend to its distant dependent countries; which, bearing no part in the legislature, are not therefore in its ordinary and daily contemplation. But when the sovereign legislative power sees it necessary to extend its care to any of its subordinate dominions, and mentions them expressly by name, or includes them under general words, there can be no doubt but then they are bound by its laws.

The Irish nation, being formerly excluded from the benefit of the English statutes, were deprived of many excellent improvements of the common law: and, the measure of justice in both kingdoms becoming thence no longer uniform, it was enacted, that all acts of parliament, before made in England, should be of force within the realm of Ireland. But, by the same rule that no laws made in England were anciently binding in Ireland, it followed that no acts of the English parliament since the 10 Henry VII. bound the people of Ireland, unless specially named or included under general words. On the other hand, it was equally clear that where Ireland was particularly named, or included under general words, they were bound by such acts of parliament.

By a subsequent statute, 6 Geo. I. c. 5, it is declared, that the kingdom of Ireland ought to be subordinate to, and dependent upon, the imperial crown of Great Britain, as being inseparably united thereto; and that the king's majesty, with the consent of the lords and commons of Great Britain in parliament, assembled, has power to make laws to bind the people of Ireland. Thus we see how extensively the laws of Ireland communicate with those of England; and indeed such communication is highly necessary, as the ultimate resort from the courts of justice in Ireland is, as in Wales, to those in England; a writ of error (in the nature of an appeal) lying from the king's bench in England, as the appeal from the chancery in Ireland lies immediately to the house of lords here; it being expressly declared, by the same statute, 6 Geo. I. c. 5, that the peers of Ireland have no jurisdiction to affirm or reverse any judgments or decrees whatsoever. The propriety, and even necessity, in all inferior dominions, of this constitution, 'that, though justice be in general administered by courts of their own, yet the appeal in the last resort ought to be to the courts of the superior state,' is founded upon these two reasons, 1. Because otherwise the law, appointed or permitted to such inferior dominions, might be insensibly changed within itself without the assent of the superior. 2. Because otherwise judgments might

be given to the disadvantage or diminution of the superiority; or to make the dependence to be only on the person of the king, and not on the crown of England.

But this act of 6 Geo. I. c. 5 was afterwards repealed in the British parliament by the statute 22 Geo. III. c. 53. The former act, however, being considered as merely declaratory of the previous law, the repeal produced no other effect than to make the law somewhat less clear than the declaratory act had made it. Afterwards, by the 23 Geo. III. c. 28, it was declared that the people of Ireland should in all cases whatever be bound only by laws enacted by his majesty and the parliament of that kingdom; and the right claimed by them to have all actions and suits instituted in that kingdom decided in his majesty's courts there finally, and without appeal thence, was established and ascertained, as it was then said, 'for ever.' And it was declared, that such decisions were at no time to be questioned or questionable: and all writs of error and appeals in the English courts were declared to be null and void.

Chap. II.—Of the Law since the Union.

1. *Of the state and united parliament.*—By the articles of the union, 39 and 40 Geo. III., it is declared that the kingdoms of Great Britain and Ireland shall on the 1st day of January, 1801, and for ever after, be united into one kingdom, by the name of the United Kingdom of Great Britain and Ireland; and that the royal style and titles of the imperial crown, and the ensigns, armorial flags, and banners, shall be such as should be appointed by his majesty's royal proclamation. That the succession to the imperial crown shall continue settled in the same manner as the succession to the crown of Great Britain and Ireland stood before limited. That there shall be one parliament, styled the parliament of the united kingdom of Great Britain and Ireland. That four lords spintual of Ireland, by rotation of sessions, namely one of the four archbishops and three of the eighteen bishops, and twenty-eight lords temporal of Ireland, elected for life by the peers of Ireland, shall sit in the house of lords; and 100 commoners, two for each county, two for the city of Dublin, and two for the city of Cork, one for Trinity College, and one for each of the thirty-one most considerable cities, towns, and boroughs, shall be the number to sit in the house of commons on the part of Ireland.

2. *Of peers and commoners.*—*Of peers.*—The act of union also declares, that questions respecting the rotation or election of the spiritual or temporal peers, shall be decided by the house of lords; and in the case of an equality of votes in the election of a temporal peer, the clerk of the parliament shall determine the election by drawing one of the names from a glass. A peer of Ireland, not elected one of the twenty-eight, may sit in the house of commons; but, whilst he continues a member of the house of commons, he shall not be entitled to the privilege of peerage, nor capable of being elected one of the twenty-eight, nor of voting at such election, and he may be sued and indicted for any offence as a commoner. As often as three of the peerages of Ireland, existing at the time of the union, shall become extinct, the king may create one peer of Ireland; and when the peers of Ireland are reduced to 100 by extinction, or otherwise, exclusive of those who shall hold any peerage of Great Britain subsisting at the time of the union, or created of the united kingdom since the union, the king may then create one peer of Ireland for every peerage that becomes extinct, or as often as any one of them is created a peer of the united kingdom; so that the king may always keep up the number of 100 Irish peers, over and above those who have an hereditary seat in the house of lords.

The lords of parliament on the part of Ireland, spiritual and temporal, sitting in the house of lords, have the same rights and privileges respectively as the peers of Great Britain; and the lords spiritual and temporal of Ireland have rank and precedency next, and immediately after, all the persons holding peerages of the like order and degree in Great Britain, subsisting at the time of the union; and all peerages thereafter created of Ireland, or of the united kingdom, of the same degree, have precedency according to the dates of their creations; and the peers of Ireland, except those who are members of the house of commons, have all the privileges of peers as fully as the peers of Great Britain; the right and privileges of sitting in the house of lords, and upon the trial of peers, only excepted.

An Irish peer is now entitled to every privilege, except that of sitting in the house of lords; unless he chooses to waive it, in order to sit in the house of commons; and, therefore, Irish peers, who are not members of the house of commons, are entitled to the letters missive from the court of chancery, when a bill is filed against them.

Of the commons.—Questions respecting the election of the members of the house of commons returned for Ireland are to be tried in the same manner as questions respecting the elections for places in Great Britain, subject to such particular regulations as the parliament afterwards shall deem expedient. The qualifications by property of the representatives in Ireland are declared the same respectively as those for counties, cities, and boroughs in England, unless some other provision be afterwards made. And it was declared that, until an act should be passed in the parliament of the united kingdom, providing in what cases persons, holding offices and places of profit under the crown of Ireland, should be incapable of sitting in the house of commons, not more than twenty such persons should be capable of sitting; and, if more than twenty such persons should be returned from Ireland, then the seats of those above twenty should be vacated who have last accepted their offices or places.

The following are the cities, towns, and boroughs, which are entitled each to send one representative to sit in the house of commons. These are exclusive of the several counties, as well as of the cities of Dublin and Cork, and of Trinity College:—

1. Armagh.
2. Athlone.
3. Bandonbridge.
4. Belfast.
5. Carrickfergus.
6. Cashel.
7. Catherlough.
8. Clonmel.
9. Coleraine.
10. Downpatrick.
11. Drogheda.
12. Dundalk.
13. Dungannon.
14. Dungarvon.
15. Ennis.
16. Enniskillen.
17. Galway.
18. Kilkenny.
19. Kinsale.
20. Limerick
21. Lisburn.
22. Londonderry.
23. Mallow.
24. New Ross.
25. Newry.
26. Portarlington.
27. Sligo.
28. Tralee.
29. Waterford.
30. Wexford.
31. Youghall.

3. *Of Protestants and Roman Catholics.*—The churches of England and Ireland are declared by the union to be united in one Protestant episcopal church, to be called the united church of England and Ireland, according to the doctrine, worship, discipline, and government of the church of England.

The laws, so far as regard the Protestant church, have been stated in the former parts of this article, and need not here be repeated.

Though the laws relating to Roman Catholics apply to all parts of the united kingdom, yet we deem it appropriate to introduce them in this place, on account of their general relation and great importance to the people of Ireland.

Of the Roman Catholic Clergy, and their church observances.—The Roman Catholic clergy, notwithstanding the removal of many disabilities, are still prohibited from officiating in any place of worship having a steeple and a bell. An exception in this respect, however, has been made in favor of places of worship in Ireland. Neither can they wear the habit of their order, except in places allowed by the statute (43 Geo. III.) or in a private house, where there are not more than five persons, besides the family. A Catholic priest cannot teach in an endowed school, nor can he receive into his school the child of any Protestant parent.

No Roman Catholic can found any religious order or society bound by monastic vows, or any school or college. All uses, trusts, and dispositions of property remain still unlawful.

Formerly the Catholics in Ireland were not allowed to bury their dead in any suppressed monastery or convent, nor to bury in the burial grounds of the established churches, unless the Protestant service was celebrated by a minister of the established church. But these restrictions are now removed (5 Geo. IV. c. 25), and Catholics may be buried in suppressed religious houses, or in Protestant church-yards, according to the Catholic ceremonial.

Catholics, having taken the oaths prescribed by the statutes 31 and 43 Geo. III., are not liable to prosecution for attending or performing mass, or other ceremonies of the church of Rome. But the place must be certified to the sessions, and the minister's name registered. The Catholic clergy are exempted from serving on juries and parochial offices.

Of the Roman Catholic laity.—Roman Catholics, who are nominated to parochial offices, are may execute them by deputy. They may hold certain offices upon taking the oath, and making the declaration prescribed by the act.

The king may grant them commissions in the army, navy, and marines. They are also eligible, upon taking the oaths of allegiance only, to the offices of commissioners of customs, excise, stamps, taxes, or any other office in the revenue, or under the post-master-general.

But they are, in strictness, disqualified from voting for members of parliament; for the oath of supremacy may be tendered, although such is not the practice, and in Ireland they are considered as eligible to vote. No Catholic, however, can sit in either house of parliament, because the oath of supremacy and declaration against popery, must be made by every member before taking his seat.

4. *Of trade and navigation.*—The subjects of Great Britain and Ireland are declared by the act of union to be equally entitled to the same privileges with regard to trade and navigation, and also in respect of all treaties with foreign powers. It was also enacted, that all prohibitions and bounties upon the exportation of merchandise, the growth, produce, or manufacture, of either country to the other shall cease. But that the importation of certain articles therein enumerated shall be subject to such countervailing duties as are specified in the act.

For twenty years from the union, i. e. until 1st of January, 1821, certain manufactured articles, viz. apparel, cabinet-ware, pottery, sadlery, &c., were subjected to a duty of £10 per cent. Salt, hops, coals, calicoes, and muslins, &c., to certain duties specified. Articles, the growth, produce, or manufacture of either country, subject to internal duty, or to duty on the materials of which they are composed, are made subject, by certain schedules in the acts, to the countervailing duties there specified. And it is provided that all articles subject to such internal duty, shall from time to time be subjected on their importation into each country respectively, from the other, to such duty as shall be sufficient to countervail such internal duty in the country from which they are exported; and that, upon the export of the like articles from one country to the other, a drawback shall be given equal in amount to the countervailing duty payable on such articles, if they had been imported into the country whence they are exported. All articles, the growth, produce, or manufacture of either country, when exported through the other, are made subject to the like charges, as on exportation directly from their own country.

All duty on the import of foreign or colonial articles into either country, shall, on their export to the other, be drawn back; and this is confirmed by 59 Geo. III. c. 52, § 8, and c. 83, § 9.

By statutes 55 Geo. III. c. 83, 59 Geo. III. c. 52, and 83, foreign or colonial goods, imported into Great Britain or Ireland from each other, shall pay such duties as on their first importation, according as they were imported either by British or foreign ships, or directly or not directly from the place of their growth; and for this purpose the clearances on the exportation

of such goods from either country to the other, shall state whether the original importation into the exporting country was a British or foreign vessel, or directly from the place of growth or not; the purpose of these acts is to prevent the evasion of the higher duties payable on the original importation, if made in foreign vessels, &c.

Corn, meal, malt, flour, and biscuit, are exempted from the operation of the union acts, so that all these, except malt, were declared free between Great Britain and Ireland, under 46 Geo. III. c. 97. The intercourse of malt between the two countries is regulated by statute 50 Geo. III. c. 34, 53, and the countervailing duties are ascertained by the several acts imposing the internal duties.

In 1823 several alterations were made under the authority of parliament for facilitating the repeal of the countervailing duties, and placing the commerce between the two countries on the footing of the coasting trade.

5. *Of taxation.*—The sinking funds, and the interest of the national debt of each country, according to the union acts, are to be defrayed by each separately. And, for the space of twenty years after the union, the contribution of Great Britain and Ireland towards the public expenditure in each year was directed to be in the proportion of fifteen to two, subject to future regulations.

Under the 56 Geo. III., c. 98, amended by 57 Geo. III., c. 48, one general consolidated fund of the united kingdom has been established, charged indiscriminately, whether in the exchequer of Great Britain or Ireland, with the whole of the interest and sinking funds of the national debts of Great Britain and Ireland, as one joint consolidated national debt, interest and sinking fund; with all other charges on the former separate consolidated funds; and, subject to such charges, to be indiscriminately applied to the service of the united kingdom.

Regulations are made for the issue of money out of the Irish exchequer, under warrant of the lord-lieutenant of Ireland, and the issues out of the treasury of Great Britain, from the growing produce of the consolidated fund; and the balance of joint contributions between Great Britain and Ireland are declared to be cancelled.

6. *Of the administration of justice.*—By the statute of union it is also enacted that all the laws and courts of each kingdom shall remain the same as they were then established, subject to such alterations by the united parliament as circumstances may require; but that all writs of error and appeals shall be decided by the house of lords of the united kingdom, except appeals from the court of admiralty in Ireland, which shall be decided by a court of delegates appointed by the court of chancery in Ireland.

7. *Apprehension of criminals in one country for offences committed in the other.*—By 44 Geo. III., c. 92, persons against whom warrants have been issued in Ireland, who shall escape to, or be in, England or Scotland, or where persons shall escape from England or Scotland to Ireland, any justice of the peace, of the place where such person shall escape to, shall indorse the warrant, and the person charged may be apprehended where such warrant is indorsed, and carried into England, Scotland, or Ireland, as the case may require, to be proceeded against according to law.

In offences not bailable, the original warrant shall be indorsed, according to 45 Geo. III. c 92.

If bailable, the party shall be bailed in the place where he is apprehended, by duplicate bonds, one to be transmitted to the proper officer of the place where the warrant was issued, and the other to the court of exchequer in the country where the party is bailed; and the penalty may be levied in the county where the bond is taken, on certificate of the breach thereof to the exchequer there.

Witnesses may be served in England with subpœnas, to compel appearance in Ireland in criminal prosecutions, and may be served in Ireland to compel appearance in England, 45 Geo. III., c. 92, sect. 3, 4. And by the 54 Geo. III., c. 186, sect. 2, 3, it is provided that warrants signed in England, Scotland, or Ireland, may be indorsed and acted upon in any part of the united kingdom, in the same manner as directed by 13 Geo. III., c. 31, as to warrants in England and Scotland; and judges in Ireland may indorse Scotch letters of second deliverance, for compelling attendance in Scotland of witnesses, in criminal cases, resident in Ireland.

ADDENDA.

Of Islands subject to the Laws of the United Kingdom.

There are several adjacent islands which are subject to the crown of the united kingdom. Some of them, viz. the Isles of Wight, of Portland, of Thanet, &c., are comprised within some neighbouring county, and are therefore to be looked upon as annexed to the mother Island, and part of the kingdom of England. But there are others which require a more particular consideration.

The Isle of Man is a distinct territory from England, and is not governed by our laws: neither does any act of parliament extend to it, unless it be particularly named therein, and then an act of parliament is binding there. It was formerly subject to the kings of Norway. Afterwards to England, under John and Henry III. Subsequently to Scotland, and again to England. Henry IV., by right of conquest, disposed of it to the earl of Northumberland. Several changes of dominion occurred until the year 1735, when the duke of Athol succeeded to the title, as heir of earl Derby. Though the title of king had been long abolished, the lords of the island had the power of making laws; and no process from England was available, until the year 1765, when the property in the island was purchased by the British government. It retains, however, its peculiar laws, except those of the revenue.

The islands of Jersey, Guernsey, Sark, Alderney, and their appendages, are also governed by their own laws. The king's writ, or process from the courts of Westminster, is there of no force; but his commission is. They are not bound by common acts of our parlia-

ment, unless particularly named. All causes are originally determined by their own officers, the bailiffs and jurats of the islands; but an appeal lies from them to the king in council, in the last resort.

For the law relating to the plantations and colonies in America, and the East and West Indies see PLANTATIONS and WEST INDIES.

LAW LANGUAGE.

All law proceedings in England were formerly written, as indeed all public proceedings were, in Norman or law French, and even the arguments of the counsel and the decisions of the court were in the same barbarous dialect: an evident and shameful badge, it must be owned, of tyranny and foreign servitude; being introduced under the auspices of William the Norman, and his sons; whereby the ironical observation of the Roman satirist came to be literally verified; that Gallia causidicos docuit facunda Britannos. This continued till the reign of Edward III.; who, having employed his arms successfully in subduing the crown of France, thought it unbeseeming the dignity of the victors to use any longer the language of a vanquished country. By a statute therefore passed in the thirty-sixth year of his reign, it was enacted, that for the future all pleas should be pleaded, shown, defended, answered, debated, and judged in the English tongue; but be entered and enrolled in Latin. In like manner as don Alonso X., king of Castile (the great-grand-father of our Edward III.) obliged his subjects to use the Castilian tongue in all legal proceedings; and as in 1286 the German language was established in the courts of the empire. And perhaps if our legislature had then directed that the writs themselves, which are mandates from the king to his subjects to perform certain acts or to appear at certain places, should have been framed in the English language according to the rule of our ancient law, it had not been very improper. But the record or enrollment of those writs, and the proceedings thereon, which was calculated for the benefit of posterity, was more serviceable (because more durable) in a dead and immutable language than in any flux or living one. The practisers, however, being used to the Norman language, and therefore imagining they could express their thoughts more aptly and more concisely in that than in any other, still continued to take their notes in law French; and of course when these notes came to be published under the denomination of reports, they were printed in that barbarous dialect; which, joined to the additional terrors of a Gothic black letter, has occasioned many a student to throw away his Plowden and Littleton without venturing to attack a page of them. And yet in reality, upon a nearer acquaintance, they would have found nothing very formidable in the language, which differs in its grammar and orthography as much from the modern French, as the diction of Chaucer and Gower does from that of Addison and Pope. Besides, as the English and Norman languages were concurrently used by our ancestors for several centuries together, the two idoms have naturally assimilated, and mutually borrowed from each other; for which reason the grammatical construction of each is so very much the same, that an Englishman (with a weeks' preparation) would understand the laws collected in their grand coustumier as well, if not better, than a Frenchman bred within the walls of Paris.

The Latin which succeeded the French for the entry and enrollment of pleas, and which continued in use for four centuries, answers so nearly to the English (oftentimes word for word) that it is not at all surprising that it should generally be imagined to be totally fabricated at home, with little more art or trouble than by adding Roman terminations to English words Whereas in reality it is a very universal dialect, spread throughout all Europe at the irruption of the northern nations, and particularly accommodated and moulded to answer all the purposes of the lawyers with a peculiar exactness and precision. This is principally owing to the simplicity, or (if the reader pleases) the poverty and baldness of its texture, calculated to express the ideas of mankind just as they arise in the human mind, without any rhetorical flourishes, or perplexed ornaments of style; for it may be observed, that those laws and ordinances, of public as well as private communities, are generally the most easily understood, where strength and perspicuity, not harmony or elegance of expression, have been principally consulted in compiling them. These northern nations, or rather their legislators, though they resolved to make use of the Latin tongue in promulging their laws, as being more durable and more generally known to their conquered subjects than their own Teutonic dialects, yet (either through choice or necessity) have frequently intermixed therein some words of a Gothic original; which is more or less the case in every country of Europe, and therefore not to be imputed as any peculiar blemish in our English legal Latinity. The truth is, what is generally denominated law Latin is in reality a mere technical language, calculated for eternal duration, and easy to be comprehended both in present and future times; and on those accounts best suited to preserve those memorials which are intended for perpetual rules of action. The rude pyramids of Egypt have endured from the earliest ages, while the more modern and more elegant structures of Attica, Rome, and Palmyra have sunk beneath the stroke of time.

As to the objection of locking up the law in a strange and unknown tongue, this is of little weight with regard to records, which few have occasion to read, but such as do, or ought to, understand the rudiments of Latin.

It was once observed by the late lord Ellenborough (certainly a very high authority, for he possessed a masculine intellect and great learning) that it was to be lamented, as a consequence of the statute for rendering the proceedings at law into English, that the literature of the inferior part of the profession (by which he meant the attorneys as compared with the barristers) had receded since that time. It is however somewhat questionable whether the knowledge of sufficient Latin to understand the language of

the old law proceedings could be a very decisive test of literature. Especially when it is recollected that the pleadings were formerly transcribed by the officers of the court, and not by the attorney, and in cases which varied from the ordinary routine the forms might be and probably were prepared (as they are now) by sergeants and counsel, or by special pleaders, and therefore but a scanty portion of legal learning would enable an attorney to pass through the customary practice of the profession. Besides, as Blackstone himself says, it may be observed of the law Latin, as the very ingenious Sir John Davis observes of the law French, 'that it is so very easy to be learned, that the meanest wit that ever came to the study of the law doth come to understand it almost perfectly in ten days without a reader.'

It is true indeed that the many terms of art, with which the law abounds, are sufficiently harsh when Latinised (yet not more so than those of other sciences), and may, as Mr. Selden observes, give offence 'to some grammarians of squeamish stomachs, who would rather choose to live in ignorance of things the most useful and important, than to have their delicate ears wounded by the use of a word, unknown to Cicero, Sallust, or the other writers of the Augustan age.' Yet this is no more than must unavoidedly happen when things of modern use, of which the Romans had no idea, and consequently no phrases to express them, come to be delivered in the Latin tongue. It would puzzle the most classical scholar to find an appellation, in his pure Latinity, for a constable, a record, or a deed of feoffment: it is therefore to be imputed as much to necessity, as ignorance, that they were styled in our forensic dialect constabularius, recordum, and feoffamentum. Thus again, another uncouth word of our ancient laws (for it is unnecessary to defend the ridiculous barbarisms sometimes introduced by the ignorance of modern practisers) the substantive murdrum or the verb murdrare, however harsh and unclassical it may seem, was necessarily framed to express a particular offence; since no other word in being, occidere, interficere, necare, or the like, was sufficient to express the intention of the criminal, or quo animo the act was perpetrated; and therefore by no means came up to the notion of murder at present entertained by our law; viz. a killing with malice aforethought.

A similar necessity to this produced a similar effect at Byzantium, when the Roman laws were turned into Greek for the use of the oriental empire. They studied more the exact and precise import of the words, than the neatness and delicacy of their cadence. And it may be suggested that the terms of the law are not more numerous, more uncouth, or more difficult to be explained by a teacher, than those of logic, physics, and the whole circle of Aristotle's philosophy, nay even of the politer arts of architecture and its kindred studies, or the science of rhetoric itself. Sir Thomas More's famous legal question contains in it nothing more difficult, than the definition which in his time the philosophers currently gave of their materia prima, the ground work of all natural knowledge; that it is, neque quid, neque quantum, neque quale, neque aliquid eorum quibus ens determinatur; or its subsequent explanation by Adrian Heereboord, who assure us that materia prima non est corpus, neque per formam corporeitatis, neque per simplicem essentiam: est tamen ens, et quidem substantia, licet incompleta; habetque actum ex se entitativum, et simul est potentia subjectiva. The law therefore, with regard to its technical phrases, stands upon the same footing with other studies, and requests only the same indulgence.

This technical Latin continued in use from the time of its first introduction till the subversion of our ancient constitution under Cromwell; when, among many other innovations in the law, some for the better and some for the worse, the language of our records was altered and turned into English. But, at the Restoration of king Charles, this novelty was no longer countenanced; the practisers finding it very difficult to express themselves so concisely or significantly in any other language as the Latin. And thus it continued without any sensible inconvenience till about the year 1730, when it was again thought proper that the proceedings at law should be done into English, and it was accordingly so ordered by statute 4 Geo. II. c. 26.

This provision was made, according to the preamble of the statute, that the common people might have knowledge and understanding of what was alledged or done for and against them in the process and pleadings, the judgment and entries in a cause. Which purpose Blackstone apprehends has not been answered; being apt, he says, to suspect that the people are now, after so many years experience, altogether as ignorant in matters of law as before. It may be observed, however, that the time at which the commentaries were written was too near the period of the change, fully to appreciate the general advantages which in the process of time might be expected to result from so apparently rational a course as that of using our native language in the forms of administering justice.

We cannot indeed by any means subscribe to the opinion of the learned commentator, that the *inconveniences* which have arisen from conducting the law proceedings in English are of a very formidable nature. 'It may be true,' as he says, 'that many clerks and attorneys are hardly able to read, much less to understand a record even of so modern a date as the reign of George I.' The fact is that scarcely any member of the profession ever has occasion either to read or understand such records, and when we are reminded by Blackstone himself that 'the meanest wit can understand it almost perfectly in ten days,' we need not wonder that the acquisition of it is deferred until it is really wanted, which it is at least a thousand to one will never be the case No doubt there were inconveniences which followed this change, and which follow almost every one; but which every year diminishes in an increased proportion. It is now very nearly a century since the change took place, and the records of the courts in the reign of George I. are as little required now, as in his day were required those of Charles I.

Another objection of a more serious nature, if it were well founded, is 'that it has much enhanced the expense of legal proceedings: for since the practicers are confined (for the sake of the stamp duties, which are thereby considerably increased) to write only a stated number of words in a sheet; and as the English language, through the multitude of its particles, is much more verbose than the Latin, it follows that the number of sheets must be very much augmented by the change.' The most considerable part of the expense, on which this objection is founded, is now removed by the repeal of the stamp duties upon law proceedings, which were forty years ago pointed out and reprehended by Mr. Bentham as an unwarrantable tax upon justice. It is true that some part of the difference of expense between writing in English and in Latin still remains, inasmuch as the charges of the practitioner are governed by the extent of the written proceedings at so much per folio of seventy-two words; yet we think no Englishman would ever think of complaining that it cost him something more to have the pleadings, which involved perhaps his highest interests, written in his native tongue, than might have happened had they been expressed in a dead language, which would occupy at least ten days tolerably to learn!

It is true that the translation of technical phrases and the names of writs and other process were found to be so very ridiculous (a writ of nisi prius, quare impedit, fieri facias, habeas corpus, and the rest, not being capable, it was thought, of an English dress with any degree of seriousness) that in two years' time a new act was obliged to be made, 6 Geo. II. c. 14, which allows all technical words to continue in the usual language, and has thereby, as Sir W. Blackstone contends, defeated every purpose of the former statute.

The attempt to translate these technical names literally was no doubt absurd, but we cannot admit that the object of the writs enumerated, or any other, could not have been briefly designated in the English language. If, however, it be impossible to do so, it is surely a matter of no great difficulty to learn the signification of the Latin term; and at all events it cannot be truly said that 'every purpose' of the statute has been defeated, when we have the proceedings themselves in English, although the technical name of some of them remains in its ancient state. That the people continue as ignorant of matters of law as before, notwithstanding the alteration, cannot be entirely correct; for they had formerly the two difficulties, of barbarous language and technical phraseology to contend with—they have now only the latter; which it may be expected will at length also yield to the influence of reasonable improvement.

But it is justly observed by Sir W. Blackstone that, although our English Justinian obtained a victory over the French language, in our courts of justice there was one mischief too deeply rooted, and which king Edward came too late to eradicate. Instead of the plain and easy method of determining suits in the county courts, the chicanery and subtleties of Norman jurisprudence had taken possession of the king's courts to which every cause of consequence was drawn. Indeed that age, and those immediately succeeding it, were the era of refinement and subtlety. There is an active principle in the human soul, that will ever be exerting its faculties to the utmost stretch, in whatever employment, by the accidents of time and place, the general plan of education, or the customs and manners of the age and country, it may happen to find itself engaged. The northern conquerors of Europe were then emerging from the grossest ignorance in point of literature; and those who had leisure to cultivate its progress were such only as were cloistered in monasteries, the rest being all soldiers or peasants. And, unfortunately, the first rudiments of science which they imbibed were those of Aristotle's Philosophy, conveyed through the medium of his Arabian commentators; which were brought from the east by the Saracens into Palestine and Spain, and translated into barbarous Latin. So that, although the materials upon which they were naturally employed, in the infancy of a rising state, were those of the noblest kind; the establishment of religion, and the regulations of civil polity; yet, having only such tools to work with, their execution was trifling and flimsy. Both the divinity and the law of those times were, therefore, frittered into logical distinctions and drawn out in metaphysical subtleties most amazingly artificial; but which serves no other purpose than to show the vast powers of the human intellect, however vainly or preposterously employed. Hence law in particular, which (being intended for universal reception) ought to be a plain rule of action, became a science of the greatest intricacy, especially when blended with the new refinements engrafted upon feudal property: which refinements were from time to time gradually introduced by the Norman practitioners, with a view to supersede (as they did in a great measure) the more homely, but more intelligible, maxims of distributive justice among the Saxons. And, to say the truth, these scholastic reformers have transmitted their dialect and finesse to posterity, so interwoven in the body of our legal polity, that they cannot easily be taken out without injury to the substance. Statute after statute has in later times been made to pare off these troublesome excrescences, and restore the common law to its pristine simplicity and vigor, and the endeavour has greatly succeeded; but still the scars are deep and visible; and the liberality of our modern courts of justice is frequently obliged to have recourse to unaccountable fictions and circuities in order to recover that equitable and substantial justice, which for a long time was totally buried under the narrow rules and fanciful niceties of metaphysical and Norman jurisprudence.

LAWS RESPECTING GAME.

Referring to the article GAME for an account of the property in animals included under this denomination, and for the reasons on which the statutes are founded, and their origin in the feudal policy, we may, in the language of Sir William Blackstone, in treating of the alterations in these laws, and mentioning franchises granted of chase and free warren, as well to preserve the breed of

animals, as to indulge the subject, observe, that though the forest laws are now mitigated, and by degrees grown entirely obsolete; yet from this root has sprung a bastard slip, known by the name of the game law, now arrived to and wantoning in its highest vigor; both founded upon the same unreasonable notion of permanent property in wild creatures; and both productive of the same tyranny to the commons; but with this difference, that whilst the forest laws established one mighty hunter throughout the land—the game laws have raised a little Nimrod in every manor. And in one respect the ancient law was much less unreasonable than the modern; for the king's grantee of a chase or free warren might kill game in every part of his franchise; but now, though a freeholder of less than £100 a year is forbidden to kill a partridge upon his own estate, yet nobody else (not even the lord of the manor, unless he has a grant of free warren) can do it without committing a trespass and subjecting himself to an action.

Under the article GAME, already referred to, will be found a statement of the law, upon the old principles of the forest law, as to destroying beasts and fowls ranked under the denomination of game. By that law all persons are alike treated as trespassers and offenders who have not authority from the crown to kill game (which is royal property) by the grant of either a free warren, or who have not at least a manor of their own.

Besides the old remedies against trespassers, the laws called the game laws have also inflicted additional punishments, which are chiefly pecuniary, on persons guilty of this general offence, unless they should be people of such rank or fortune as therein specified.

For unqualified persons transgressing the law by killing game, keeping engines for that purpose, or having game in their custody; or for persons, however qualified, that kill game, or have it in possession at unseasonable times of the year, or unseasonable hours of the day or night, on Sundays or on Christmas days, or selling or exposing it to sale, there are various penalties assigned, corporal and pecuniary, by different statutes; on any of which, but only on one at a time, the justices may convict, or in most of them prosecutions may be carried on at the assizes. The substance of these statutes will be stated under their appropriate heads.

1. *Of killing deer, hares, and other game.*—It is declared felony by the 7 and 8 Geo, IV. c. 29, to course, hunt, snare, carry away, kill, or wound, or attempt to kill or wound, any deer kept in the enclosed part of any forest, chase, or purlieu, or any enclosed land where deer are usually kept. The offender is liable to transportation for seven years, or imprisonment for two years either with or without whipping. If the offence be committed on the unenclosed part of a forest, chase, or purlieu, a penalty of £50 may be inflicted, and for the second offence the same punishment as above. Setting engines for taking deer, or pulling down any fence or bank enclosing land where deer are kept, renders the offender liable to a penalty not exceeding £20.

According to 11 Henry VII., c. 13, persons taking pheasants or partridges with engines in another man's ground, without license, are subject to a penalty of £10. Hunting with spaniels, in standing corn, incurs a penalty, by 23 Eliz. c. 10, of 40*s*. Those who kill any pheasant, partridge, duck, heron, hare, or other game, are liable to a forfeiture of 20*s*. for every fowl and hare.

2. *Of the several qualifications for killing game.*—It may be in general sufficient to observe that the qualifications for killing game, as they are usually called, but more properly the exemptions from the penalties inflicted by the laws, are,

As to property.—1. The having a freehold or copyhold estate of £100 per annum; there being fifty times the property required to enable a man to kill a partridge, even on his own land, as to vote for a knight of the shire. 2. A leasehold for ninety-nine years or for life of £150 per annum. An ecclesiastical living is within the act. 3. Being the owner or keeper of a forest, park, chase, or warren. 4. The lord of any manor or royalty. 5. The game-keeper of qualified lords of manors, employed solely to kill game for their use.

As to rank.—Being the son and heir apparent of an esquire (a very loose and vague description), or person of superior degree. It is singular that whilst the son of an esquire is qualified on account of his rank, the father is not qualified unless he possess a sufficient amount of property.

Certificates and deputations.—By the 25 Geo. III. c. 50, and 31 Geo. III. c. 21, every person in Great Britain, the royal family excepted, who shall use any dog, gun, net, or other engine, for the taking or destruction of game (not acting as game-keeper), shall deliver in a paper or account in writing, containing his name and place of abode, to the clerk of the deace, or his deputy, and annually take out a certificate thereof; and every such certificate shall be charged with a stamp duty, amounting in the whole to £3 3*s*. The clerk of the peace is directed by the act annually to deliver to persons requiring the same, duly stamped, a certificate or license according to the form therein mentioned, for which he is entitled to demand 1*s*. for his trouble, and, on refusal or neglect to deliver the same, he is liable to forfeit £20.—Every certificate is to bear date the day when issued, and to continue in force until the 1st of July following.

Any person that shall use any greyhound, hound, pointer, setting-dog, spaniel, or other dog, or any gun, net, or engine, for taking or killing game, without a certificate, is liable to the penalty of £20. The clerks of the peace are to transmit to the stamp office in London alphabetical lists of the certificates granted every year before the 1st of August, under the penalty of £20. These lists are to be kept in the stamp office in London, and there to be inspected on payment of 1*s*. And the commissioners of the stamp duties are, once or oftener in every year, as soon as such lists are transmitted to them, to cause the same to be published in the newspapers circulating in each county, or such public paper as they shall think most pro-

per. Any person in pursuit of game who shall refuse to produce his certificate, or to tell his name and place of abode, or shall give any false or fictitious name or place of abode, to any person requiring the same, who shall have obtained a certificate, is liable to a penalty of £50.

Effect of the certificate.—The certificates are not to authorise persons to kill game at any time prohibited by law, nor to give any person any right to kill game, unless such person shall be qualified so to do by the law, but he shall be liable to the same penalties as if the act (relating to certificates) had not passed. So that though by this act, qualified and unqualified persons are equally included, yet having a certificate does not give an unqualified person a right to kill game. The point of right still stands upon the former acts of parliament. And any unqualified person killing game without a certificate is not only liable to the penalty inflicted by this act, but also to all the former penalties relating to the killing of game, &c.

The deputation of a game-keeper must be registered with the clerk of the peace, and such game-keeper must annually take out a certificate thereof, which certificate is charged with stamp duties amounting in the whole to £1 1*s*.

Game-keepers must also, within the space of twenty days next after their appointment, register their deputations, and take out a certificate thereof, in default of which they are liable, in each instance, to the penalty of £20. If any game-keeper who shall have registered his deputation, and taken out a certificate thereof, shall be changed, and a new game-keeper appointed in his stead, the first certificate is declared null and void, and the person acting under the same, after notice, is liable to the penalty of £20.

Game-keepers have power within the manors for which they are appointed to seize guns, dogs, nets, and engines, kept by unqualified persons to destroy game. But they have no right to use fire arms for the capture of poachers, though they are justified in taking them into custody.

3. *Of selling, purchasing, and possessing game.*—By 1 Jac. I. c. 17, for selling, or buying to sell again, any hare, pheasant, &c., the penalty is 10*s*. each hare, &c.

By the 9 Ann. c. 25, the penalty is increased to £5 against higglers, chapmen, carriers, innkeepers, victuallers, &c., for selling game, or offering the same to sale: and it is adjudged 'an exposing to sale' when any hare or other game is found in a shop, &c.

The 28 Geo. II., c. 12, enacts that persons selling, or exposing to sale, any game, are liable to the penalties inflicted by 5 Ann. c. 14, on higglers, &c., offering game to sale; and game found in the house or possession of a poulterer, salesman, fishmonger, cook, or pastry-cook, is deemed exposing thereof to sale.

According to the 58 Geo. III., c. 75, any person, whether qualified or not, who buys game, is liable to forfeit £5, and, for the discovery of offenders, the penalty is remitted, and they receive the reward from the other party if they inform within six months.

Constables, by 7 Jac. I. c. 11, having a justice of peace's warrant, may search for game and nets in the possession of persons not qualified to kill game or keep nets. Suspected persons, without lawful occasion, found in possession of deer, or any part thereof, or of any snare or engine for taking deer, forfeit on conviction £20.

Under 4 & 5 W. & M. c. 23, the houses of suspected persons may be searched by constables, authorised by a justice of the peace, and, in case any game be found, the offender may be apprehended, and if he do not give a good account before a justice of the peace, how he came by the game, or produce the party of whom he bought it, or a creditable person to prove the sale, he shall forfeit for every article of game a sum not less than 5*s*., nor more than 20*s*., or be committed to the house of correction, not exceeding a month, nor less than ten days, and there be whipped and kept to hard labor.

Higglers, chapmen, innkeepers, victuallers, &c., having in their custody hare, pheasant, partridge, heath-game, &c., except sent by some person qualified to kill game, shall by 5 Ann. c. 14, forfeit for every hare and fowl £5, to be levied by distress and sale of their goods, being proved by one witness before a justice; and for want of distress shall be committed to the house of correction for three months; one moiety of the forfeiture belongs to the informer, and the other to the poor.

4. *Of offences during the night, &c.*—If any person shall take or kill any pheasants or partridges with any net in the night time, they shall by 23 Eliz., c. 10, forfeit 20*s*. for every pheasant, and 10*s*. for every partridge taken. By a subsequent statute the penalty for killing hares during the night is £5, or imprisonment in the house of correction for three months.

By 5 Geo. III., c. 14, persons convicted of entering warrens in the night time, and taking or killing of conies there, or aiding or assisting therein, may be punished by transportation, or by whipping, fine, or imprisonment. Persons convicted on this act are not liable to be convicted under any former act. This act does not extend to the destroying conies in the day-time, on the sea and river banks in the county of Lincoln, &c. No satisfaction is to be made for damages occasioned by entry unless they exceed 1*s*.

It is further enacted, by 10 Geo. III. c. 19, that if any person kill any hare, &c, between sun-setting and sun-rising, or use any guns, &c. for destroying game, he shall for the first offence be imprisoned for any time not exceeding six nor less than three months. If guilty of a second offence, after conviction of a first, to be imprisoned for any time not exceeding twelve months, nor less than six; and shall also, either for the first or any other offence, be once publicly whipped.

By 13 Geo. III., c. 80, persons destroying game, between seven at night and six in the morning, from the 12th of October to the 12th of February, and between nine at night and four in the morning from the 12th of February to the 12th of October, or in the day-time on Sundays or on Christmas day, are liable to a penalty of £20 for the first offence, £30 for the second, and £50

for the third: the amount of which, however, may be mitigated. In default of payment, imprisonment for six or twelve months may be inflicted, besides whipping.

A subsequent statute, 57 Geo. III. c. 97, inflicts the penalty of transportation for seven years, or fine and imprisonment, on persons found with offensive weapons with intent illegally to destroy game or rabbits. The 3d of Geo. IV., c. 114, adds to this hard labor.

By the statute 7 and 8 Geo. IV., c. 29, persons in the night time killing hares or conies in any warren are guilty of a misdemeanor. The same offence in the day-time, or using snares or engines, subjects the offender to a penalty of £5.

Offences during prohibited seasons of the year.—By 7 Jac. I., c. 11, pheasants or partridges are not to be taken between the 1st of July and the last of August, on pain of imprisonment for a month, or the payment of 20*s*. for each pheasant, &c., killed. And by the 9th Ann., c. 25, if any persons shall drive wild fowls with nets, between the 1st of July and the 1st of September, they shall forfeit 5*s*. for every fowl.

The 2d of Geo. III., c. 19, provides against any person taking, killing, buying or selling, or having in his custody any partridge between the 12th of February and the 1st of September, or pheasant between the 1st of February and the 1st of October, or heath-fowl between the 1st of January and the 20th of August, or grouse between the 1st of September and the 25th of July in any year.

Black game, or heath-fowl, is protected under a penalty of £20, from the 10th of December to the 20th of August. Red game, or grouse, has the same protection; and bustards from the 1st of March to the 1st of September. There is an exception by 50 Geo. III., c. 55, as to heath-game in the New Forest, and in Somerset and Devon, which may be taken between the 10th of December and the 1st of September. The eggs of game are also protected by various penalties.

5. *Of legal proceedings and their limitation.*—By the 26th of Geo. II., c. 2, all suits and actions brought by virtue of stat. 8 Geo. I., for the recovery of any pecuniary penalty, or sum of money, for offences committed against any law, for the better preservation of the game, shall be brought before the end of the second term after the offence committed.

Evidence, and recovering penalties.—Witnesses refusing to appear on summonses from justices of the peace, or appearing and refusing to give evidence, are liable to forfeit £10. The certificates obtained under deputations are not to be given in evidence for killing of game by a game-keeper out of the manor in respect of which such deputation or appointment was given or made.

Penalties exceeding £20 are to be recovered in any of his majesty's courts of record at Westminster; and penalties not exceeding £20 are recoverable before two justices, and may be levied by distress. The whole of the penalties go to the informer.

6. *Of the seisure of guns, dogs, and nets.*—If any unqualified person shall keep a gun he shall forfeit £10: and persons being qualified may take guns from those who are not qualified, and break them, 35 Henry VIII. c. 6, and 21 and 22 Car. II. c. 25. One justice of peace, upon examination and proof of the offence, may commit the offender till he has paid the forfeiture of £10. And persons not qualified by law keeping dogs, nets, or other engines to kill game, being convicted thereof before a justice of the peace, shall forfeit £5, or be sent to the house of correction for three months.

If a person hunt upon the ground of another, such other person cannot justify the killing of his dogs, as appears by a case reported in 2 Roll. Abr. 567; but it was otherwise adjudged in Mich. 3 Car. II., in C. B. 2 Cro. 44.

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LAWERS, an eminent engraver, who flourished about the middle of the sixteenth century. He was a native of Flanders, and is said to have studied under Paul Pontius, whose style of engraving he often imitated.

LAWLESS COURT, a famous court held annually at Rochford, in Essex, on Wednesday morning after Michaelmas-day. See ROCHFORD.

LAWN, *n. s.* Fr. *linon.* Fine linen, used in bishop's sleeves.

> Should'st thou bleed,
> To stop the wounds my finest *lawn* I'd tear,
> Wash them with tears, and wipe them with my hair.
> *Prior.*

> What awe did the slow solemn knell inspire;
> The duties by the *lawn* robed prelate payed,
> And the last words, that dust to dust conveyed?
> *Tickel.*

> From high life high characters are drawn,
> A saint in crape is twice a saint in *lawn*. *Pope.*

LAWN, *n. s.* Fr. *lande;* Ital. Span. and barb. Lat. *landa;* Teut. Sax. and Belg. *land.* An open, smooth ground: an open space of ground between woods.

> Betwixt them *lawns*, or level downs and flocks
> Grazing the tender herb, were interposed. *Milton.*

His mountains were shaded with young trees, that gradually shot up into groves, woods, and forests, intermixed with walks, and *lawns*, and gardens. *Addison.*

> Interspersed in *lawns* and opening glades,
> Thin trees arise that shun each other's shades.
> *Pope.*

> Stern beasts in trains that by his truncheon fell,
> Now grisly forms shoot o'er the *lawns* of hell. *Id.*

> A Turkey carpet was his *lawn*,
> Whereon he loved to bound. *Cowper.*

A LAWN is a spacious plain in a park, or adjoining to a noble seat. The dimensions of a lawn, in a large park, should be as extensive as the ground will permit; and never less than fifty acres; but, in gardens of a moderate extent, a lawn of ten acres is sufficient: and, in those of the largest size, fifteen acres. The best situation for a lawn is in the front of the house: and here, if the house front the east, it will be extremely convenient; but the most desirable aspect for a lawn is that of the south-east. Some recommend an exact square, others an oblong square, some an oval, and others a circular figure. The most proper trees are the elm, oak, chestnut, and beech; and some clumps of ever-greens intermixed will add to the beauty of the whole, especially in winter; the best sorts are lord Weymouth's pine, and the silver and spruce firs.

LAWRENCE (French), LL.D., a learned modern civilian, was born at Bristol, where he received his early education, and whence he removed to Winchester and to Corpus Christi College, Oxford. In 1781 he graduated M. A., and in 1787 LL.D. In 1797 he was appointed regius professor of civil law at Oxford, and, through the friendship of Mr. Burke and earl Fitzwilliam, became a member of the legislature. He was one of the executors of Mr. Burke, and a joint editor of his works. He contributed to the probationary odes for the laureatship, and wrote Remarks on the Apocalypse. He was also a writer in the Annual Register. A volume of letters between him and Mr. Burke has recently appeared. He died in 1807 of a decline.

LAWRENCE (sir Thomas), a distinguished English portrait painter, was born at Bristol in 1769. His father was an inn-keeper, and the artist very early exhibited proofs of his talent for the art: he is said to have sketched portraits very successfully in his fifth year. At the age of six he was sent to school, where he remained two years; and this, with the exception of a few lessons subsequently in Latin and French, constituted his whole education. His father would not even permit him to be instructed in drawing, declaring that his genius would be cramped by the restraint of rules. Young Lawrence, however, had access to the galleries of some of the neighboring gentry, in which he employed himself in copying historical and other pieces. In 1782, his father removed to Bath, where his son was much employed in taking portraits in crayon; and, having made a copy of the Transfiguration, by Raphael, the Society of Arts bestowed on him their silver palette, in consequence of its merits. During six years, he was the sole support of his father and a large family. In 1787, the family removed to London, and Lawrence was admitted a student at the Royal Academy. His subsequent career was successful and brilliant. He was elected royal associate in 1791, and, on the death of sir J. Reynolds, the next year, was made painter to the king. His reputation grew steadily, and he was soon considered the first portrait painter of the age in England. His scene from the Tempest was a successful attempt at historical painting; but that branch of the art receives too little encouragement in England, in comparison with that of portrait painting, to induce a successful artist in the latter department to cultivate the former. In 1815, he was knighted by the prince regent, who also employed him to take the likenesses of the sovereigns, and the most distinguished persons of their suite. During their visit to England, he finished the portrait of the king of

Prussia, and went to Aix-la-Chapelle, several years afterwards, to paint Alexander; thence he went to Vienna, where he completed the portraits of the emperor, the archdukes, Metternich, &c., and, in Rome, painted Pius VII. and cardinal Gonsalvi. On his return to England, he was elected president of the Royal Academy, as successor to West. This office he held till his death, which occurred suddenly, January 7, 1830. His portraits are striking likenesses, and display a bold and free pencil; but they are, particularly his later ones, chargeable with mannerism, and are not considered to be successful in expressing the nicer shades of character. In his drawing, there is a want of accuracy and finish. His income, for the last twenty years of his life, was from £10,000 to £20,000; but he died poor, owing to his zeal to possess the first-rate productions of his art, which he purchased at any price. The personal appearance of sir Thomas Lawrence was striking and agreeable. His countenance bore a marked resemblance to that of Canning, and he was always pleased when this resemblance was observed. A look of settled melancholy was always upon his features, and there was a restlessness in his manner that bespoke an unquiet spirit.

LAWRENCE, ST., GULF OF, a gulf which receives the waters of the St. Lawrence, formed between the western part of Newfoundland, the eastern shores of Labrador, the eastern extremity of New Brunswick, part of Nova Scotia, and the island of Cape Breton. It communicates with the Atlantic by three passages,—on the north by the straits of Belleisle, between Labrador and Newfoundland; on the south-east, by the passage between Cape Ray and Newfoundland; and by the gut of Canso, which divides Cape Breton from Nova Scotia. The distance from Cape Rosier to Cape Ray is seventy-nine leagues; from Nova Scotia to Labrador, 106.

LAWSONIA. See ALHEN.

LAX, *adj.* & *n. s.*
LAX'ATIVE, *adj.* & *n. s.*
LAX'ATIVENESS,
LAX'ITY,
LAX'NESS.
Fr. *lache;* Latin *laxus.* Loose; disunited; not closely or strongly combined; slack: hence vague; not legally or morally rigid: as a substantive diarrhœa; looseness of body: laxative is having the power or tendency to remove that habit; a purgative: laxativeness, power of removing costiveness: laxity and laxness, state of being uncompressed; incoherent; not costive; not precise.

LAXAS, a town of New Granada, South America. It was formerly rich, owing to its mines; but its population is now greatly reduced.

LAY, preterite of *lie.* See LIE.

LAY, *v. a.* & *n. s.*
LAY'ER, *n. s.*
Sax. lecgan, legan; Teut. *legan;* Swed. *luga;* Goth. *lega;* Dan. *legge.* To place; deposit; apply; put down; prostrate; dispose: hence to quiet; calm; allay (mentally); dispose of; put into any supposed state or condition; to scheme or contrive; charge or allege; impose; enjoin; exhibit. It is combined with a great number of prepositions and adverbs: but some one of the above original senses seems always to be retained: to lay eggs is to deposit them: a lay is synonymous with a layer, row, or stratum: it also signifies a wager.

How shall this bloody deed be answered?
It will be *laid* to us. *Id. Hamlet.*

For her, my lord,
I dare my life *lay down*, and will do't, Sir. *Shakspeare.*

Embalm me,
And *lay* me *forth;* although unqueened, yet like
A queen, and daughter to a king, inter me. *Id.*

Lay down by those pleasures the fearful and dangerous thunders and lightnings, and then there will be found no comparison. *Raleigh.*

Another ill accident is *laying* of corn with great rains in harvest. *Bacon's Natural History.*

After the egg *layed*, there is no further growth or nourishment from the female. *Id.*

A viol should have a *lay* of wire-strings below, as close to the belly as the lute, and then the strings of guts mounted upon a bridge as in ordinary viols, that the upper strings strucken might make the lower resound. *Bacon.*

Let the main part of the ground employed to gardens or corn be to a common stock: and *laid* in, and stored up, and then delivered out in proportion. *Id.*

There is a cunning, which we in England call the turning of the cat in the paw; which is, when that which a man says to another, he *lays* it as if another had said it to him. *Id.*

Every breast she did with spirit inflame,
Yet still fresh projects *layed* the grey-eyed dame. *Chapman.*

Friends, loud tumults are not *laid*
With half the easiness that they are raised *Ben Jonson.*

Till us death *lay*
To ripe and mellow, we are but stubborn clay. *Donne.*

I have *laid down*, in some measure, the description of the old known world. *Abbot.*

Let no sheep there play,
Nor frisking kids the flowery meadows *lay.* *May.*

The only son of God, upon this very hill is *laid* upon the altar of the cross; and so becomes a true sacrifice for the world. *Bp. Hall.*

Whilst he this, and that, and each man's blow,
Doth eye, defend, and shift, being *laid* to sore;
Backwards he bears. *Daniel's Civil War.*

He that really *lays* these two things to heart, the extreme necessity that he is in, and the small possibility of help, will never come coldly to a work of that concernment. *Duppa.*

I feared I should have found
A tempest in your soul, and came to *lay* it. *Denham.*

Fathers are wont to *lay up* for their sons,
Thou for thy son art bent to *lay out* all. *Milton.*

Soft on the flowery herb I found me *laid.* *Id.*

Thus passed the night so foul, till morning fair
Came forth with pilgrim steps in amice grey,
Who with her radiant finger stilled the roar
Of thunder, chased the clouds, and *laid* the winds. *Id.*

A vessel and provisions *laid* in large
For man and beast. *Id.*

Let us be glad of this, and all our fears
Lay on his providence. *Id. Paradise Regained.*

It is esteemed an even *lay*, whether any man lives ten years longer: I suppose it is the same, that one of any ten might die within one year. *Graunt.*

And *laid about* in fight more busily,
Than the Amazonian dame Penthesile. *Hudibras.*

When we began, in courteous manner, to *lay* his unkindness *unto* him, he, seeing himself confronted

by so many, like a resolute orator, went not to denial, but to justify his cruel falsehood. *Sidney.*

After a tempest, when the winds are *laid*,
The calm sea wonders at the wrecks it made.
Waller.

Darkness, which fairest nymphs disarms,
Defends us ill from Mira's charms;
Mira can *lay* her beauty *by*,
Take no advantage of the eye,
Quit all that Lely's art can take,
And yet a thousand captives make. *Id.*

Tycho Brahe *laid out*, besides his time and industry, much greater sums of money on instruments than any man we ever heard of. *Boyle.*

You see what obligation the profession of Christianity *lays* upon us to holiness of life. *Tillotson.*

Kircher *lays* it *down* as a certain principle, that there never was any people so rude, which did not acknowledge and worship one supreme deity.
Stillingfleet.

The writers of those times *lay* the disgraces and ruins of their country upon the numbers and fierceness of those savage nations that invaded them.
Temple.

The whole was tilled, and the harvest *laid up* in several granaries. *Id.*

I *lay* the deep foundations of a wall,
And Enos, named from me, the city call.
Dryden.

At once the wind was *laid*, the whispering sound
Was dumb, a rising earthquake rocked the ground.
Id.

But since you will be mad, and since you may
Suspect my courage, if I should not *lay*;
The pawn I proffer shall be full as good. *Id.*

While cumbered with my dropping cloaths I *lay*,
The cruel nation covetous of prey,
Stained with my blood the' unhospitable coast.
Id. Æneid.

They *lay* want of invention to his charge; a capital crime. *Id.*

A prince who never disobeyed,
Not when the most severe commands were *laid*,
Nor want, nor exile with his duty weighed.
Dryden.

He took the quiver and the trusty bow
Achates used to bear; the leaders first
He *laid* along, and then the vulgar pierced. *Id.*

Dismiss your rage, and *lay* your weapons *by*,
Know I protect them, and they shall not die. *Id.*

Answer, or answer not, 'tis all the same,
He *lays* me *on*, and makes me bear the blame.
Id.

I have *laid in* for these, by rebating the satire, where justice would allow it, from carrying too sharp an edge. *Id.*

The story of the tragedy is purely fiction: for I take it up where the history has *laid* it *down*. *Id.*

He *laid* down his pipe, and cast his net, which brought him a very great draught. *L'Estrange.*

The husband found no charm to *lay* the devil in a petticoat, but the rattling of a bladder with beans in it. *Id.*

O bird! the delight of gods and of men! and so he *lays* himself *forth* upon the gracefulness of the raven. *Id.*

A dispute, where every little straw is *laid* hold on, and every thing that can but be drawn in any way, to give colour to the argument, is advanced with ostentation. *Locke.*

The pictures drawn in our minds are *laid* in fading colours, and, if not sometimes refreshed, vanish and disappear. *Id.*

If you can get a good tutor, you will never repent the charge; but will always have the satisfaction to think it the money, of all other, the best *laid out*.
Id.

They, who so state a question, do no more but separate and disentangle the parts of it, one from another and *lay* them, when so disentangled, in their due order. *Id.*

A tax *laid* upon land seems hard to the landholder, because it is so much money going out of his pocket. *Id.*

They *lay* the blame on the poor little ones. *Id.*

Retention is the power to revive again in our minds, those ideas which, after imprinting, have disappeared, or have been *laid aside* out of sight.
Id.

Favourable seasons of aptitude and inclination, be heedfully *laid hold of*. *Id.*

We make no excuses for the obstinate: blows are the proper remedies; but blows *laid on* in a way different from the ordinary. *Id. on Education.*

It was a sandy soil, and the way had been run of dust; but an hour or two before a refreshing fragment shower of rain had *laid* the dust. *Ray.*

The chief time of *laying* gilliflowers is in July, when the flowers are gone. *Mortimer's Husbandry.*

Hens will greedily eat the herb which will make them *lay* the better. *Id.*

Upon this they *lay* a *layer* of stone, and upon that a *lay* of wood. *Id.*

A *layer* of rich mould beneath, and about this natural earth to nourish the fibres. *Evelyn.*

Never more shall my torn mind be healed,
Nor taste the gentle comforts of repose!
A dreadful band of gloomy cares surround me,
And *lay* strong siege to my distracted soul.
Philips.

If we *lay* all these things *together*, and consider the parts, rise, and degrees of his sin, we shall find that it was not for nothing. *South.*

In the late successful rebellion, how studiously did they *lay about* them, to cast a slur upon the king!
Id.

A hen mistakes a piece of chalk for an egg, and sits upon it; she is insensible of an increase or diminution in the number of those she *lays*.
Addison.

A Roman soul is bent on higher views,
To civilize the rude unpolished world,
And *lay* it *under* the restraint of laws. *Id.*

Readers, who are in the flower of their youth, should labour at those accomplishments which may set off their persons when the bloom is gone, and to *lay in* timely provisions for manhood and old age.
Id. Guardian.

My father never at a time like this
Would *lay out* his great soul in words, and waste
Such precious moments. *Id. Cato.*

The wars have *laid* whole countries waste.
Addison.

Their office it is to *lay* the business of the nation *before* him. *Id.*

No selfish man will be concerned to *lay out* himself for the good of his country. *Smalridge.*

I shall *lay down* some indisputable marks of this vice, that, whenever we see the tokens, we may conclude the plague is in the house:—let us hear your diagnosticks. *Collier on Pride.*

The terrestrial matter is disposed into strata or *layers*, placed one upon another, in like manner as any earthly sediment, settling down from a flood in great quantity, will naturally be. *Woodward.*

Whilst you *lay* on your friend the favour, acquit him of the debt. *Wycherley.*

For that look which does your people awe,
When in your throne and robes you give 'em law,
Lay it *by* here, and give a gentler smile. *Walker.*
Ambitious conquerors, in their mad career,
Checked by thy voice, *lay down* the sword and spear.
Blackmore's Creation.

There was eagerness on both sides; but this is far from *laying* a blot upon Luther. *Atterbury.*

Till he *lays* his indictment in some certain country, we do not think ourselves bound to answer. *Id.*

He was dangerous, and takes occasion to *lay out* bigotry, and false confidence, in all its colours. *Id.*

If the sinus lie distant, *lay* it open first, and cure that apertion before you divide that in ano. *Wiseman.*

Don Diego and we have *laid* it so, that, before the rope is well about thy neck, he will break in and cut thee down. *Arbuthnot.*

Roscommon first, then Mulgrave rose, like light;
The Stagyrite, and Horace, *laid aside*,
Informed by them, we need no foreign guide.
Granville.

I cannot better satisfy your piety, than by *laying before* you a prospect of your labours. *Wake.*

I must *lay down* this for your encouragement, that we are no longer now under the heavy yoke of a perfect unsinning obedience. *Id.*

We to thy name our annual rites will pay,
And on thy altars sacrifices *lay*. *Pope's Statius.*

Homer is like his Jupiter, has his terrors, shaking Olympus; Virgil, like the same power in his benevolence, counselling with the gods, *laying* plans for empires. *Pope.*

Neglect the rules each verbal critick *lays*,
For not to know some trifles is a praise. *Id.*
What right, what true, what fit, we justly call,
Let this be all my care; for this is all;
To *lay* this harvest *up*, and hoard with haste
What every day will want, and most, the last. *Id.*

A scheme which was writ some years since, and *laid by* to be ready on a fit occasion. *Swift.*

From the maxims *laid down* many may conclude that there had been abuses. *Id.*

The colouring upon those maps should be *laid on* so thin, as not to obsure or conceal any part of the lines. *Watts.*

Many trees may be propagated by *layers*: this is to be performed by slitting the branches a little way, and *laying* them *under* the mould about half a foot. *Miller.*

No money is better spent than what is *laid out* for domestic satisfaction. A man is pleased that his wife is dressed as well as other people, and the wife is pleased that she is dressed. *Johnson.*

I served out my trade when the gallant game was played,
And the Moro low was *laid* at the sound of the drum.
Burns.

Do not you think there is a sort of antipathy between philosophical and poetical genius? I question whether any one person was ever eminent for both. Lucretius *lays aside* the poet when he assumes the philosopher, and the philosopher when he assumes the poet. *Beattie.*

How many hours of night or day
In those suspended pangs I *lay*,
I could not tell; I scarcely knew
If this were human breath I drew. *Byron.*

Lay, *n. s.* Sax. ley, leaȝ. See **Lea**. Pasture land: ground laid down in grass.

A tuft of daisies on a flowery *lay*
They saw. *Dryden's Flower and Leaf.*

The plowing of *layes* is the first plowing up of grass ground for corn. *Mortimer's Husbandry.*

Lay, *n. s.* Sax. ley, leoð; Ital. *lai;* Welsh *llais;* Goth. *lio*, from *loa*, to sound. A song or poem.

To the maiden's sounding timbrels sung,
In well attuned notes, a joyous *lay*.
Faerie Queene.

Soon he slumbered, fearing not be harmed,
The whiles with a loud *lay*, she thus him sweetly charmed. *Id.*

This is a most majestic vision, and
Harmonious charming *lays*. *Shakspeare.*

Nor then the solemn nightingale
Ceased warbling, but all night tuned her soft *lays*.
Milton.

If Jove's will
Have linked that amorous power to thy soft *lay*,
Now timely sing. *Id.*

He reached the nymph with his harmonious *lay*,
Whom all his charms could not incline to stay.
Waller.

On Ceres let him call, and Ceres praise
With uncouth dances, and with country *lays*.
Dryden.

Even gods incline their ravished ears,
And tune their own harmonious spheres
To his immortal *lays*. *Dennis.*

Unhappy Dryden! in all Charles's days,
Roscommon only boasts unspotted *lays*. *Pope.*

I strive, with wakeful melody, to cheer
The sullen gloom, sweet Philomel! like thee,
And call the stars to listen: every star
Is deaf to mine, enamoured of thy *lay*. *Young.*

But hail, ye mighty masters of the *lay*,
Nature's true sons, the friends of man and truth,
Whose song sublimely sweet, serenely gay,
Amused my childhood, and informed my youth.
Beattie.

On thy voiceless shore
The heroic *lay* is tuneless now—
The heroic bosom beats no more!
And must thy lyre, so long divine,
Degenerate into hands like mine? *Byron.*

Lay, *adj.* } Lat. *laicus;* Gr. λαος, the
Lay'man, *n. s.* } people. Belonging to the people as distinct from the clergy: one of the people; a painter's image of a man.

The say of the father may no way prejudge the bishop's authority, but it excludes the assistance of *laymen* from their consistories. *Bp. Taylor.*

All this they had by law, and none repined,
The preference was but due to Levi's kind:
But, when some *lay* preferment fell by chance,
The Gourmands made it their inheritance.
Dryden.

Since a trust must be, she thought it best
To put it out of *laymen's* power at least,
And for their solemn vows prepared a priest. *Id.*

You are to have a *layman* almost as big as the life for every figure in particular, besides the natural figure before you. *Id. Dufresnoy.*

It might well startle
Our *lay* unlearned faith. *Rowe.*

Lay persons, married or unmarried, being doctors of the civil law, may be chancellors, officials, &c.
Ayliffe's Parergon.

Laymen will neither admonish one another themselves, nor suffer ministers to do it.
Government of the Tongue.

Where can be the grievance, that an ecclesiastical landlord should expect a third part value for his lands, his title as antient, and as legal, as that of a *layman*, who is seldom guilty of giving such beneficial bargains? *Swift.*

Lay Brothers, among the Romanists, pious but illiterate persons, who devote themselves in some convent to the service of the religious. They wear a different habit from that of the religious; but never enter into the choir, nor are present at the chapters: nor do they make any other vow except of constancy and obedience. In the nunneries there are also lay sisters.

The institution of lay-brothers began in the eleventh century. The persons on whom this title was conferred were such as were too ignorant to become clerks, and who therefore applied themselves wholly to bodily labor.

It seems to have taken its rise from hence, that the laity in those days had not, for the generality, the least tincture of learning; whence also those came to be called clerks, by way of distinction, who had studied a little, and were able to read.

In some orders they are only retained by a civil contract, which, however, binds them for life; in other orders they are to pass through four years of probation, as among the Jacobins; or seven, as among the Feuillants. The Capuchins admit none before nineteen years of age. The Jesuits call them coadjutors.

LAYBACH, Government of, one of the greatest divisions of Austrian Illyria, which see. It is divided into the circles of Laybach, Neustadtel, Adelsberg, Clagenfurt, and Villah. Population about 640,000.

Laybach, one of the circles of the above government, has a territorial extent of 1423 square miles, and a population of 140,000.

Laybach, the capital of the division of Austrian Illyria of this name, stands on the river Laybach. It has a cathedral, town-house, ten churches, two hospitals, a central school or university, an observatory, and public library. Also three distinct suburbs, and a castle on an eminence, which is used as a prison. The manufactures of silks and woollens are fallen into decay, but the potteries and tanneries are thriving; and there is a good trade with Italy, Croatia, and the south of Germany. Population 11,000. It is twenty-eight miles north-east of Onesk.

Laybach, or Laubach, a river of Carniola, which rises about a mile west of Upper Laybach, and falls into the Save. It is navigable for boats almost to its head, but forms a marsh in its course.

Layers, in gardening, are tender shoots or twigs of trees, laid in the ground, till, having struck root, they are separated from the parent tree, and become distinct plants. The propagating trees by layers is done in the following manner: the branches of the trees are to be slit a little way, and laid under the mould for about half a foot; the ground should be first made very light, and after they are laid they should be gently watered. If they will not remain easily in the position they are put in, they must be pegged down with wooden hooks; the best season for doing this is, for ever-greens, towards the end of August; and, for other trees, in the beginning of February If they have taken root, they are to be cut off from the main plant the succeeding winter, and planted out. If the branch is too high from the ground, a tub of earth is to be raised to a proper height for it. Some pare off the rind, and others twist the branch before they lay it, but this is not necessary. The end of the layer should be about a foot out of the ground; and the branch may be either tied tight round with a wire, or cut upwards from a joint, or cut round for an inch or two at the place, and it is a good method to pierce several holes through it with an awl above the part tied with the wire.

Laying the Land, in navigation, the state of motion which increases the distance from the coast, so as to make it appear lower and smaller, a circumstance which evidently arises from the intervening convexity of the surface of the sea. It is used in contradiction to raising the land, which is produced by the opposite motion of approach towards it.

LAY'-STALL, *n. s.* From Lay, to place, or deposit; and Stall, which see. A dung-heap.

> Scarce could he footing find in that foul way,
> For many corses, like a great *lay-stall*
> Of murdered men, which therein strewed lay.
> *Spenser.*

LA'ZAR, *n. s.*
La'zarhouse,
Laz'aretto,
La'zarly, *adj.*
La'zar-wort, *n. s.*
} Italian, *lazzaretto*, *lazzarino*. From Lazarus, the sick man of the Gospels; or Arab. *alazar*, sick. A man loathsome with disease. Lazar-house and lazaretto, signify a house for the reception of the diseased; an hospital. Lazarly, like, or pertaining to, the diseased.

> They ever after in most wretched case,
> Like loathsome *lazars*, by the hedges lay.
> *Faerie Queene.*

I'll be sworn, and sworn upon't, she never shrowded any but *lazars*. *Shakspeare.*

The church of Rome, unto her four famous orders of Jacobins, Franciscans, Augustins, and Carmelites, hath added a fifth of Jesuits; and, like another Jerusalem, for those five leprous *lazarly* orders hath built five porches; that, if the water of any state be stirred, they may put in for a share.
Bp. Hall's Contemplations.

> A place
> Before his eyes appeared, sad, noisome, dark,
> A *lazar-house* it seemed, where were laid
> Numbers of all diseased. *Milton.*

I am weary with drawing the deformities of life, and *lazars* of the people, where every figure of imperfection more resembles me. *Dryden.*

> Life he labours to refine
> Daily, nor of his little stock denies
> Fit alms to *lazars*, merciful and meek.
> *Phillips.*

LAZARUS, Heb. לעצר, i. e. the Lord's help, a Jew of Bethany, whom our Saviour raised from the dead, after having been four days in the grave. This miracle, with many peculiarly affecting circumstances attending it, is recorded in John xi. Lazarus, from the attention paid to his sisters by the Jews, upon his death, is supposed to have been a man of considerable property. He and his sisters, Martha and Mary, are recorded to have been among the peculiar friends of our Lord.

Lazarus (St.), or Lazaro, a military order, instituted at Jerusalem by the crusaders, and whose business was, to receive pilgrims under their care, guard them on the roads, and defend

them from the insults of the Saracens. The knights of this order, being driven out of the Holy Land in 1253, followed St. Lewis into France; who put them into possession of several houses, commanderies, and hospitals, and endowed the order with ample privileges, and procured in 1255 a bull, from Alexander IV., confirming the order, and giving them permission to observe the rule of St. Augustine. In the year 1490 pope Innocent VIII. suppressed their order, and united them to the order of St. John of Jerusalem; but the bull issued for that purpose was not received in France. In 1572 pope Gregory XII. united those of the order in Italy with that of St. Maurice, then newly instituted by Emanuel Philibert, duke of Savoy. And, in 1608, this order was united in France to that of our Lady of mount Carmel, which had been instituted by Henry IV. The knights of St. Lazarus, and those of our Lady of mount Carmel, were allowed to marry, and, at the same time, to possess pensions charged upon ecclesiastical livings. The badge of this order is a cross of eight points, made of pure gold, edged with white enamel; the middle, or nucleus, of the cross is enamelled crimson, and on it is the image of the blessed virgin and child proper; the reverse has the middle enamelled green, on which is the figure of St. Lazarus; between the rays of the cross are four fleurs-de-lis, and on each of the points a small gold ball. The cross is fastened to a broad crimson riband, and is worn either on the breast or scarf-wise.

LAZULI. See LAPIS LAZULI.

LA'ZY, *adj.*, LA'ZILY, *adv.*, LA'ZINESS, *n. s.* Fr. *lache;* Goth. *losk;* Swed. *loski, lase;* Teut. *lassig;* all, perhaps, of Latin *lassus*, relaxed. Sluggish; idle; slow; feeble; the adverb and noun corresponding.

Our soldiers, like the night-owl's *lazy* flight,
Or like a *lazy* thrasher with a flail,
Fall gently down as if they struck their friends.
Shakspeare.

Wicked condemned men will ever live like rogues, and not fall to work, but be *lazy*, and spend victuals.
Bacon.

The eastern nations view the rising fires,
Whilst night shades us, and *lazily* retires.
Creech.

The ordinary method for recruiting their armies, was now too dull and *lazy* an expedient to resist this torrent. *Clarendon.*

Whose *lazy* waters without motion lay.
Roscommon.

My fortune you have rescued, not only from the power of others, but from my own modesty and *laziness*. *Dryden.*

The *lazy* glutton safe at home will keep,
Indulge his sloth and batten with his sleep. *Id.*

Watch him at play, when following his own inclinations; and see whether he be stirring and active, or whether he *lazily* and listlessly dreams away his time. *Locke.*

The towering bard had sung, in nobler lays,
How the last trumpet wakes the *lazy* dead. *Smith.*

The sot cried, Utinam hoc esset laborare, while he lay *lazing* and lolling upon his couch. *South.*

That instance of fraud and *laziness*, the unjust steward, who pleaded that he could neither dig nor beg, would quickly have been brought both to dig and to beg too, rather than starve. *Id.*

Or *lazy* lakes, unconscious of a flood,
Whose dull brown Naiads ever sleep in mud.
Parnell.

He that floats *lazily* down the stream in presence of something borne along by the same current, will find himself move forward; but unless he lays his hand to the oar, and increases his speed by his own labour, must be always at the same distance from that which he is following. *Adventurer.*

Like eastern kings, a *lazy* state they keep,
And close confined in their own palace sleep.
Pope.

Laziness travels so slowly, that poverty soon overtakes him. *Franklin.*

LAZZAROVICH, one of the four counties of Austrian Dalmatia, in the district of the Mouths of the Cattaro. It forms the north-west corner of the district of Xuppa.

LEA, *n. s.* Sax. lea, ley. See LAY. Pasture; enclosed ground.

Greatly agast with this pittious plea;
Him rested the good man on the *lea*. *Spenser.*

Her fallow *leas*
The darnel, hemlock, and rank fumitory
Doth root upon. *Shakspeare.*

Dry up thy harrowed veins, and plough torn *leas*,
Whereof ingrateful man with liquirish draughts,
And morsels unctuous, greases his pure mind. *Id.*

Such court guise,
As Mercury did first devise,
With the mincing Dryades,
On the lawns and on the *leas*. *Milton.*

The lowing herds wind slowly o'er the *lea*.
Gray.

LEA, a river of England, which rises near Luton, in Bedfordshire, and running to Hertford and Ware, and afterwards south, dividing Essex from part of Hertfordshire, and from Middlesex, falls into the Thames below Blackwall. Great quantities of corn are brought by it from Hertfordshire to London.

LEAD, *v. a.*, *v. n.* & *n. s.*, LEAD'ER, *n. s.*, LEAD'ING, LEAD'ING-STRINGS, LEAD'MAN. Sax. lædan; Goth. *leida;* Belg. *leiden;* Teut. *leiten;* Dan. *lede*. To guide; conduct; pass or spend, (applied to time); introduce; hence to induce; persuade; allure; a lead-man is the leader or beginner of a dance.

Knowist thou not that the benyngnyte of god *ledith* thee to forthinkyng. *Wiclif. Rom.* ii.

I will *lead* on softly, according as the cattle that goeth before me, and the children, be able to endure.
Gen. xxxiii.

Which may go out before them, and which may go in before them, and which may *lead* them out, and which may bring them in. *Num.* xxvii. 17.

I have given him for a *leader* and commander to the people. *Isaiah* lv. 4.

The leaders of this people cause them to err, and they that are *led* of them are destroyed. *Id.* ix. 16.

Then brought he me out of the way, and *led* me about the way without unto the outer gate.
Ezek. xlvii. 2.

Then shall they know that I am the Lord your God, which causeth them to be *led* into captivity among the heathen. *Id.* xxxix. 28.

They thrust him out of the city, and *led* him unto the brow of the hill. *Luke* iv. 29.

Would you *lead* forth your army against the enemy, and seek him where he is to fight? *Spenser.*

There is a cliff whose high and bending head
Looks fearfully on the confined deep:
Bring me but to the very brim of it,
And I'll repair the misery thou dost bear,
With something rich about me: from that place
I shall no *leading* need. *Shakspeare.*

What I did, I did in honour,
Led by the impartial conduct of my soul. *Id.*

The sweet woman *leads* an ill life with him. *Id.*

Nay, keep your way, little gallant; you were wont to be a follower, now you are a *leader*. *Id.*

He turns head against the lion's armed jaws;
And, being no more in debt to years than thou,
Leads antient lords, and reverend bishops, on
To bloody battles. *Id. Henry IV.*

The way of maturing of tobacco must be from the heat of the earth or sun; we see some *leading* of this in musk-melons sown upon a hot-bed dunged below. *Bacon.*

Those escaped by flight, not without a sharp jest against their *leaders*, affirming that, as they had followed them into the field, so it was good reason they should follow them out. *Hayward.*

His guide, as faithful from that day,
As Hesperus that *leads* the sun his way. *Fairfax.*

Such a light and mettled dance
Saw you never,
And by *leadmen* for the nonce,
That turn round like grindle stones. *Ben Jonson.*

He was driven by the necessities of the times, more than *led* by his own disposition, to any rigour of actions. *King Charles.*

When our Lycians see
Our brave examples, they admiring say,
Behold our gallant *leaders*. *Denham.*

The lord Cottington, being a master of temper, knew how to *lead* him into a mistake, and then drive him into choler, and then expose him. *Clarendon.*

So shalt thou *lead*
Safest thy life, and best prepared endure
Thy mortal passage when it comes. *Milton.*

He *led* me on to mightiest deeds,
Above the nerve of mortal arm,
Against the uncircumcised, our enemies:
But now hath cast me off. *Id. Agonistes.*

They being to *lead* and give law, not to follow or receive it. *Barrow.*

Cyrus was beaten and slain under the *leading* of a woman, whose wit and conduct made a great figure. *Temple.*

Him, fair Lavinia, thy surviving wife
Shall breed in groves, to *lead* a solitary life. *Dryden.*

The vessels heavy-laden put to sea
With prosperous gales, a woman *leads* the way. *Id.*

Sound may serve such, ere they to sense are grown,
Like *leading-strings*, till they can walk alone. *Id.*

In organised bodies, which are propagated by seed, the shape is the *leading* quality, and most characteristical part, that determines the species. *Locke.*

As in vegetables and animals, so in most other bodies, not propagated by seed, it is the colour we most fix on, and are most *led* by. *Id.*

Christ took not upon him flesh and blood, that he might conquer and rule nations, *lead* armies, or possess places. *South.*

He left his mother a countess by patent, which was a new *leading* example, grown before somewhat rare. *Wotton.*

Luther's life was *led* up to the doctrines he preached, and his death was the death of the righteous. *Atterbury.*

This distemper is most incident to such as *lead* a sedentary life. *Arbuthnot on Aliments.*

What I say will have little influence on those whose ends *lead* them to wish the continuance of the war. *Swift.*

The understandings of a senate are enslaved by three or four *leaders*, set to get or to keep employments. *Id.*

Mistakes arise from the influence of private persons, upon great numbers stiled *leading* men and parties. *Id.*

Was he ever able to walk without *leading-strings*, or swim without bladders, without being discovered by his hobbling and his sinking? *Id.*

Human testimony is not so proper to *lead* us into the knowledge of the essence of things, as to acquaint us with the existence of things. *Watts.*

Yorkshire takes the *lead* of the other counties. *Herring.*

Prosperity is too apt to prevent us from examining our conduct, but, as adversity *leads* us to think properly of our state, it is most beneficial to us. *Johnson.*

Riches are passed away from hand to hand,
As fortune, vice, or folly, may command;
As in a dance the pair that take the *lead*
Turn downward, and the lowest pair succeed,
So shifting and so various is the plan,
By which Heaven rules the mixed affairs of man. *Cowper.*

Slow treads fair Cannabis the breezy strand,
The distaff streams dishevelled in her hand:
Now to the left her ivory neck inclines,
And *leads* in Paphian curves its azure lines. *Darwin.*

This account allows, or rather *leads* us to suppose, that St. Paul, in going over Macedonia, had passed so far to the west as to come into those parts of the country which were contiguous to Illyricum, if he did not enter into Illyricum itself. *Paley.*

I am—or rather was—a prince,
A chief of thousands, and could *lead*
Them on where each would foremost bleed;
But could not o'er myself evince
The like control. *Byron.*

But all the cities you have taken, all the armies which retreated before your *leaders*, are but paltry subjects of self-congratulation, if your land divides against itself, and your dragoons and executioners must be let loose against your fellow-citizens. *Id.*

LEAD, *n. s.* & *v. a.* } Sax. læð. A metal.
LEAD'EN, *adj.* } See below. To cover with lead; in the plural, the roof of a house or top of any thing covered with lead. Leaden, made of lead; and metaphorically heavy; dull, stupid.

Thou didst blow with thy wind, the sea covered them; they sank as *lead* in the mighty waters. *Exod.* xv. 10.

He fashioneth the clay with his arm, he applieth himself to *lead* it over; and he is diligent to make clean the furnace. *Ecclus.* xxxviii. 30.

Thou art a soul in bliss, but I am bound
Upon a wheel of fire; that mine own tears
Do scald like molten *lead*. *Shakspeare.*

Stalls, bulks, windows,
Are smothered up, *leads* filled, and ridges horsed
With variable complexions; all agreeing
In earnestness to see him. *Id.*

This tiger-footed rage, when it shall find
The harm of unskanned swiftness, will, too late,
Tie *leaden* pounds to's heels. *Id.*

O murth'rous slumber!
Lay'st thou the *leaden* mace upon my boy,
That plays thee musick? *Id. Julius Cæsar.*

If thou dost find him tractable to us,
Encourage him, and tell him all our reasons:
If he be *leaden*, icy, cold, unwilling,
Be thou so too. *Id. Richard III.*

I would have the tower two stories, and goodly *leads* upon the top, raised with statues interposed. *Bacon.*

There is a traverse placed in a loft, at the right hand of the chair, with a privy door, and a carved window of glass *leaded* with gold and blue, where the mother sitteth. *Id.*

A *leaden* bullet shot from one of these guns against a stone wall, the space of twenty-four paces from it, will be beaten into a thin plate. *Wilkins.*

Of *lead*, some I can show you so like steel, and so unlike common *lead* ore, that the workmen call it steel ore. *Boyle.*

Lead is employed for the refining of gold and silver by the cupel; hereof is made common ceruss with vinegar; of ceruss, red *lead*; of plumbum ustum, the best yellow ochre; of *lead*, and half as much tin, solder for *lead*. *Grew.*

Night, sable goddess! from her ebon throne,
In rayless majesty, now stretches forth
Her *leaden* sceptre o'er a slumbering world. *Young.*

LEAD, in mineralogy and chemistry, Lat. plumbum; Fr. plomb; Span. plomo; Ital. piembo; Germ. bleg; is a metal of a bluish-white color, very soft, flexible, and malleable, extending easily under the hammer into very thin plates; but its tenacity is less than that of almost any other metal, a wire of the diameter of the tenth of an inch breaking under a weight of three pounds. It may easily be cut with a knife; and, when heated, gives a very peculiar smell. Its specific gravity is 11·33, and it melts at 612°, rendering the refractory metals also more fusible. In a strong heat it boils, and emits fumes; during which time, if exposed to the air, its oxidation proceeds with considerable rapidity. Lead is brittle at the time of congelation. In this state it may be broken to pieces with a hammer, and the crystallisation of its internal parts will exhibit an arrangement in parallel lines. Lead is not much altered by exposure to air or water, though the brightness of its surface, when cut or scraped, very soon goes off. It is probable that a thin stratum of oxide is formed on the surface, which defends the rest of the metal from corrosion. It is much doubted whether lead is ever found perfectly metallic in a native state. Specimens have been shown as native lead from Poland and Monmouthshire, some of which are certainly the work of art; and, although they are not all proved to be of this kind, yet, when we take into conderation the easy calcination of this metal by the atmosphere, &c., the existence of native lead must be allowed to be, at least, very improbable.

The principal ores of lead are the following:—

Species 1. *Galena, or lead; glance bleiglans* of Werner.—Color lead-gray, sometimes iridescently variegated. Massive, imitative, and crystallised in cubes, octohedrons, rectangular four-sided prisms, broad unequiangular six-sided prisms, six-sided tables, and three-sided tables. Specular splendent, to glimmering. Lustre metallic. Cleavage hexahedral. Fragments cubical. Harder than gypsum. Sextile and frangible. Specific gravity 7, to 7·6. Effervesces both with nitrous and marine acid. In a crucible it melts easily into a yellowish slagg, and some lead is commonly found reduced, and so much the more as the ore is more pyritous, but mere iron renders it refractory. Before the blow-pipe, on charcoal, it decrepitates, but melts easily with a sulphureous smell, part sinks into the charcoal; if alternately heated and cooled, it will at last vanish and leave its silver, if it contains any. Lead enters into this ore, generally in the proportion of from forty-five to eighty-three per cent. The sulphur is to the lead in the proportion of sixteen to eighty-three nearly. But the lead commonly contains silver in the proportion of from [illegible] to [illegible]. The ores that have most lustre are said to contain most silver; those that have least lustre contain most iron, unless the want of lustre proceeds from decay. According to Westrumb's analysis its constituents are, lead 83, sulphur, 16·41, silver 2·08. The following are the results of Vauquelin's examination of this ore:—

	From Kirschwald in Deux Ponts.	Kampfstein.	Ecklerberg.
Lead	54	69	68·69
Sulphur	8	16	16·18
Carbonated lime and silex	38	15	16·13
Oxide of iron	0	0	0
	100	100	101

	Kantenbach.	Cologne.
Lead	64	63·1
Sulphur	18	12
Carbonated lime and silex	18	19·67
Oxide of iron	0	3·33
	100	98·1

Dr. Thomson gives the following as the result of his experiments:—

Lead	85·13
Sulphur	13·02
Oxide of iron	0·5
	98·65
Loss	1·35
	100

This ore abounds in various parts of Great Britain and on the continent, particularly in Siberia and Germany; nearly all the lead of commerce, indeed, is procured from galena.

Species 2. *Compact galena bley schweif* of Werner.—Color lead-gray, inclining occasionally to the steel-gray. Found massive, in nodules, investing, and specular. External lustre 2, 3. Internal 0, 1, 2. Transparency 0. Fracture compact, mostly even, or inclining to the flat conchoidal, seldom discovers striæ, or inclines to the foliated; sometimes in the gross slaty. Fragments indeterminate, and presents no distinct concretions. Hardness from 6 to 8. Specific gravity from 6·886 to 7·444, Gellert. Streak, brighter lead-gray, and metallic. Often feels somewhat greasy, and stains the fingers. Effervesces with nitrous acid. In lustre, fracture, fragments, and specific gravity, it differs much from the former species: it is said to contain no silver, but often iron and zinc. The connexion it may often have with the plumbiferous silver ore, which contains so large a proportion of lead, should be noted. Before the blow-pipe it does not decrepitate so strongly as the former species, but melts easily, and is reduced on charcoal with a sulphureous smell. It occurs in veins, and is usually accompanied by the common lead-glance. When the two sub-species occur together, the compact always forms the sides of the vein, owing, probably, to its having been in a less perfect state of solution. It is accompanied with black blende, common iron pyrites, copper pyrites, quartz, and heavy spar. It is found in the lead-hills in Lanarkshire, and in Derbyshire, in divers parts of Germany, and in the valley of Chamouni in Switzerland.

Species 3. *Blue lead ore; blau bleyerz* of Werner. *Mine de plomb bleue*, Broch. Color between dark indigo-blue and lead-gray. Massive, and crystallised in regular six-sided prisms. Feebly glimmering. Soft. Sectile. Specific gravity 5·461. It is conjectured to be sulphuret of lead, intermixed with phosphate of lead. It occurs in veins. It has been found in Saxony and France.

Species 4. *Black lead ore; schwarz bleyerz* of Werner.—Light or deep black, often with some streaks of red. Found massive, cellular, stalactitic, or crystallised in small or minute hexahædral prisms, generally truncated, and often so implicated as to be difficultly distinguished. External lustre 2, 3. Internal 2, 1·5. Metallic. Transparency 0. Fracture uneven, or imperfectly conchoidal, or intermediate. Hardness from 5, 6. Brittle. Specific gravity 5·744, Brisson; 5·77, Gellert. Streak light bluish-gray. Before the blow-pipe it decrepitates, but melts easily, and is reduced. By the experiments of M. Laumont, it appears that this ore consists chiefly of sulphureted lead, arising from decayed galenas, and the red part from the brownish-red phosphoric ore. For from the black prisms he extracted sulphur, and from the red part phosphoric acid. According to Lampadius it consists of

Lead	72
Oxygen	7
Carbonic acid	18
Carbon	2
	99
Loss	1
	100

It occurs in veins, and is almost always accompanied with white-lead ore and lead-glance, and usually in the upper part of veins, and in new lead-glance formations. It very frequently encrusts lead-glance, and is covered with white lead ore, and sometimes by green lead ore. It is found in the lead-hills of Scotland, in different parts of Bohemia, Saxony, Salzburg, Lower Brittany, and in Siberia. Previously to the analysis of Lampadius, Haüy supposed it was a phosphate of lead; and Werner suspected that it was a compound of lead, carbonic, and sulphuric acids.

Species 5. *Cobaltic lead glance.*—Color fresh lead-gray. Minutely disseminated in exceedingly small crystals, aggregated in a moss-like form. Shining and metallic. Sealy foliated. Opaque. Soft. Soils feebly. It communicates a smalt-blue color to glass of borax. It occurs near Clausthal in the Hartz.

Species 6. *Triprismatic lead spar*, or *sulphate of lead; blei vitriol* of Werner. Colors yellowish and grayish-white. Massive and crystallised. In the primitive form the vertical prism is 120°. The principal crystallisations are, an oblique four-sided prism, variously bevelled or truncated; and a broad rectangular four-sided pyramid. Lustre shining, adamantine. Fracture conchoidal. Translucent. As hard as calcareous spar. Streak white. Brittle. Specific gravity 6·3. It decrepitates before the blow-pipe, then melts, and is soon reduced to the metallic state. Its constituents are, according to Klaproth, oxide of lead 70·5, sulphuric acid 25·75, water 2·25. It occurs in veins along with galena at Wanlockhead in Dumfries-shire, Leadhill, Pary's mine, and Penzance.

Species 7. *Pyramidal or yellow lead spar, yellow molybdenated lead ore* of Kirwan, *gelbe bleyerz* of Werner. Color wax-yellow or citron-yellow. Found massive, disseminated, or lamellar, or crystallised in small cubic or rhomboidal or octohedral tables, or thin plates, often cellularly accumulated, or acicular. Lustre 2. Waxy. Transparency 2, 3. Fracture minute, conchoidal. Fragments 3. Hardness from 5 to 6. Specific gravity of the massive, much debased with mild calx, 3·800. Streak white. Sulphureted vollalkali blackens it. Before the blow-pipe it decrepitates, and melts into a yellowish and blackish-gray mass, which to borax imparts a bluish-white color, and, if nitre be added, it is reduced. It does not effervesce with acids, though it often seems to do so from a mixture of mild calx invisibly contained in it; but, if it be digested with a large proportion of nitrous acid, the greater part will be dissolved in it, and white flakes will appear diffused through the solution. Its constituents, according to Hatchett, are, oxide of lead 58·4, molybdic acid 38, oxide of iron 2·08, silica 0·28. It occurs at Bleiberg in Carinthia.

Species 8. *Prismatic or red lead spar; roth bleyerz* of Werner. Color hyacinth-red, with a shade of yellow. In France it is said to have been found massive, but more generally disseminated or overlaying. In Siberia it has hitherto occurred only crystallised in small acute angled four-sided prisms, sometimes smooth,

sometimes longitudinally streaked, often hollow, rarely in low hexahedral prisms, with two small and four broad sides. These crystals are often implicated in each other. External lustre 2, 3. Internal 2, 1·5. Common. Transparency 2, 3. Fracture, if made crossways, foliated. Otherwise compact, being fine grained, uneven, or minute conchoidal. Fragments 2. Hardness 5, 4. Specific gravity 6·0269, Brisson. Streak and powder orange yellow. Does not effervesce with acids. The vitriolic, while cold, scarcely or but slowly affects it. It refuses to unite, but not to diffuse itself in the nitrous, whether hot or cold. But the marine, even without heat, sensibly attacks it, and dissolves about one-sixteenth of its weight; if heated, an effervescence is perceived. Treated with the blow-pipe on charcoal it decrepitates, a small proportion of the lead is reduced, but the greater part of it remains a black slagg, which to borax gives a grass-green color passing into the leek green. Its constituents are, according to Vauquelin, oxide of lead 63·96, chromic acid 36·4. It occurs in veins of gneiss in the gold mines of Beresofk in Siberia.

Species 9. *Green rhomboidal lead spar*. Color grass green. Occurring imitative or crystallised. The primitive form is a dirhomboid, or a flat equiangular double six-sided pyramid. The secondary forms are the equiangular six-sided prism, variously truncated and acuminated. Splendent. Fracture uneven. Translucent. Sometimes as hard as fluor. Brittle. Specific gravity 6·9 to 7·2. It dissolves in acids without effervescence. Its constituents are, according to the analysis of Klaproth, oxide of lead 80, phosphoric acid 18, muriatic acid 1·62, oxide of iron, a trace. It occurs along with galena at Leadhills, and Wanlockhead; at Alston in Cumberland, &c.

Species 10. *Brown rhomboidal lead spar*.—Color clove brown. Massive, and crystallised in an equiangular six-sided prism; and an acute double three-sided pyramid. Glistening, resinous. Feebly translucent. Streak grayish-white. Brittle. Specific gravity 6·91. It melts before the blow-pipe, and, during cooling, shoots into acicular crystals. It dissolves without effervescence in nitric acid. Its constituents are, oxide of lead 78·58, phosphoric acid 19·73, muriatic acid 1·65. It occurs in veins that traverse gneiss. It is found at Miess in Bohemia.

Species 11. *White lead spar, carbonate of lead*. Color milk white. Occurring massive, and crystallised; in a very oblique four-sided prism; an unequiangular six-sided prism; acute double six-sided pyramid; oblique double four-sided pyramid; long acicular crystals; and in twin and triple crystals. Lustre adamantine. Fracture small conchoidal. Translucent. Refracts double in a high degree. Harder than calcareous spar. Brittle. Specific gravity 6·2 to 6·6. It dissolves with effervescence in muriatic and nitric acids. It yields a metallic globule with the blow-pipe. Its constituents are, according to the analysis of Klaproth, oxide of lead 82, carbonic acid 16, water 2. It occurs in veins at Leadhills in Lanarkshire.

Species 12. *Corneous lead ore*, or *muriate of lead*.—Color grayish-white. Occurring crystallised in an oblique four-sided prism, variously truncated, bevelled, and acuminated. Splendent and adamantine. Cleavage threefold. Fracture conchoidal. Transparent. Soft. Sextile and easily frangible. Specific gravity 6·065. It melts before the blow-pipe into an orange colored globule. Its constituents are, according to Klaproth, oxide of lead 85·5, muriatic acid 8·5, carbonic acid 6·0. It is found near Matlock in Derbyshire.

Species 13. *Arseniated lead ore*.—Color reddish brown. Shining. Fracture conchoidal. Opaque. Soft and brittle. Specific gravity 3·933. It gives out arsenical vapors with the blow-pipe. It colors glass of borax lemon-yellow. Its constituents are, oxide of lead 35, arsenic acid 25, water 10, oxide of iron 14, silver 1·15. silica 7, alumina 2. It is found in Siberia.

Treated with the blow-pipe, it reddens before it melts, and retains its color. It melts more difficultly than phosphoreted lead does. To decompose it, it must be heated to whiteness, then the arsenical acid escapes with effervescence and the lead is reduced.

Smelting and reduction of lead ore.—The only ore of lead purchased in the large way is galena, and the method of treating this is very simple, partly on account of the richness of the ore, and partly on account of the low price of the metal itself, which therefore will not admit of any but the most summary methods of bringing it into a marketable state.

When first brought up from the mine, this ore is dressed by women and boys, who with a hand hammer separate the greater part of the adhering impurities, consisting of blende, iron, pyrites, quartz, calcareous spar, &c. The residue, being broken into pieces of about the size of a hazel nut, is washed from all the adhering clay and dirt, and is then ready to be smelted. The furnace used for this purpose is the common reverberatory with a low arch. A ton or more of the ore is spread on the floor of the furnace, and by means of a pit-coal flame it is soon brought to a red heat. In this state it is occasionally stirred with iron rakes to expose fresh surfaces to the action of the flame, and facilitate the separation of the sulphur. In a short time the mass begins to acquire a pasty consistence; upon which the heat is lowered, and the ore is kept at a dull red till the sulphur is nearly all got rid of: the fire being then increased, the ore is brought to a state of perfect fusion, and visibly consists of two fluids; the lower is the metallic lead; the upper is a vitreous slagg still holding a considerable portion of lead, but mixed with various impurities. In this state of the process the fire is damped; and a few spadefuls of quick-lime are thrown into the fluid mass: by this the scoriæ are suddenly solidified, and are raked to the side of the furnace. The tap-hole is then opened, and the lead runs into moulds placed to receive it, when it congeals into oblong masses called pigs, weighing about 60lbs. each.

As soon as the lead has run out of the furnace, the tap-hole is closed, the scoriæ are replaced in the bed, and, being quickly raised to a glowing red heat, are soon melted. The greatest part of the lead that they contained by this means col-

lects into a mass at the bottom: a little lime is thrown in as before, the scoriæ thus rendered solid are raked aside, and the lead which they covered is let off into a mould. This second scoria, though still holding from five to eight per cent. of lead, is now removed from the furnace, and applied to no purpose but that of mending roads; the expense of separating the last portions of metal being more than the value of the produce. The lead of the first running is the best: that procured from the scoriæ being sensibly harder and less malleable on account of the iron that it contains.

In order to obtain perfectly pure lead, the lead of commerce may be dissolved in pure nitric acid, and the solution be decomposed by adding to it, gradually, a solution of sulphate of soda, so long as a precipitate ensues. This precipitate, which is sulphate of lead, must then be collected on a filter, washed repeatedly in distilled water, and then dried. In order to reduce it to its metallic state, let it be mixed with two or three times its weight of black flux, introduce the mixture into a crucible, and expose it briskly to a red heat.

There are certainly two, perhaps three, oxides of lead:—1. The powder precipitated by potash from the solution of the nitrate of lead, being dried, forms the yellow protoxide. When somewhat vitrified it constitutes litharge, and, combined with carbonic acid, white-lead, or ceruse. It has been obtained by M. Houton-Labillardiere, in dodecahedral white crystals, about the size of a pin-head, by slow deposition, from a solution of litharge in soda. Heat volatilises it. It is of very great importance to know accurately the composition of this oxide of lead, especially in consequence of its great influence in the analyses of organic bodies. The mean of Berzelius's last experiments, as detailed in vol. v. of the Afhandlingar i Fysik, and translated into the Ann. of Phil. for February, 1820, gives us 7·73 for the quantity of oxygen, combined with 100 of lead in 107·73 of the protoxide, whence the prime equivalent of lead comes out 12·9366. The very near approach of this to 13 will justify us in adopting this round number; and in estimating the equivalent of the protoxide at 14. The pigment massicot is merely this oxide.

2. When massicot has been exposed for about forty-eight hours to the flame of a reverberatory furnace, it becomes red-lead, or minium. This substance has a specific gravity of 8·94. At a red heat it gives out oxygen, and passes into vitrified protoxide. It consists of 100 lead + 11·08 oxygen; and it may be represented as a compound of 2 primes of lead + 3 oxygen; or of 1 prime protoxide + 1 prime peroxide.

3. If upon 100 parts of red-lead we digest nitric acid, of the specific gravity 4·26, 92·5 parts will be dissolved, but 7·5 of a dark brown powder will remain insoluble. This is the protoxide of lead, and consists of 100 lead + 15·4 oxygen; or 13 + 2 = 15.

By passing a stream of chlorine through red-lead diffused in water, we obtain a solution, which yields by potash an abundant precipitate of the brown oxide of lead. From 100 of minium, sixty-eight of the peroxide may be obtained. It is tasteless, and with muriatic acid evolves chlorine. When heated, oxygen is disengaged, and protoxide remains. The red-lead of commerce is often very impure, containing yellow oxide, sulphate of lead, submuriate of lead, and silica.

Chloride of lead is formed, either by placing lead in chlorine, or by exposing the muriate to a moderate heat. It is a semitransparent grayish-white mass, somewhat like horn, whence the old name of plumbum corneum. It is fixed at a red heat in close vessels, but it evaporates at that temperature in the open air. By Dr. Davy's analysis, it consists of chlorine 25·78 + lead 74·22; or 4·5 + 13.

The iodide is easily formed, by heating the two constituents. It has a fine yellow color. It precipitates when we pour hydriodate of potash into a solution of nitrate of lead.

The salts of lead have the protoxide for their base, and are distinguishable by the following general characters:—

1. The salts which dissolve in water usually give colorless solutions, which have an astringent sweetish taste.

2. Placed on charcoal they all yield, by the blow-pipe, a button of lead.

3. Ferroprussiate of potash occasions insolutions a white precipitate.

4. Hydrosulphuret of potash, a black precipitate.

5. Sulphureted hydrogen, a black precipitate.

6. Gallic acid, and infusion of galls, a white precipitate.

7. A plate of zinc, a white precipitate, or metallic lead.

Most of the acids attack lead. The sulphuric does not act upon it, unless it be concentrated and boiling. Sulphurous acid gas escapes during this process, and the acid is decomposed. When the distillation is carried on to dryness, a saline white mass remains, a small portion of which is soluble in water, and is the sulphate of lead; it affords crystals. The residue of the white mass is an insoluble sulphate of lead. It consists of 5 acid + 14 protoxide.

Nitric acid acts strongly on lead.

The nitrate solution, by evaporation, yields tetrahedral crystals, which are white, opaque, possess considerable lustre, and have a specific gravity of 4. They dissolve in 7·6 parts of boiling water. They consist of 6·75 acid + 14 protoxide; or nearly 1 + 2.

A subnitrate may be formed in pearl-colored scales, by boiling in water equal weights of the nitrate and protoxide.

A subnitrate of lead may be formed, by boiling a solution of ten parts of the nitrate on 7·8 of metallic lead. If more of the metal be used, a quadro-subnitrate results. By saturating one-half of the oxide of the subnitrate, with the equivalent proportion of sulphuric acid, a neutral nitrate is formed.

Muriatic acid acts directly on lead by heat, oxidizing it, and dissolving part of its oxide.

The acetic acid dissolves lead and its oxides; though probably the access of air may be necessary to the solution of the metal itself in this acid

White-lead, or ceruse, is made by rolling leaden plates spirally up, so as to leave the space of about an inch between each coil, and placing them vertically in earthen pots, at the bottom of which is some good vinegar. The pots are to be covered, and exposed for a length of time to a gentle heat in a sand bath, or by bedding them in dung. The vapor of the vinegar, assisted by the tendency of the lead to combine with the oxygen which is present, corrodes the lead, and converts the external portion into a white substance, which comes off in flakes, when the lead is uncoiled. The plates are thus treated repeatedly, until they are corroded through. Ceruse is the only white used in oil paintings. Commonly it is adulterated with a mixture of chalk in the shops. It may be dissolved without difficulty in the acetic acid, and affords a crystallisable salt, called sugar of lead from its sweet taste. This, like all the preparations of lead, is a deadly poison. The common sugar of lead is an acetate; and Goulard's extract, made by boiling litharge in vinegar, a subacetate. The power of this salt, as a coagulator of mucus, is superior to the other. If a bit of zinc be suspended by brass or iron wire, or a thread, in a mixture of water and the acetate of lead, the lead will be revived, and form an arbor Saturni.

The acetate, or sugar of lead, is usually crystallised in needles, which have a silky appearance. They are flat four-sided prisms with dihedral summits. Its specific gravity is 2·345. It is soluble in three and a half times its weight of cold water, and in somewhat less of boiling water. Its constituents are 26·96 acid + 58·71 base + 14·82 water.—Berzelius.

Acetate and subacetate of lead in solution, have been used as external applications to inflamed surfaces, and scrofulous sores, and as eyewashes. In some extreme cases of hæmorrhagy from the lungs and bowels, and uterus, the former salt has been prescribed, but rarely and in minute doses, as a corrugant or astringent. The colic of the painters, and that formerly prevalent in certain counties of England, from the lead used in the cyder presses, show the very deleterious operation of the oxide, or salts of this metal, when habitually introduced into the system in the minutest quantities at a time. Contraction of the thumbs, paralysis of the hand, or even of the extremities, have not unfrequently supervened. A course of sulphureted hydrogen waters, laxatives, of which sulphur, castor-oil, sulphate of magnesia, or calomel, should be preferred, a mercurial course, the hot sea-bath, and electricity, are the appropriate remedies.

Dealers in wines have occasionally sweetened them, when acescent, with litharge or its salts. This deleterious adulteration may be detected by sulphureted hydrogen water, which will throw down the lead in the state of a dark brown sulphuret. Or subcarbonate of ammonia, which is a very delicate test, may be employed to precipitate the lead in the state of a white carbonate; which, on being washed and digested with sulphureted hydrogen water, will instantly become black. If the white precipitate be gently heated it will become yellow, and on charcoal, before the blowpipe, it will yield a globule of lead. Chromate of potash will throw down from saturnine solutions a beautiful orange-yellow powder. Burgundy wine, and all such as contain tartar will not hold lead in solution, in consequence of the insolubility of the tartrate.

The proper counter-poison for a dangerous dose of sugar of lead is solution of Epsom or Glauber salt, liberally swallowed; either of which medicines instantly converts the poisonous acetate of lead into the inert and innoxious sulphate. The sulphuret of potash, so much extolled by Navier, instead of being an antidote, acts itself as a poison on the stomach.

Oils dissolve the oxide of lead, and become thick and consistent; in which state they are used as the basis of plasters, cements for waterworks, paints, &c.

Sulphur readily dissolves lead in the dry way, and produces a brittle compound, of a deep gray color and brilliant appearance, which is much less fusible than lead itself; a property which is common to all the combinations of sulphur with the more fusible metals.

The phosphoric acid exposed to heat, together with charcoal and lead, becomes converted into phosphorus, which combines with the metal. This combination does not greatly differ from ordinary lead; it is malleable, and easily cut with a knife: but it loses its brilliancy more speedily than pure lead; and when fused upon charcoal with the blow-pipe the phosphorus burns, and leaves the lead behind.

Litharge fused with common salt decomposes it; the lead unites with the muriatic acid, and forms a yellow compound, used as a pigment. The same decomposition takes place in the humid way, if common salt be macerated with litharge; and the solution will contain caustic alkali.

Lead unites with most of the metals. Gold and silver are dissolved by it in a slight red-heat. Both these metals are said to be rendered brittle by a small admixture of lead, though lead itself is rendered more ductile by a small quantity of them. Platina forms a brittle compound with lead; mercury amalgamates with it; but the lead is separated from the mercury by agitation, in the form of an impalpable black powder, oxygen being at the same time absorbed. Copper and lead do not unite but with a strong heat. If lead be heated so as to boil and smoke, it soon dissolves pieces of copper thrown into it; the mixture, when cold, is brittle. The union of these two metals is remarkably slight; for, upon exposing the mass to a heat no greater than that in which lead melts, the lead almost entirely runs off by itself. This process is called eliquation. The coarser sorts of lead, which owe their brittleness and granulated texture to an admixture of copper, throw it up to the surface on being melted by a small heat. Iron does not unite with lead, as long as both substances retain their metallic form. Tin unites very easily with this metal, and forms a compound, which is much more fusible than lead by itself, and is, for this reason, used as a solder for lead. Two parts of lead and one of tin form an alloy more fusible than either metal alone: this is the solder of the plumbers. Bismuth combines readily with lead, and affords a metal of a fine close grain, but very

brittle. A mixture of eight parts bismuth, five lead, and three tin, will melt in a heat which is not sufficient to cause water to boil. Antimony forms a brittle alloy with lead. Nickel, cobalt, manganese, and zinc, do not unite with lead by fusion.

The alloys in any proportion have the singular property of being of less specific gravity than the mean, the very contrary of which is observed in most other compounds of metals. The following is a table given by Mr. Hatchett exhibiting these facts:—

Metals.	Grains.	Specific Gravity of Alloy	Bulk before Union.	Bulk after Union.	Expansion.
Gold Lead	442 38	18·08	1000	1005	5
Gold Copper Lead	442 19 19	17·765	1000	1006	6
Gold Copper Lead	442 30 8	17·312	1000	1022	22
Gold Copper Lead	442 34 4	17·032	1000	1035	35
Gold Copper Lead	442 37·5 ·5	16·627	1000	1057	57
Gold Copper Lead	442 37·75 ·25	17·039	1000	1031	31

LEAD, RED. See MINIUM.

LEAD, WHITE. See WHITE LEAD.

LEAD, BLACK. See PLUMBAGO.

LEAD, or HAND LEAD, in maritime affairs. Fr. petit plomb de sonde. An instrument for discovering the depth of water: it is composed of a large piece of lead, from seven to ten pounds weight, and attached, by means of a strap, to a long line called the lead-line. It is shaped like the diagram, having a hole in the upper extremity, through which is reeved a gromet *a*, being well served over to keep it from chafing; and the lower extremity is hollowed for the purpose of being armed (filled with tallow), to ascertain what kind of ground you strike soundings on. In the end of the lead-line there is a long eye spliced, which is also served over. The eye is reeved through the gromet and taken over the lead, being thus secured. This line is about twenty fathoms in length, and particularly marked as follows: at the distance of two and three fathoms, a piece of black leather is thrust through the strands—at five fathoms, a white rag—at seven fathoms, a red one—at ten and thirteen, black leather; and at seventeen, a red rag.

Deep-Sea LEAD. Fr. grand plomb de sonde. A lead of a larger size, being from twenty-five to thirty pounds weight, is attached to a much longer line, and shaped like the former.

LEADHILLS, mountains of Scotland, in the county of Lanark, and district of Clydesdale, abounding with the most famous and ancient lead mines in that kingdom, the lead ores having been first discovered in 1513. In the summit of these mountains gold has also been found. The lead ore affords a portion of silver; and the chief business is carried on by the Scots Mining Company, who farm the hills from the earl of Hopetoun, the latter receiving every sixth bar of lead as a rental. The number of bars annually cast amounts to about 18,000.

LEADHILLS is a village on one of the above mountains, by some said to be the highest human habitation in Great Britain. Here reside many hundreds of miners with their families, and have a public library for the instruction and amusement of their little community. They labor in the mines about six hours only in the twenty-four; and 'Nothing,' says Mr. Pennant, 'can equal the gloomy appearance of the country round. Neither tree, nor shrub, nor verdure, nor picturesque rock, appear to amuse the eye. The spectator must plunge into the bowels of these mountains for entertainment.' But a few spots have been made to produce corn and potatoes. The veins of lead lie mostly north and south, and their thickness, which seldom exceeds forty feet, varies greatly in different parts. Some have been found filled with ore within two fathoms of the surface; others sink to the depth of ninety fathoms. The lead is all sent to Leith, where it has the privilege of being exported free of duty. The scanty pasture of this barren region feeds some sheep and cattle; but those in the neighbourhood of the mines often perish by drinking of the water in which the ore has been washed. Population about 1000.

LEAF, *n. s.* & *v. n.*, LEAF'LESS, *adj.*, LEAF'Y, LEA'VY. } Sax. leaf; Goth. *lauf;* Danish, *lev.* The loose green part of a plant; the petal of a flower; foliage; any thing foliated, or beaten thin; any thing broad, flat, and open; hence part of a book (containing two pages); a broad door, or part of folding-doors; the flap of a table, &c. To leaf is to come into, or bear leaves. Leafless is destitute of leaves: leafy and leavy, full of them.

And the *leeuys* of the tree ben to heelthe of folkis.
Wiclif. Apoc. xxii.

And they sewed fig *leaves* together, and made themselves aprons. *Gen.* iii. 7.

The two *leaves* of the one door were folding.
1 *Kings.*

Now, fair Madame! quod I,
(If I durst ask) what is the cause and why
That knightis have the ensigne of honour
Rather by the *lefe* than by the flour?
Chaucer

Happy, ye *leaves*, when as those lily hands
Shall handle you. *Spenser.*

This is the state of man; to-day he puts forth
The tender *leaves* of hopes, to-morrow blossoms.
Shakspeare.

The frauds of men were ever so,
Since summer first was *leafy*. *Id.*

Now near enough: your *leavy* screens throw down, And show like those you are. *Id.*

Heat drieth bodies that do easily expire, as parchment, *leaves*, roots, and clay; and so doth time arefy. *Bacon.*

Eleven ounces two pence sterling ought to be of so pure silver, as is called *leaf* silver, and then the melter must add of other weight seventeen pence halfpenny farthing. *Camden.*

Leaf gold, that flies in the air as light as down, is as truly gold as that in an ingot. *Digby.*

What chance, good lady, hath bereft you thus:
— Dim darkness, and this *leafy* labyrinth. *Milton.*

Most trees fall off the *leaves* at autumn; and, if not kept back by cold, would *leaf* about the solstice. *Browne.*

Strephon, with *leavy* twigs of laurel tree,
A garland made on temples for to wear,
For he then chosen was the dignity
Of village lord that Whitsuntide to bear. *Sidney.*

A man shall seldom fail of having cherries borne by his graft the same year in which his incision is made, if his graft have blossom buds; whereas, if it were only *leaf* buds, it will not bear fruit till the second season. *Boyle.*

Those things which are removed to a distant view, ought to make but one mass; as the *leaves* on the trees, and the billows in the sea. *Dryden.*

Her *leafy* arms with such extent were spread,
That hosts of birds, that wing the liquid air,
Perched on the boughs. *Id. Flower and Leaf.*

Bare honesty, without some other adornment, being looked on as a *leafless* tree, nobody will take himself to its shelter. *Government of the Tongue.*

Where doves in flocks the *leafless* trees o'ershade,
And lonely woodcocks haunt the watery glade. *Pope.*

Peruse my *leaves* through every part,
And think thou seest my owner's heart
Scrawled o'er with trifles. *Swift.*

Ofttimes its *leaves* of scarlet hue
A golden edging boast;
And, opened, it displays to view
Twelve pages at the most. *Cowper.*

The tempest's howl, it soothes my soul,
My griefs it seems to join;
The *leafless* trees my fancy please,
Their fate resembles mine! *Burns.*

Again rejoicing nature sees
Her robe assume its vernal hues
Her *leafy* locks wave in the breeze,
All freshly steeped in morning dews. *Id.*

Though by no hand untimely snatched,
The *leaves* must drop away:
And yet it were a greater grief
To watch it withering *leaf* by *leaf*
Than see it plucked to-day;
A lovely being, scarcely formed or moulded,
A rose with all its sweetest *leaves* yet folded. *Byron.*

Leaf is defined by Miller, 'a part of a plant extended into length and breadth in such a manner as to have one side distinguishable from the other.' Linnæus defines leaves 'the organs of motion, or muscles of the plant.' The leaves are not merely ornamental to plants; they serve very useful purposes, and make part of the organs of vegetation. Most plants, especially trees, are furnished with leaves; n mushrooms, and shrubby horse-tail, they are totally wanting. Ludwig defines leaves to be fibrous and cellular processes of the plant, which are of various figures, but generally extended into a plain membranaceous or skinny substance. They are of a deeper green than the foot-stalks on which they stand, and are formed by the expansion of the vessels of the stalk, among which, in several leaves, the proper vessels are distinguished by the particular taste, color, and smell of the liquors contained within them. By the expansion of the vessels of the stalk are produced several ramifications or branches, which, crossing each other mutually, form a kind of net; the meshes or interstices of which are filled up with a tender cellular substance, called the pulp, pith, or parenchyma. This pulpy substance is frequently consumed by insects, whilst the membranous net remaining untouched exhibits the genuine skeleton of the leaf. The net is covered externally with an epidermis or scarf-skin, which appears to be a continuation of the scarf-skin of the stalk, and perhaps of that of the stem. M. De Saussure, a judicious naturalist, has attempted to prove that this scarf-skin, like that of the petals, is a true bark, composed itself of an epidermis and cortical net; these parts seem to be the organs of perspiration, which serve to dissipate the superfluous juices. The cortical net is furnished, principally on the surface of the leaf, with a great number of suckers or absorbent vessels, destined to imbibe the humidity of the air. The upper surface, turned towards heaven, serves as a defence to the lower, which looks downward; and this disposition is so essential to the vegetable economy, that if a branch is overturned, in such a manner as to destroy the natural direction of the leaves, they will of themselves, in a very short time, resume their former position; and that as often as the branch is thus overturned. Leaves are useful and necessary organs; trees perish when totally divested of them. In general, plants stript of any of their leaves cannot shoot vigorously: witness those who have undergone the depredations of insects; witness, likewise, the very common practice of stripping off some of the leaves from plants, when we would suspend their growth, or diminish the number of their shoots. This method is sometimes observed with corn and the esculent grasses; and in cold years is practised on fruit-trees and vines, to render the fruit riper and better colored: but in this case it is proper to wait till the fruits have acquired their full bulk, as the leaves contribute greatly to their growth. See Botany.

Leaf, in clocks and watches, an appellation given to the notches of their pinions.

Leaf Gold, or Gold Leaf, fine gold beaten into plates of extreme thinness, for the purpose of gilding, &c. 'The gold is melted in a black lead crucible, with some borax, in a wind furnace, called by the workmen a wind hole: as soon as it appears in perfect fusion, it is poured out into an iron ingot mould, six or eight inches long, and three quarters of an inch wide, previously greased and heated, so as to make the tallow run and smoke, but not to take flame. The bar of gold is made red-hot, to burn off the unctuous matter, and forged on an anvil into a long plate, which is further extended, by being passed repeatedly between polished steel rollers,

till it becomes a riband as thin as paper. Formerly the whole of this extension was procured by means of the hammer, and some of the French workmen are still said to follow the same practice: but the flatting mill both abridges the operation, and renders the plate of more uniform thickness. The riband is divided by compasses, and cut with sheers into equal pieces, which consequently are of equal weights: these are forged on an anvil till they are an inch square; and afterwards well annealed to remove the rigidity which the metal has contracted in the hammering and flatting. Two ounces of gold, or 960 grains, the quantity which the workmen usually melt at a time, make 150 of these squares, when each of them weighs six grains and two-fifths; and, as 902 grains of gold make a cubic inch, the thickness of the square plates is about the 766th part of an inch. In order to the further extension of these pieces into fine leaves, it is necessary to interpose some smooth body between them and the hammer, for softening its blow, and defending them from the rudeness of its immediate action: as also to place between every two of the pieces some proper intermedium, which, while it prevents their uniting together, or injuring one another, may suffer them freely to extend. Both these ends are answered by certain animal membranes. The gold-beaters use three kinds of membranes; for the outside cover, common parchment made of sheep-skin; for interlaying with the gold, first, the smoothest and closest vellum, made of calf-skin; and afterwards the much finer skins of ox-gut, stript off from the large straight gut slit open, curiously prepared on purpose for this use, and hence called gold-beater's skin. The preparation of these last is a distinct business. The general process is said to consist in applying one upon another, by the smooth sides, in a moist state, in which they readily cohere and unite inseparably; stretching them on a frame, and carefully scraping off the fat and rough matter, so as to leave only the fine exterior membrane of the gut; beating them between double leaves of paper, to force out what unctuosity may remain in them; moistening them once or twice with an infusion of warm spices; and, lastly, drying and pressing them. It is said, that some calcined gypsum or plaster of Paris is rubbed with a hare's foot both on the vellum and the ox-gut skins, which fill up such minute holes as may happen in them, and prevent the gold-leaf from sticking, as it would do to the simple animal membrane. It is observable, that, notwithstanding the vast extent to which the gold is beaten between these skins, and the great tenuity of the skins themselves, yet they sustain continual repetitions of the process for several months, without extending or growing thinner. Our workmen find, that, after seventy or eighty repetitions, the skins, though they contract no flaw, will no longer permit the gold to extend between them; but that they may be again rendered fit for use by interlaying them with leaves of paper moistened with white-wine vinegar, beating them for a whole day, and afterwards rubbing them over as at first with plaster of Paris. The gold is said to extend between them more easily after they have been used a little than when they are new. The beating of the gold is performed on a smooth block of black marble, weighing from 200 to 600 pounds, the heavier the better; about nine inches square on the upper surface, and sometimes less, fitted into the middle of a wooden frame, about two feet square, so as that the surface of the marble and the frame form one continuous plane. Three of the sides are furnished with a high ledge; and the front, which is open, has a leather flap fastened to it, which the gold-beater takes before him as an apron, to preserve the fragments of gold that fall off. Three hammers are employed, all of them with two round and somewhat convex faces, though commonly the workman uses only one of the faces: the first, called the cutch-hammer, is about four inches in diameter, and weighs fifteen or sixteen pounds, and sometimes twenty, though few workmen can manage those of the last size; the second, called the shodering-hammer, weighs about twelve pounds and is about the same diameter: the third, called the gold-hammer, or finishing hammer, weighs ten or eleven pounds, and is nearly of the same width. The French use four hammers, differing both in size and shape from those of our workmen; they have only one face, being in figure truncated cones. The first has very little convexity, is nearly five inches in diameter, and weighs fourteen or fifteen pounds: the second is more convex than the first, about an inch narrower, and scarcely half its weight: the third, still more convex, is only about two inches wide, and four or five pounds in weight: the fourth or finishing hammer, is near as heavy as the first, but narrower by an inch, and the most convex of all: 150 of the pieces of gold are interlaid with leaves of vellum, three or four inches square, one vellum leaf being placed between every two of the pieces, and about twenty more of the vellum leaves on the outsides; over these is drawn a parchment case, open at both ends, and over this another in a contrary direction, so that the assemblage of gold and vellum leaves is kept tight and close on all sides. The whole is beaten with the heaviest hammer, and every now and then turned upside down, till the gold is stretched to the extent of the vellum; the case being from time to time opened for discovering how the extension goes on, and the packet, at times, bent and rolled as it were between the hands, for procuring sufficient freedom to the gold, or, as the workmen say, to make the gold work. The pieces, taken out from between the vellum leaves, are cut in four with a steel knife; and the 600 divisions, hence resulting, are interlaid in the same manner, with pieces of the ox-gut skins five inches square. The beating being repeated with a lighter hammer, till the golden plates have again acquired the extent of the skins, they are a second time divided in four: the instrument used for this division is a piece of cane cut to an edge, the leaves being now so light, that the moisture of the air or breath condensing on a metallic knife would occasion them to stick to it. These last divisions being so numerous, that the skins necessary for interposing between them would make the packet too

thick to be beaten at once, they are parted into three parcels, which are beaten separately, with the smallest hammer, till they are stretched, for the third time, to the size of the skins: they are now found to be reduced to the greatest thinness they will admit of; and indeed many of them, before this period, break or fall. In the beating, however simple the process appears to be, a good deal of address is requisite, for applying the hammers so as to extend the metal uniformly from the middle to the sides: one improper blow is apt not only to break the gold leaves, but to cut the skins. After the last beating, the leaves are taken up by the end of a cane instrument, and, being blown flat on a leather cushion, are cut to a size, one by one, with a square frame of cane made of a proper sharpness, or with a frame of wood edged with cane: they are then fitted into books of twenty-five leaves each, the paper of which is well smoothed, and rubbed with red bole to prevent their sticking to it. The French use only the cane knife; cutting them first straight on one side, fitting them into the book by the straight side, and then paring off the superfluous parts of the gold about the edges of the book. The size of the French gold leaves is from three inches to three and three-quarters square; that of ours, from three inches to three and three-eighths. The process of gold-beating is considerably influenced by the weather. In wet weather, the skins grow somewhat damp, and in this state make the extension of the gold more tedious: the French are said to dry and press them at every time of using; with care not to overdry them, which would render them unfit for farther service. Our workmen complain more of frost, which appears to affect the metalline leaves themselves: in frost, a gold leaf cannot easily be blown flat, but breaks, wrinkles, or runs together. Gold leaf ought to be prepared from the finest gold; as the admixture of other metals, though in too small a proportion to sensibly affect the color of the leaf, would dispose it to lose much of its beauty in the air. And indeed there is little temptation to the workmen to use any other; the greater hardness of alloyed gold occasioning as much to be lost in point of time and labor, and in the greater number of leaves that break, as can be gained by any quantity of alloy that would not be at once discoverable by the eye. All metals render gold harder and more difficult of extension: even silver, which in this respect seems to alter its quality less than any other metal, produces with gold a mixture sensibly harder than either of them separately, and this hardness is in no art more felt than in gold-beating. But, though the gold-beater cannot advantageously diminish the quantity of gold in the leaf by the admixture of any other substance with the gold, yet means have been contrived, for some particular purposes, of saving the precious metal, by producing a kind of leaf called party gold, whose basis is silver, and which has only a superficial coat of gold upon one side: a thick leaf of silver and a thinner one of gold, laid flat on one another, heated and pressed together, unite and cohere; and being then beaten into fine leaves, as in the foregoing process, the gold, though its quantity is only about one-fourth of that of the silver, continues everywhere to cover it, the extension of the former keeping pace with that of the latter. See GOLD.

LEAGUE, *n.s.* & *v.n.* }
LEAGUED', *adj.* } Fr. *ligue*; Lat. *ligo*, to bind together. A confederacy; union; bond of agreement; political treaty: to unite; confederate.

Thou shalt be in *league* with the stones of the field; and the beasts of the field shall be at peace with thee. *Job.*

You peers, continue this united *league*:
I every day expect an embassage
From my Redeemer, to redeem me hence.
And now in peace my soul shall part to heaven,
Since I have made my friends at peace on earth.
Shakspeare.

It is a great error, and a narrowness of mind, to think that nations have nothing to do one with another, except there be either an union in sovereignty, or a conjunction in pacts or *leagues*: there are other bands of society and implicit confederations. *Bacon's Holy War.*

Oh Tyrians, with immortal hate
Pursue this hated race: and let there be
'Twixt us and them no *league* nor amity.
Denham.

I, a private person, whom my country
As a *league* breaker gave up bound, presumed
Single rebellion, and did hostile acts. *Milton.*

And now thus *leagued* by an eternal bond,
What shall retard the Britons bold designs?
Philips.

Where fraud and falsehood invade society, the band presently breaks, and men are put to a loss where to *league* and to fasten their dependances.
South.

Thus every kind their pleasure find,
The savage and the tender;
Some social join, and *leagues* combine;
Some solitary wander. *Burns.*

While Israel's chiefs the sacred hill surround,
And famished armies crowd the dusty ground:
While proud Idolatry was *leagued* with dearth,
And withered Famine swept the desart earth.
Darwin.

When we are told that these men are *leagued* together, not only for the destruction of their own comfort, but of their very means of subsistence, can we forget that it is the bitter policy, the destructive warfare of the last eighteen years, which has destroyed their comfort, your comfort, all men's comfort!
Byron.

LEAGUE, *n. s.* Fr. *lieue*; Ital. *lega*; Lat. *leuca*; Wel. *lech*, a stone, says Camden, which used to mark every three miles; other etymologists connect it with Sax. leaȝ, Goth. *lage*, a place or station. Minsheu says, à Gr. λευκ. albus, 'Because they did of old time place white stones at every league's end.' A measure of length, equal to three miles.

Ere the ships could meet by twice five *leagues*,
We were encountered by a mighty rock.
Shakspeare.

Even Italy, though many a *league* remote,
In distant echoes answered. *Addison.*

Mazeppa said—'Twere long to tell;
And we have many a *league* to go,
With every now and then a blow,
And ten to one at least the foe,
Before our steeds may graze at ease
Beyond the swift Borysthenes. *Byron.*

A League contains more or fewer geometrical paces, according to the different usages and customs of countries. A league at sea, where it is chiefly used by us, being a land measure mostly peculiar to the French and Germans, contains 3000 geometrical paces, or three English miles. The French league sometimes contains the same measure, and in some parts of France it consists of 3500 paces; the mean or common league consists of 2400 paces, and the little league of 2000. The Spanish leagues are longer than the French, seventeen Spanish leagues making a degree, or twenty French leagues, or sixty-nine and a half English statute miles. The league of Spain is = four ancient Roman miles = 6441·392 yards. The large league of Spain is = five ancient Roman miles = 8051·74 English yards. On roads made since 1766 the distances are laid down at the rate of 8000 varas to the league; that is, 7416 English yards; so that five such leagues = twenty-one English miles nearly. But the juridical league is 5000 varas, or 4635 English yards; so that eight of these are equal to twenty-one English miles. Marine leagues are reckoned at the rate of twenty to a degree. But in different parts of Spain the leagues are very different. The leagues of Germany and Holland contain four geographical miles each. The German league, or that of Scandinavia, is = 9662·0886 English yards. The mile or league of Germany is = 200 Rhenish yards = 8239·846 English yards. The Persian leagues are pretty nearly of the same extent with the Spanish; that is, they are equal to four Italian miles; which is pretty near to what Herodotus calls the length of the Persian parasang, which contained thirty stadia, eight whereof, according to Strabo, made a mile. The word comes from leuca, or leuga, an ancient Gaulish word for an itinerary measure, and retained in that sense by the Romans. Some derive the word leuca from λευκος, white; as the Gauls, in imitation of the Romans, marked the distances in their roads with white stones.

League denotes also an alliance between princes and states for their mutual aid, either in attacking some common enemy, or in defending themselves. Leagues among the Greeks were of three sorts: 1. *Σπονδη, συνθηκη ειρηνη*, whereby both parties were obliged to cease from hostilities, without even molesting the allies of each other; 2. *Επιμαχια*, whereby they engaged to have the same friends and enemies, and to assist each other upon all occasions. All these leagues were confirmed with oaths, imprecations, and sacrifices. The victims most generally used were a boar, ram, or goat, sometimes all three; and sometimes bulls and lambs. They cut out the testicles of the animal, and stood upon them while they swore; and some of the hair of the victim was distributed to all present. They then cut the animal's throat, which was called *ορκια τεμνειν*, in Latin ferire fœdus. This done, they repeated their oaths and imprecations, calling the gods to witness the honesty of their intentions. A libation was then made of wine, which at this time was mixed, to imply their conjunction and union; while this was pouring out they prayed that the blood of him who should break the treaty might be poured out in like manner. Upon these occasions no part of the victim was eaten. Still further to increase the solemnity of this obligation, the league was engraven upon brass, fixed up in places of public concourse, and sometimes read at the solemn games. Some exchanged certain *συβολα*, or tesseræ, upon the occasion, and frequently sent ambassadors, on some appointed day, to keep them in mind of their engagements to each other. The ceremonies of the Romans in making leagues were performed by the Feciales. See Feciales.

League, by way of eminence, denotes a celebrated one which existed in France, from 1576 to 1593. Its intent was to prevent the succession of Henry IV., who was of the reformed religion, to the crown; and it ended with his abjuration of that faith. The leaguers, or confederates, were of three kinds. The zealous leaguers aimed at the utter destruction, not only of the Huguenots, but also of the ministry. The Spanish leaguers had principally in view the transferring the crown of France to the king of Spain, or the infanta his daughter. The moderate leaguers aimed only at the extirpation of Calvinism, without any alteration of the government. See France.

League, Achæan. See Achæans.

LEA'GUER, *n. s.* Swed. and Teut. *lager*, from Goth. *lega*, to lay or place. Siege; investment of a town.

We will bind and hoodwink him so, that he shall suppose no other but that he is carried into the *leaguer* of the adversaries, when we bring him to our own tents. *Shakspeare.*

LEAK, *n. s.* & *v. a.* } Sax. lecen; Belg. and
Lea'ky, *adj.* } Teut. *lecken*; Heb. לקח, accipere. Minsheu. A hole or breach which lets in water; to let in or let out water; to fall through a hole or breach.

There will be always evils, which no art of man can cure: breaches and *leaks* more than man's wit hath hands to stop. *Hooker.*

They will allow us ne'er a jordan, and then we *leak* in your chimney. *Shakspeare.*

Thou'rt so *leaky*,
That we must leave thee to thy sinking; for
Thy dearest quit thee. *Id.*

The water, which will perhaps by degrees *leak* into several parts, may be emptied out again. *Wilkins.*

The water rushes in, as it doth usually in the *leak* of a ship. *Id.*

Golden stars hung o'er their heads,
And seemed so crowded, that they burst upon 'em,
And dart at once their baleful influence
In *leaking* fire. *Dryden and Lee.*

If you have not enjoyed what youth could give,
But life sunk through you like a *leaky* sieve,
Accuse yourself, you lived not while you might. *Id.*

Whether she sprung a *leak* I cannot find,
Or whether she was overset with wind,
Or that some rock below her bottom rent,
But down at once with all her crew she went. *Id.*

Women are so *leaky*, that I have hardly met with one that could not hold her breath longer than she could keep a secret. *L'Estrange.*

His feet should be washed every day in cold water; and have his shoes so thin that they might *leak*, and let in water. *Locke.*

A small *leak* will sink a great ship.
Franklin.

As day advanced the weather seemed to abate,
And then the *leak* they reckoned to reduce,
And keep the ship afloat, though three feet yet
Kept two hand and one chain-pump still in use.
Byron.

A LEAK, at sea, is a hole in the ship, through which the water comes in. A ship is said to spring a leak, when she begins to leak, or to let in the water. The manner of stopping a leak is to put into it a plug wrapped in oakum, and well tarred, or in a tarpawling clout, which keeps out the water, or nailing a piece of sheet lead on the place. Seamen sometimes stop a leak by thrusting a piece of salt beef into it. The sea-water, being fresher than the brine imbibed by the beef, penetrates into its body, and causes it to swell so as to bear strongly against the edges of the broken plank, and thereby stops the influx of the water.—A ready way to find a leak in a ship is, to apply the narrower end of a speaking trumpet to the ear, and the other to the side of the ship where the leak is supposed to be; when the noise of the water issuing in at the leak will be heard distinctly, whereby it may be discovered.

LEAKAGE, in commerce, is an allowance in the customs, granted to importers of wines, for the waste or damage it is supposed to have received in the passage.

LEAKE (John), M.D., an eminent English physician, born at Kirk-Oswald, in Cumberland. After going through the usual studies, in which he made rapid advances, he attended the London Hospitals, and was admitted a member of the corporation of surgeons in that city. He then set out on a tour to Portugal and Italy, and on his return commenced business in Piccadilly, and delivered lectures on the obstetrical art. His Introductory Lecture on the Theory and Practice of Midwifery was published in 1764, and went through four editions in 4to. In 1765 he published the original plan of the Westminster Lying-in Hospital; and, having purchased a piece of ground, erected a building according to his plan, and made a free gift of the whole to the governors of the hospital. In 1773 he published Practical Observations on the Child-bed Fever; in 1774 he re-published his lecture, including the History, Nature, and Tendency of Midwifery; which he afterwards considerably enlarged, and published in two volumes, under the title of Medical Observations and Instructions, on the Nature, Treatment, and Cure of Various Diseases Incident to Women. In 1792 he published a Practical Essay on the Diseases of the Viscera, particularly those of the Stomach and Bowels. But his intense application, in the composition of this work, induced an affection of the breast, which ended in his death in 1792.

LEAKE (Richard), master gunner of England, was born at Harwich in 1629, and bred to the sea. At the Restoration he was made master gunner of the Princess, a frigate of fifty guns; and, in the first Dutch war, distinguished himself by his skill and bravery in two extraordinary actions; one against fifteen sail of Dutch men of war; and another, in 1667, against two Danes in the Baltic, in which, the commanding officers of the Princess being killed or desperately wounded, the command devolved upon him. In 1669 he was promoted to be gunner of the Royal Prince, a first-rate man of war. He was engaged, with his two sons Henry and John, in the sea-fight against Van Tromp, in 1673; when the Royal Prince had all her masts shot away, near 400 of her men killed and disabled, and most of her upper tier of guns dismounted. As she lay thus like a wreck, a large Dutch man of war came down upon her with two fire ships; and captain Rooke, afterwards Sir George, thinking it impossible to defend her, ordered the men to save their lives, and the colors to be struck Leake, hearing this, took the command upon himself, saying, 'The Royal Prince shall never be given up to the enemy, while I am alive to defend her.' His undaunted spirit inspired the small residue of the ship's company with courage; they returned with alacrity to the fight, and, under the direction of this valiant gunner and his two sons, sunk both the fire-ships, and obliged the man of war to sheer off: having thus saved the Royal Prince, he brought her into Chatham. Soon after Leake was made commander of a yacht, and gunner of Whitehall. In 1677 he obtained a grant for life of the office of master gunner of England, and store-keeper of the ordnance at Woolwich. He was the principal contriver of what the French call infernals, used at the bombardment of St. Malo's, in 1693.

LEAKE (Sir John), an English admiral, distinguished by his bravery and success, was born in 1656, and was taught mathematics and gunnery by Richard his father. He distinguished himself in 1673 in the memorable engagement between Sir Edward Spragg and Van Tromp, when but sixteen years of age; and, being afterwards made captain, signalised himself by carrying into effect the desperate attempt of convoying some victuallers into Londonderry. In 1702, being made commodore of a squadron, he destroyed the French trade and settlements at Newfoundland, and thus restored the whole island to the British. On his return he was created rear-admiral; soon after he was made vice-admiral of the blue, and was knighted. He was engaged with admiral Rooke in taking Gibraltar; after which he distinguished himself in the general engagement off Malaga. He was soon after made vice-admiral of the white, and then twice relieved Gibraltar. The last time he attacked five ships of the French fleet coming out of the bay, of which two were taken, and two run ashore and destroyed: baron Pointi died soon after of the wounds he received in the battle; and in a few days the enemy raised the siege. In 1705 Sir John was engaged in the reduction of Barcelona; and in 1706 relieved that city, when reduced to the last extremity, and obliged king Philip to raise the siege. Soon after he took Carthagena; whence, proceeding to Alicant and Joyce, they both submitted to him; and he concluded the year with the reduction of Majorca. Upon his return home prince George of Denmark made him a present of a ring valued at £400, and he received £1000 from queen Anne as a reward for his services. In 1707 he was made admiral of the white, and commander-

'n-chief of the fleet; and in 1706 he surprised a convoy of the enemy's corn, sent to Barcelona. He then proceeded to Sardinia, which he reduced to the obedience of king Charles of Spain, and soon after assisted lord Stanhope in the conquest of Minorca. On his return he was appointed one of the lord high admiral's council; and, in 1709, was made rear-admiral of Great Britain. He was several times chosen M. P. for Rochester; and in 1712 conducted the English forces to take possession of Dunkirk. But upon the accession of king George I. he was superseded, and allowed a pension of £6000 a year. He died at Greenwich in 1720.

LEAKE (Stephen Martin), a writer on heraldry, was the nephew of Sir John Leake, the naval officer. At the revival of the order of the Bath he was appointed one of the esquires of the deputy earl marshal, and, in 1727, Lancaster herald, and successively Norroy, Clarencieux, and at length in 1754 garter king-at-arms. In 1750 he printed a life of his uncle Sir John Leake, 8vo., which, however, was never published, and, the impression having been restrained to fifty copies, the book is rare. His other works are, Reasons for granting Commissions to the provincial Kings-at-arms to visit their Provinces; An Historical Account of English Money; and The Statutes of the Order of the Garter. He died in 1773.

LEAMINGTON. See LYMINGTON.

LEAMINGTON, Spa, England, in the parish of Leamington Priors, and county of Warwick, celebrated for its mineral waters. This place has been rapidly progressing to prosperity and elegance since the year 1797, and from an inconsiderable village, such as it then was, it has become a populous, regularly built, fashionable rendezvous during the summer, visited not only by invalids, for whom the waters have been prescribed, but also by persons of rank and high professional reputation, who seek a restoration of their energies, in the regularity of regimen, and agreeable society of this favourite watering place. Baths, public walks, libraries, assembly and pump-rooms, are all in a style of costliness and good taste. The waters contain salt, sulphate of soda, muriate of magnesia, and sulphate of lime. Leamington is distant from Warwick two miles, from London 95 miles, has a population amounting to 6000 souls. The benefice of Leamington Priors is a vicarage in the diocese of Lichfield and Coventry, of the annual value of £141. 5s.

LEAN, *v. a.* Sax. linian; Belg. *lenen, leitnen*; Goth. *ligen*, to recline. To incline or rest against; to bend or tend towards; to recline; to be in a bending posture.

The columns may be allowed somewhat above their ordinary length, because they *lean* unto so good supporters. *Wotton.*

'Mid the central depth of blackening woods,
High raised in solemn theatre around
Leans the huge elephant. *Thomson.*

Lean not on earth, 'twill pierce thee to the heart;
A broken reed at best; but oft a spear;
On its sharp point peace bleeds, and hope expires. *Young.*

And oft by yon blue gushing stream,
Shall Sorrow *lean* her drooping head,
And feed deep thought with many a dream,
And lingering, pause and lightly tread,
Fond wretch; as if her step disturbed the dead. *Byron.*

LEAN, *adj.* & *n. s.*, LEAN'LY, LEAN'NESS. Sax. læne; Swed. *len* Goth. and Teut. *lin*; Lat. *lenis*. Thin; meagre; frail; weak; not fat; wanting flesh: hence poor in any way; hungry.

Lean raw-boned rascals! who would e'er suppose,
They had such courage and audacity! *Shakspeare.*

I would invent as bitter searching terms,
With full as many signs of deadly hate,
As *lean*-faced envy in her loathsome cave. *Id.*

That which combined us was most great, and let not
A *leaner* action rend us. *Id.*

The poor king Reignier, whose large style
Agrees not with the *leanness* of his purse. *Id.*

Let a physician beware how he purge after hard frosty weather, and in a *lean* body, without preparation. *Bacon.*

If thy *leanness* loves such food,
There are those, that, for thy sake,
Do enough. *Ben Jonson.*

And fetch their precepts from the cynic tub,
Praising the *lean* and sallow abstinence. *Milton.*

Swear that Adrastus, and the *lean*-looked prophet,
Are joint conspirators. *Dryden and Lee.*

With razors keen we cut our passage clean
Through rills of fat, and deluges of *lean*. *Farquhar.*

There are two chief kinds of terrestrial liquors, those that are fat and light, and those that are *lean* and more earthy, like common water. *Burnet.*

No laughing graces wanton in mine eyes;
But haggered grief, *lean*-looking sallow care,
Dwell on my brow. *Rowe's Jane Shore.*

Lean people often suffer for want of fat, as fat people may by obstruction of the vessels. *Arbuthnot.*

The symptoms of too great fluidity are excess of universal secretions, as of perspiration, sweat, urine, liquid dejectures, *leanness* and weakness. *Id.*

With eye askance,
I view the muscular proportioned limb
Transformed to a *lean* shank. *Cowper.*

LEAO, in natural history, a mineral substance approaching to the nature of the lapis lazuli, found in the East Indies, and of great use in the Chinese porcelain manufactures, being the finest blue they are possessed of. This stone is found in the strata of pit-coal, or in those of a yellowish or reddish earth in the neighbourhood of the veins of coal. Pieces of it are often found lying on the surface of the ground, and these are a sure indication that more will be found on dipping. It is generally found in oblong pieces of the size of a finger, not round, but flat. Some of this is very fine, some coarse and of a bad color. The latter is very common; but the former is scarce, and greatly valued. It is not easy to distinguish them at first sight, but the trying one piece is generally a sufficient test of the whole mine; for all that is found in the same place is usually of the same sort. In preparing it for use they first wash it very clean; then lay it at the bottom of their baking furnaces; and, when it has been thus calcined for three or four hours, it is taken

out and powdered very fine in large mortars of porcelain, with stone pestles faced with iron. When the powder is perfectly fine, they pour in boiling water, and grind that with the rest; and, when thoroughly incorporated, they add more, and pour it off after some time settling. The remainder at the bottom of the mortar, which is the coarser part, they grind again with more water; and so on, till they have made the whole fine, excepting a little dirt or grit. All the liquors are then mixed together, and stirred; and after being allowed to stand two or three minutes, poured off with the powder remaining in them. This is suffered to subside gradually, and is the fine blue used in their best works, common smalt serving for the blue of all the common China.

LEAP, *v. n., v. a.* & *n. s.* }
LEAP'FROG, *n. s.* } Saxon leapan; Belg. *loopen;* Sw. *lopa;* Scotch *loup.*
LEAP'YEAR. }
To jump; bound; spring: hence to start, fly, or rush impetuously: to pass over or into by leaping: the noun signifies either the jump or bound accomplished, or the space passed over: leap-frog, a leaping play of children in imitation of frogs: leap-year is abundantly defined in the extracts.

And anoon his leggis and hire feet were sowdid togidre, and he *leppide* and stood and wandride, and he entride with hem into the temple and wandride and *leppide* and heriede God. *Wiclif. Dedis* 3.

Out of his mouth go burning lamps, and sparks of fire *leap* out. *Job.* xli. 19.

Rejoice ye in that day, and *leap* for joy. *Luke* vi. 2.

For age, with stealing steps,
Hath clawed me with his crowch,
And lusty life away she *leapes,*
As there had been none such.
Vncertaine Auctors. Thassault of Cupide, &c.

He ruin upon ruin heaps,
And on me, like a furious giant, *leaps.* *Sandys.*

He parted frowning from me, as if ruin
Leaped from his eyes; so looks the chased lion
Upon the daring huntsman that has galled him;
Then makes him nothing. *Shakspeare. Henry VIII.*

Methinks, it were an easy *leap*
To pluck bright honour from the pale-faced moon.
Shakspeare.

If I could win a lady at *leap-frog,* I should quickly *leap* into a wife. *Id. Henry V.*

A man *leapeth* better with weights in his hands than without; for that the weight, if it be proportionable, strengthening the sinews by contracting them. In *leaping* with weights, the arms are first cast backwards and then forwards with so much the greater force; for the hands go backward before they take their rise. *Bacon.*

In a narrow pit
He saw a lion, and *leaped* down to it. *Cowley.*

The reason of the name of *leap-year* is, that a day of the week is missed; as, if on one year the first of March be on Monday, it will on the next year be on a Tuesday, but on *leap-year* it will *leap* to Wednesday.

As one condemned to *leap* a precipice,
Who sees before his eyes the depth below,
Stops short. *Dryden's Spanish Fryar.*

Behold that dreadful downfal of a rock,
Where yon old fisher views the waves from high!
'Tis the convenient *leap* I mean to try. *Dryden.*

Too soon they must not feel the sting of love:
Let him not *leap* the cow. *Id. Georg.*

Every man is not of a constitution to *leap* a gulf for the saving of his country. *L'Estrange.*

Wickedness comes on by degrees, as well as virtue; and sudden *leaps* from one extreme to another are unnatural. *Id.*

The cat made a *leap* at the mouse. *Id.*

Strait *leaping* from his horse, he raised me up. *Rowe.*

Leap-year or bissextile is every fourth year, and so called from its *leaping* a day more that year than in a common year: so that the common year has 365 days, but the *leap-year* 366; and then February hath 29 days, which in common years hath but 28. To find the *leap-year* you have this rule:

Divide by 4; what's left shall be
For *leap-year* 0; for past 1, 2, 3. *Harris.*

I am warmed, my heart
Leaps at the trumpet's voice, and burns for glory.
Addison.

She dares pursue, if they dare lead:
As their example still prevails,
She tempts the stream or *leaps* the pales.
Prior.

The commons wrested even the power of chusing a king intirely out of the hands of the nobles; which was so great a *leap,* and caused such a convulsion in the state, that the constitution could not bear. *Swift.*

I see the circling hunt of noisy men
Burst law's inclosure, *leap* the mounds of right,
Pursuing and pursued, each other's prey;
As wolves for rapine, as the fox for wiles;
Till death, that mighty hunter, earth them all.
Young.

LEAP, in music, is when the song does not proceed by conjoint degrees, as when between each note there is an interval of a third, a fourth, a fifth, &c. It is to be observed that there are two kinds of leaps, regular and irregular, called by the Italians salti regolari, and irregolari. The regular leaps are those of a third major or minor, whether natural or accidental, fourth, fifth, sixth minor, and octave, and these either ascending or descending.

Irregular leaps are the triton, sixth major, seventh major, the ninth, tenth, and, in general, all beyond the compass of an octave; at least in vocal music. Besides these, there are others which may be used, such as the diminished fourth, the false fifth, and flat seventh. The difference between the regular and irregular leaps is, that the former are performed by the voice, without any great difficulty or effort; whereas the latter require more attention to execute.

LEAP, THE LOVER'S. See LEUCATA.

LEARN, *v. a.* & *v. n.* }
LEARN'ED, }
LEARN'EDLY, } Sax. leoɲnian; Teut. *lernen;* Goth. and Swed. *lœra.* To obtain knowledge or skill; to improve; to
LEARN'ING, }
LEARN'ER. }
take pattern (used with *of*): also, in a sense deservedly obsolete, to impart knowledge: learned is skilled or versed to some degree of proficiency in science or art: learning, scholastic knowledge; skill of any kind.

But britheren I preie ghou that ghe aspie hem that maken dissentiouns and hyrtyngis bisidis the doçtrine that ghe han *lerned,* and bowe ghe awai fro hem. *Wiclif. Romayns* 16.

Learn a parable of the fig-tree.
Matt. xxiv. 32.

Take my yoke upon you, and *learn of* me; for I am meek and lowly. *Matt.* xi. 29.

He would *learn*
The lion stoop to him in lowly wise,
A lesson hard. *Spenser's Faerie Queene.*

The apostle seemed in his eyes but *learnedly* mad. *Hooker.*

An art of contradiction by way of scorn, a *learning* wherewith we were long sithence forewarned, that the miserable times whereunto we are fallen should abound. *Id.*

He, in a shorter time than was thought possible, *learned* both to speak and write the Arabian tongue. *Knolles.*

You taught me language, and my profit on't
Is, I know not how to curse: the red plague rid you,
For *learning* me your language. *Shakspeare. Tempest.*

Much
He spoke, and *learnedly*, for life; but all
Was either pitied in him, or forgotten. *Shakspeare.*

In imitation of sounds, that man should be the teacher is no part of the matter; for birds will *learn* one *of* another. *Bacon's Natural History.*

Learning hath its infancy, when it is almost childish; then its youth, when luxuriant and juvenile; then its strength of years, when solid; and, lastly, its old age, when dry and exhaust. *Bacon.*

The late *learners* cannot so well take the ply, except it be in some minds that have not suffered themselves to fix. *Id.*

He that sips of many arts, drinks of none. However, we must know that all *learning*, which is but one grand science hath so homogeneall a body, that the parts thereof do with a mutuall service relate to, and communicate strength and lustre each to other. *Fuller.*

Learn, wretches! *learn* the motions of the mind,
And the great moral end of humankind. *Dryden.*

Great contemporaries whet and cultivate each other: and mutual borrowing and commerce make the common riches of *learning*, as it does of the civil government. *Id.*

It is indifferent to the matter in hand, which way the *learned* shall determine of it. *Locke.*

To be *learned* in the lump by other men's thoughts, and to be in the right way by saying after others, is the much easier and quicker way. *Id.*

You will find it difficult to persuade *learned* men to fall in with your projects. *Addison on Medals.*

To tongue or pudding thou hast no pretence,
Learning thy talent is, but mine is sense. *Prior.*

The *learned* Vossius says his barber used to comb his head in iambics. *Steele.*

Though trained in arms, and *learned* in martial arts,
Thou chusest not to conquer men but hearts. *Granville.*

As Moses was *learned* in all the wisdom of the Egyptians, so it is manifest from this chapter, that St. Paul was a great master in all the *learning* of the Greeks. *Bentley.*

Some by old words to fame have made pretence:
Such laboured nothings, in so strange a style,
Amaze the unlearned, and make the *learned* smile. *Pope.*

As those move easiest that have *learned* to dance. *Id.*

Every coxcomb swears as *learnedly* as they. *Swift.*

The *learned* met with free approach,
Although they came not in a coach. *Id.*

You may rely upon my tender care,
To keep him far from perils of ambition:
All he can *learn* of me will be to weep! *A. Philips.*

Would you be still more *learned* than the *learned*?
Learn well to know how much need not be known,
And what that knowledge which impairs your sense. *Young.*

Much *learning* shews how little mortals know;
Much wealth how little worldlings can enjoy. *Id.*

A man of the best, and the greatest *learning*, if he does not know the world by his own experience and observation, will be very absurd, and consequently very unwelcome in company. *Chesterfield.*

Learning once made popular is no longer *learning*; it has the appearance of something which we have bestowed upon ourselves, as the dew appears to rise from the field which it refreshes. *Johnson.*

What pity it is that men should take such immense pains, as some do, to *learn* those things which, as soon as they become wise, they must take as much pains to unlearn! *Mason.*

Knowledge is proud that he has *learned* so much;
Wisdom is humble that he knows no more. *Cowper.*

LEASE, *v.n.*, LEAS'ER, *n. s.* Sax. lısan; Goth. *lesan*; Teut. and Belg. *lesen*; Gr. *λεγω*, to gather. To glean.

She in harvest used to *lease*;
But harvest done, to chare-work did aspire,
Meat, drink, and two-pence, was her daily hire. *Dryden.*

There was no office which a man from England might not have; and I looked upon all who were born here as only in the condition of *leasers* and gleaners. *Swift.*

LEASE, *n. s.* & *v. a.* Fr. *laisser*; Teut. *lassen*; Goth. *leysa.* A demise or tenure of houses or lands. See below: to lease is to demise or let property.

Why, cousin, wert thou regent of the world,
It were a shame to let this land by *lease*. *Shakspeare.*

Our high-placed Macbeth
Shall live the *lease* of nature. *Id.*

Lords of the world have but for life their *lease*,
And that too, if the lessor please, must cease. *Denham.*

Thou to give the world increase,
Shortened hast thy own life's *lease*. *Milton.*

Where the vicar *leases* his glebe, the tenant must pay the great tythes to the rector or impropriator, and the small tithes to the vicar. *Ayliffe.*

I have heard a man talk with contempt of bishop's *leases*, as on a worse foot than the rest of his estate. *Swift.*

Leases of a Dean and Chapter are good without confirmation of the Bishop. *Tomlins.*

LEASE, in law. In times of remote antiquity the feudal law imposed restrictions on the granting of leases wholly incompatible with the spirit of the common law. By this, as it has stood for many centuries, all persons seised of an estate might let leases to endure so long as their own interest lasted. A tenant, therefore, in fee simple might let leases of any duration, for he had the whole interest; but tenants in tail, or for life, could make no leases which should bind the issue in tail or reversioner; nor could a husband, seised jure uxoris, make a firm or valid lease for any longer term than the joint-lives of himself and his wife. Yet some tenants

for life, as, where the fee-simple was in abeyance, might (with the concurrence of such as had the guardianship of the fee) make leases of equal duration with those granted by tenants in fee-simple; such as parsons and vicars with consent of the patron and ordinary. Co. Lit. 44. So also bishops and deans, and such other sole ecclesiastical corporations as are seised of the fee-simple of land in their corporate right, might, with the concurrence and confirmation of such persons as the law requires, have made leases for years, or for life, estates in tail, or in fee, without any limitation or control. And corporations aggregate might have made what estates they pleased, without the confirmation of any other person whatever. Whereas now, by several statutes, this power where it was unreasonable, and might be made an ill use of, is restrained; and, where in the other cases the restraint by the common law seemed too hard, it is in some measure removed. The former statutes are called the restraining, the latter the enabling statute, 2 Comm. c. 20.

A lease may be either in writing or by word of mouth: sometimes it is made and done by record, as fine, recovery, &c., and sometimes and most frequently by writing, called a lease by indenture; it may be also made by deed-poll; when made by word of mouth, without any writing, it is called a lease-parol. But by the statute of frauds, statute 29 Car. II. c. 3, leases of lands, except leases not exceeding three years, must be in writing, and signed by the parties themselves, or their agents duly authorised, otherwise they will operate only as leases at will.

A parol agreement to lease lands for four years creates only a tenancy at will. 4 Term Rep. 680.—But see 8 Term Rep. 3, that a lease by parol enures as a tenancy from year to year; the meaning of the statute of frauds being that such an agreement should not operate as a term. As to the time a lease may be made either for life, for years, or at will. For life; as for life of the lessee, or another, or both.—For years, i. e. for a certain number of years, as ten, 100, 1000, or 10,000 years, months, weeks, or days, as the lessor and lessee agree. And then the estate is properly called a term for years; for this word term does not only signify the limits and limitation of time, but also the estate and interest that doth pass for that time. These leases for years do some of them commence in præsenti, and some in futuro at a day to come; and the lease that is to begin in futuro is called an interesse termini, or future interest.—At will; i. e. when a lease is made of land to be held at the will and pleasure of the lessor and lessee together; and such a lease may be made by word of mouth, as well as the former.

A lease but for half a year, or a quarter, or any less time, this lessee is still respected as a tenant for years, and is styled so in some legal proceedings; a year being the shortest term which the law in this case takes notice of. Indeed every estate which must expire at a period certain and prefixed, by whatever words created, is an estate for years, and therefore this estate is frequently called a term, terminus, because its duration or continuance is bounded, limited, and determined; for every such estate must have a certain beginning and certain end. Co. Lit. 45. But the law reckons an estate for years inferior in interest, as compared to an estate for life, or an inheritance; an estate for life, even if it be per auter vie, is a freehold; but an estate for 1000 years is only a chattel, and reckoned part of the personal estate. Co. Lit. 45. Hence it follows, that a lease for years may be made to commence in futuro, though a lease for life cannot. As if one grants lands to another to hold from Michaelmas next for twenty years, this is good; but to hold from Michaelmas next, for the term of his natural life is void.

Generally, to the making of a good lease there must concur, 1. A lessor not restrained from making a lease; 2. A lessee not disabled to receive; 3. A thing demised which is demisable, and a sufficient description of the thing demised, &c.; 4. If for years, it must have a specified commencement and termination; 5. It is to have all the usual ceremonies of sealing, delivery, and acceptance.

If the substance of a lease be put in writing, and signed by the parties, though it be not sealed, it shall have the effect of a lease for years (Wood's Inst. 266); but a lease in writing, though not under seal, cannot be given in evidence, unless it be stamped: and articles with covenants to let and make a lease of lands, for a certain term, at so much rent, have been adjudged a lease. In a covenant with the words 'have, possess, and occupy lands, in consideration of a yearly rent, without the word demise, it was held a good lease; and a license to occupy, take the profits, &c., which passes an interest, amounts to a lease. 3 Bulst. 204; 3 Salk. 223. An agreement of the parties, that the lessee shall enjoy the lands, will make a lease; but if the agreement has a reference to the lease to be made, and implies an intent not to be perfected till then, it is not a perfect lease until made. If on a promise of lease a man lays out money on the premises, he shall oblige the lessor afterwards to make the lease; the agreement being executed on the lessee's part.

A paper containing words of present contract, with an agreement that the lessee should take possession immediately, and that a lease should be executed in future, operates only as an agreement for a lease, and not as a lease itself. But an instrument containing words of present demise will operate as a lease.

A lessee has a term for a year by parol, and so from year to year, so long as both parties please; if the lessee enters on a second year, he is bound for that year, and so on; and if there is a lease by deed for a year, and so from year to year as long as both parties agree, this is binding but for one year; though, if the lessee enters upon the second year, he is for that year bound: if it is for a year, and so from year to year, so long as both parties agree, till six years expire; this is a lease for six years, but determinable every year at the will of either party; but if it is for a year, and so from year to year till six years determine, this is a certain lease for six years.

A man out of possession cannot make a lease of lands, without entering and sealing the lease upon the land. Dalis. 81. The lessee is to enter on the premises let; and such lessee for years is not in possession, so as to bring trespass, &c., until actual entry; but he may grant over his term before entry. 1 Inst. 46; 2 Lil. 160.

Lands and mines are leased to a tenant; this only extends to the open mines, and the lessee shall not have any others, if there are such: and, if land and timber are demised, the lessee is not empowered to sell it. 2 Lev. 184; 2 Mod. 193. A man makes a lease of lands for life, or years, the lessee has but a special interest in the timber trees, as annexed to the land, to have the mast and shadow for his cattle; and when they are severed from the lands, or blown down with wind, the lessor shall have them as parcel of his inheritance. 4 Rep. 62; 11 Rep. 81. A demise of premises in Westminster, late in the occupation of A, particularly describing them, part of which was a yard, does not pass a cellar situate under that yard, which was then in the occupation of B, another tenant to the lessor: and the lessor, in an ejectment brought to recover the cellar, is not estopped by his deed from going into evidence, to show that the cellar was not intended to be demised. Whether parcel or not of the thing demised is always matter of evidence.

He that is seised of an estate for life, may make a lease for his life according as he is seised; also he may make a lease for years of the estate, and it shall be good as long as the estate for life doth last; one possessed of lands, for years, may make a lease for all the years except one day, or any short part of the term; and if lessee for years make a lease for life, the lessee may enjoy it for the lessor's life, if the term of years last so long; but, if he gives livery and seisin upon it, this is a forfeiture of the estate for years. Wood's Inst. 267. If tenant in tail or for life make a lease generally, it shall be construed for his own life. 1 Inst. 42. By various acts of parliament, and also by private settlements, a power is granted of making leases in possession, but not in reversion, for a certain time; the object being that the estate may not be incumbered, by the act of the party, beyond a specific time. Yet persons who had this limited power of making in possession only, had frequently demised the premises to hold from the day of the date; and the courts in several instances determined, that the words 'from the day of the date,' excluded the day of making the deed: and that in consequence these were leases in reversion, and void; but this question having been brought again before the court of king's bench, it was determined that the words 'from the day' might either be inclusive or exclusive; and therefore that they ought to be construed so as to effectuate these important deeds, and not to destroy them. Of all kinds of powers the most frequent is that to make leases. In the making such leases all the requisites particularly specified in the power must be strictly observed; and such leases must contain all such beneficial clauses and reservations as ought to be, for the benefit of the remainderman; the principle of law in this case being, that the estate must come to him in as beneficial a manner as the ancient owners held it. Joint-tenants, tenants in common, and coparceners, may make leases for life, years, or at will, of their own parts, which shall bind their companions; and, in some cases, persons who are not seised of lands in fee, &c., may make leases for life or years, by special power enabling them to do it; when the authority must be exactly pursued. Wood's Inst. 267. But there is a difference where there is a general power to make leases, and a particular power. See ante, et 8 Rep. 69. If joint-tenants join in a lease, this shall be but one lease, for they have but one freehold; but, if tenants in common join in a lease, it shall be several leases of their several interests. A lessor who has the fee cannot reserve rent to any other but himself, his heirs, &c. And, if he reserves a rent to his executors, the rent shall be to the heir, as incident to the reversion of the land. 1 Inst. 47. The lessor may take a distress on the tenements let for the rent; or may have action of debt for the arrears, &c. Also land leased shall be subject to those lawful remedies which the lessor provides for the recovery of his rent, possession, &c., into whose hands soever the land may come. In lands leased at will, the lessee cannot determine his will before or after the day of payment of the rent, but it must be done on that very day; and the law will not allow the lessee to do it to the prejudice of the lessor, as to the rent; nor that the lessor shall determine his will to the prejudice of the lessee, after the land is sown with corn, &c. For where lessee at will sows the land, if he does not himself determine the will, he shall have the corn: and where tenant for life sows the corn, and dies, his executors shall have it; but it is not so of a tenant for years, where the term ends before the corn is ripe, &c. 5 Rep. 116. The lessor and lessee, where the estate is at will, may determine the will when they please; but, if the lessor does it within a quarter, he shall lose that quarter's rent; and, if the lessee does it, he must pay a quarter's rent. 2 Salk. 413. By words spoken on the ground, by the lessor in the absence of the lessee, the will is not determined; but the lessee is to have notice. 1 Inst. 55. If a man makes a lease at will, and dies, the will is determined; and, if the tenant continues in possession, he is tenant at sufferance. Ibid. 57. But where a lessor makes an estate at will to two or three persons, and one of them dies, it has been adjudged this does not determine the estate at will. 5 Rep. 10. If a tenant at will grants over his estate to another, it determines his will.

The cancelling a lease is not a surrender within the statute of frauds: nor is the recital in a second lease that it was granted in part consideration of the surrender of a former lease, it not purporting in the terms of it to be of itself a surrender. If a landlord lease for seven years by parol, and agree that the tenant shall enter at Lady-day, and quit at Candlemas; though the lease be void by the statute of Frauds, as to the duration of the term, the tenant holds under the terms of the lease in other respects. When the term of a lease is to end on a particular day

there is no occasion for a notice to quit: but a demand of possession, and notice in writing, are necessary to entitle the landlord to raise his rent. See LANDLORD and TENANT. The enabling statute, 32 Hen. VIII. c. 28, empowers three manner of persons to make leases, to endure for three lives, or one-and-twenty years, which could not do so before. At first, tenant in tail may by such leases bind his issue in tail, but not those in remainder or reversion. Secondly, a husband seised in right of his wife, in fee-simple or fee-tail, provided the wife joins in such lease, may bind her and her heirs thereby. Lastly, all persons seised of an estate in fee-simple in right of their churches, which extends not to parsons and vicars, may, without the concurrence of any other person, bind their successors. But many requisites must be observed which the statute specifies: as, 1st, The lease must be by indenture, and not by deed-poll or parol. 2dly, It must begin from the making, or day of the making, and not at any distance of time. 3dly, If there be any old lease in being, it must be first absolutely surrendered, or be within a year of expiring. 4thly, It must be either for twenty-one years, or three lives; and not for both. 5thly, It must not exceed the term of three lives, or twenty-one years, but may be for a shorter time. 6thly, Under this statute, 32 Hen. VIII., it must have been of corporeal hereditaments, and not of such things as lie merely in grants; for no rent can be reserved thereout by the common law, as the lessor cannot resort to them to distrain. But now, by the statute 5 Geo. III. c. 17, a lease of tithes or other incorporeal hereditaments, alone may be granted by any bishop or any such ecclesiastical or eleemosynary corporation, and the successor shall be entitled to recover the rent by an action of debt; which, in case of a freehold lease, he could not have brought at the common law. 7thly, It must be of lands and tenements most commonly letten for twenty years past; so that if they had been let for above half the time, or eleven years out of the twenty, either for life, for years, at will, or by copy of court-roll, it is sufficient. 8thly, The most usual and customary feorm or rent for twenty years past must be reserved yearly on such lease. 9thly, Such lease must not be made without impeachment of waste. These are the guards imposed to prevent unreasonable abuses, in prejudice of the issue, the wife, or the successor, of the reasonable indulgence here given. Next follow, in order of time, the disabling or restraining statute, 1 Eliz. c. 19 (made entirely for the benefit of the successor); which enacts, that all grants by archbishops and bishops (which include even those confirmed by the dean and chapter, the which, however long and unreasonable, were good at common law), other than for the term of twenty-one years, or three lives from the making, or without reserving the usual rent, shall be void. Then the 13 Eliz. c. 10; 14 Eliz. c. 11 and 14; 18 Eliz. c. 11; and 43 Eliz. c. 29.

Concerning these restrictive statutes two general observations are to be made. First, that they do not, by any construction, enable any persons to make such leases as they were by common law disabled to make. Therefore a parson or vicar, though he is restrained from making longer leases than for twenty-one years or three lives, even with the consent of the patron and ordinary, yet is not enabled to make any lease at all, so as to bind his successor, without obtaining such consent. Co. Lit. 44. Secondly, that though leases contrary to these statutes are declared void, yet they are good against the lessor, during his life, if he be a sole corporation; and are also good against an aggregate corporation, so long as the head of it lives, who is presumed to be the most concerned in interest. For the statute was intended for the benefit of the successor only; and no man shall make an advantage of his own wrong. Co. Lit. 45, 2 Comm. c. 20.

LEASE, in Scots law, is generally called a tack. See LAW. The shortness of leases in many parts of Scotland has been long and justly complained of, as disadvantageous, not only to the tenants, but even to the proprietors, as well as to the country in general, by tending greatly to retard improvements in husbandry. Leases for nineteen years are too short for making any material improvements. Three times that period, or fifty-seven years, is much recommended. See Stat. Acc. Index, part I. 'Although the granting of leases for nineteen years at least,' says the author of the Stat. Acc. of Dunnichen, 'is now become universal, yet there prevails a considerable diversity of opinion among proprietors, as to the expediency of including the life of the farmers in their leases. Some advantages, however, seem to give a decided preference to this last sort of lease. The tenant knows he is settled for life, and is therefore afraid to overcrop his land, lest he thereby injure himself. Many law-suits are thereby avoided. The tenant is also more attentive to the repairs of his buildings and fences; and requires a much less vigilant inspection on the part of the proprietor, or his factor. To protect the newly planted trees round the enclosed fields, the proprietor of Dunnichen has given the heirs of the tenants a right to one-third part of them at the expiration of the lease; and engages not to prosecute the tenants for any accidental damage from cattle. The tenants consider the trees as a part of their own property, and are at pains to protect them from injury. Until farms are transmitted from father to son like an inheritance, as is much the case in England, agriculture will not attain all the perfection of which it is capable. Veteres migrate coloni is an odious mandate.'

Upon this subject, however, respectable writers have given very different opinions. 'What ought to be the term of a lease,' says Mr. Loudon, 'can only be determined by a reference to the circumstances of each particular case. Lands naturally rich, or such as have already been brought to a high degree of fertility, requiring no great investment of capital, and returning all or nearly all the necessary outlay within the year, may be advantageously held upon short leases, such as perhaps give time for two, or at most three, of the rotations or courses of crops to which the quality of the soil is best adapted. The practice of England in this re-

spect is extremely various, almost every term, from twenty years downwards, being found in different parts of it. In Scotland, by far the most common period is nineteen years, to which it was formerly the practice, in some places, to add the life of the tenant. In that country, even when it is thought expedient to agree for a much longer term, this is still expressed in periods of nineteen years, a sort of mysterious cycle, which seems to be no less a favorite with the courts of law, than with landholders and farmers. Yet this term is somewhat inconvenient, as it can never correspond with any number of the recognised rotations of arable land. A lease for twenty years, it has been maintained by several writers, is not sufficient to reimburse a tenant for any considerable improvements, and landholders have often been urged to agree to a much longer term, which, it is alleged, would be not less for their own interest than for that of the tenant. This is a question which our limits do not permit us to discuss, but, after viewing it in different lights, assisted by the experience of long leases in different parts of Scotland, we cannot help expressing some doubts of their utility, even in so far only as regards the parties themselves; and we are decidedly of opinion, that a greater produce will be brought to market, from any given extent of land held on successive leases of twenty years, for half a century, than if held on one lease of that duration, whether the term be specified or indefinite, as is the case of a lease for life. As a general mode of tenure, leases for lives seem to us particularly objectionable.'

LEASE AND RELEASE is a species of convey ance used in the English law, first invented by sergeant Moore, soon after the statute of uses, and now the most common of any, and therefore not to be shaken; though very great lawyers, particularly Mr. Noy, formerly doubted its validity. It is thus contrived: a lease, or rather bargain and sale, upon some pecuniary consideration, for one year, is made by the tenant of the freehold to the lessee or bargainee. Now this, without any enrolment, makes the bargainer stand seised to the use of the bargainee, and vests in the bargainee the use of the term for a year; and then the statute immediately annexes the possession. He therefore, being thus in possession, is capable of receiving a release of the freehold and reversion, which must be made to a tenant in possession; and accordingly, the next day, a release is granted to him. This is held to supply the place of livery of seisin; and so a conveyance by lease and release is said to amount to a feoffment. See USES.

LEASH, *n. s.* & *v. a.* Fr. *liasse, lesse:* Ital. *laccio*; Belg. *litse;* Scot. *leich.* A cord or thong by which birds or dogs are held: hence a tierce, three; a bond generally: to leash is to bind or hold in a string.

Holding Corioli in the name of Rome,
Even like a fawning greyhound in the *leash*,
To let him slip at will. *Shakspeare.*

I am sworn brother to a *leash* of drawers, and can call them all by their Christian names. *Id.*

What I was, I am;
More straining on, for plucking back; not following
My *leash* unwillingly. *Id. Winter's Tale.*

Then should the warlike Harry, like himself,
Assume the port of Mars; and, at his heels,
Leasht in like hounds, should famine, sword, and fire,
Crouch for employment. *Id. Henry V.*

Some thought when he did gabble,
Th'ad heard three labourers of Babel.
Or Cerberus himself pronounce
A *leash* of languages at once. *Hudibras.*

The ravished soul being shewn such game, would break these *leashes* that tie her to the body. *Boyle.*

Thou art a living comedy; they are a *leash* of dull devils. *Dennis's Letters.*

LEAS'ING, *n. s.* } Sax. leaꞅe, leaꞅ, defici-
LEA'SY, *adj.* } ent; Goth. *lessing*. Lying; deceit; fraud: leasy, loose; flimsy.

The lawe is not sette to a iust man, but to uniuste men,—and lecchouris, to hem that doen leccherie with men, *lesing* mongeris and forsworun. *Wiclif.* 1 *Tymo.* i.

If thou because of thin humilitee, makest a *lesing* on thyself, though thou were not in sinne before yet arte thou than in sinne through thy *lesing*. *Chaucer. Personnes Tale.*

O ye sons of men, how long will ye have such pleasure in vanity, and seek after *leasing?* *Psalms* iv. 2.

He never leaveth, while the sense itself be left loose and *leasy*. *Ascham's Schoolmaster.*

That false pilgrim which that *leasing* told,
Was indeed old Archimago. *Faerie Queene.*

He 'mongst ladies would their fortunes read
Out of their hands, and merry *leasings* tell. *Hubberd's Tale.*

He hates foul *leasings* and vile flattery,
Two filthy blots in noble gentery. *Id.*

I have ever verified my friends
With all the size that verity
Would without lapsing suffer: nay, sometimes,
Like to a bowl upon a subtle ground,
I've tumbled past the throw; and in his praise
Have almost stampt the *leasing*. *Shakspeare.*

As folks, quoth Richard, prone to *leasing*,
Say things at first, because they're pleasing;
Then prove what they have once asserted,
Nor care to have their lie deserted:
Till their own dreams at length deceive them,
And oft repeating they believe them. *Prior.*

Trading free shall thrive again,
Nor *leasings* lewd affright the swain. *Gay.*

LEAST, *adj.* & *adv.* Sax. læꞅꞇ. The superlative of little (Sax. lıꞇ); Goth. *litest*. Wallis contends we should write it *lest*, as analogous to less. Smallest; in the lowest degree: 'at least,' 'at the least,' 'or at least-wise,' mean saying no more than necessary, or barely sufficient; at the lowest degree; also, not to say all.

He that is *leest* among you all is the grettist. *Wiclif. Luke* ix.

I am not worthy of the *least* of all the mercies shewed to thy servant. Gen. xxxii. 10.

Every effect doth after a sort contain, at *least-wise* resemble, the cause from which it proceedeth. *Hooker.*

To come from all things to nothing is not a descent but a downfall; and it is a rare strength and constancy, not to be maimed *at least*. *Bp. Hall's Contemplations.*

He who tempts, though in vain, *at least* asperses
The tempted with dishonour. *Milton.*

Whether such virtue spent now failed
New angels to create, if they *at least*
Are his created. *Id*

He resolved to wave his suit,
Or for a while play *least* in sight.
Hudibras.

Upon the mast they saw a young man, *at least* if he were a man, who sat as on horseback. *Sidney.*

The remedies, if any, are to be proposed from a constant course of the milken diet, continued *at least* a year. *Temple.*

Even that avert; I chuse it not;
But taste it as the *least* unhappy lot.
Dryden.

A fiend may deceive a creature of more excellency than himself, *at least* by the tacit permission of the omniscient Being. *Id.*

A man can no more have a positive idea of the greatest than he has of the *least* space. *Locke.*

A true and genuine impudence is ever the effect of ignorance without the *least* sense of it. *Steele.*

No man more truly knows to place a right value on your friendship, than he who *least* deserves it on all other accounts than his due sense of it. *Pope.*

Honour and fame *at least* the thunderer owed,
And ill he pays the promise of a god. *Id.*

Let useful observations be *at least* some part of the subject of your conversation. *Watts.*

Oh! how I wished for spear or sword,
At *least* to die amidst the horde,
And perish—if it must be so—
At bay, destroying many a foe. *Byron.*

LEATH'ER, *n. s.* & *adj.*
LEATHER'COAT,
LEATHER'DRESSER,
LEATHER'MOUTHED, *adj.*
LEATH'ERN, *adj.*
LEATH'ERY,
LEATH'ERSELLER, *n. s.*

Saxon, leðeր; Belgic and Teut. *leder*; Dan. *lædur*; Goth. *leder* (Goth. *lid*, a cover). The dressed skin of an animal; any skin. Shakspeare calls apples with tough skins 'leather-coats.' See the extract for leather-mouthed: leathern is made of leather: leathery, resembling leather.

He was a hairy man, and girt with a girdle of *leather* about his loins. 2 *Kings* i. 8.

The shepherd's homely curds,
His cold thin drink out of his *leather* bottle;
Is far beyond a prince's delicacies. *Shakspeare.*

There is a dish of *leathercoats* for you. *Id.*

I saw her hand; she has a *leathern* hand,
A free-stone colored hand: I verily did think
That her old gloves were on. *Id.*

By a *leather mouthed* fish, I mean such as have their teeth in their throat; as, the chub or cheven.
Walton's Angler.

In silken or in *leathern* purse retains
A splendid shilling. *Philips.*

Wormius calls this crust a *leathery* skin.
Grew.

And if two boots keep out the weather,
What need you have two hides of *leather*?
Prior.

He removed to Cumæ; and by the way was entertained at the house of one Tychius, a *leather-dresser.* *Pope.*

Returning sound in limb and wind,
Except some *leather* lost behind. *Swift.*

No grassy mantle hides the sable hills,
No flowery chaplet crowns the trickling rills;
Nor tufted moss, nor *leathery* lichen, creeps
In russet tapestry on the crumbling steeps.
Darwin.

But, ere they came to this, they that day shared
Some *leathern* caps, and what remained of shoes;
And then they looked around them, and despaired,
And none to be the sacrifice would choose.
Byron.

LEATHER, in commerce and the arts, is the prepared skin of various animals. Under the article CURRYING will be found an ample account of that process, and the operations of the tanner upon skins under TANNING. See also SKINS, for miscellaneous information respecting different modes of dressing and disposing of them.

Leather is of three principal sorts, i. e. tanned or tawed, oil, and alum leather. To dress leather in oil, the skins are first soaked, then thrown into the lime-pit; and, when taken thence, pulled and delivered to the friezer; they are then struck with the oil, and sent to the mill. When milled sufficiently, they are thrown into the ditch to be scoured; sometimes they are scudded, and afterwards hung upon the hooks to dry. Skins dressed in oil are those of deer, sheep, and lambs, and some few of goats; the oil used for the purpose is Newfoundland, or cod's-liver oil. The alum leather-dressers' art consists in soaking, liming, wringing (an operation sometimes omitted), and striking them in a liquor composed of water, salt, and alum, and then drying them properly. The skins dressed in alum are those of sheep and lambs, and a large quantity of kid.

The following processes for dyeing red and yellow leather, as practised in Turkey, with directions for preparing and tanning the skins, were communicated by Mr. Philippo, a native of Armenia, who received from the Society for the Encouragement of Arts, &c., £100, besides the society's gold medal, as a reward.

1. First preparation of the skins, for both colors, by lime. Let the skins, dried with the hair on, be first laid to soak in clean water for three days; let them then be broken over the flesh-side, put into fresh water for two days longer, and afterwards hung up to drain half an hour. Let them now be broken on the flesh-side, limed in cold lime on the same side, and doubled together with the grain-side outward. In this state they must be hung up within doors over a frame for five or six days, till the hair be loose; which must then be taken off, and the skins returned into the lime-pit for about three weeks. Take them out, and let them be well worked flesh and grain, every sixth or seventh day during that time; after which let them be washed ten times in clear water, changing the water at each washing.

2. Preparation for both dyes, by drenching. After squeezing the water out of the skins, put them into a mixture of bran and water, warm as new milk, in the following proportions: viz. about three pounds of bran for five skins, and water sufficient to make the mixture moderately fluid, which will be about a gallon to each pound of bran. In this drench let the skins lie three days; at the end of which they must be well worked, and then returned into the drench two days longer. They must next be taken out and rubbed between the hands, the water squeezed from them, and the bran scraped off clear from both sides of the skin. After this they must be again washed ten times in clear water, and the water squeezed out of them. Thus far, the preparatory process for both

colors is the same; but after this the skins must be treated differently.

3. Preparation in honey and bran of the skins to be dyed red. Mix one pound of honey with three pints of luke-warm water, and stir them together till the honey is dissolved. Then add two double handfuls of bran: and, taking four skins (for which the above quantity of the mixture will be sufficient), work them well in it one after another. Afterwards fold up each skin separately into a round form, with the flesh-side inwards; and lay them in an earthen pan, or other proper vessel; in summer by the side, but in winter on the top of each other. Place the vessel in a sloping position, so that such part of the fluid as may spontaneously drain from the skins may pass off. An acid fermentation will then rise in the liquor, and the skins will swell considerably. In this state they must continue for seven or eight days; but the moisture that drains from them must be poured off, once or twice a-day, as occasion may require.

4. Preparation in salt of the skins to be dyed red. After the skins have been thus fermented in honey and bran, let them be taken out of that mixture on the eighth or ninth day, and well rubbed and worked with dry sea salt, in the proportion of about half a pound to each skin. This will make them contract again, and part with a considerable quantity more of moisture; which must be squeezed out by drawing each skin separately through the hands. They must next be scraped clean on both sides from the bran, superfluous salt, and remaining moisture; after which dry salt must be strewed over the grain side, and well rubbed in with the hand. They are then to be doubled with the flesh side outwards, lengthwise from neck to tail, and a little more dry salt must be thinly strewed over the flesh side and rubbed in; for the two last operations about 1½ lb. of salt will be sufficient for each skin. They must then be put, thus folded on each other, between two clean boards, placed sloping breadthwise: and a heavy weight laid on the upper board, in order gradually to press out what moisture they will thus part with. In this state of pressure they must be continued two days or longer, till it be convenient to dye them, for which they will then be duly prepared.

5. Preparation of the red dye, in a proportion for four skins. Put eight gallons of water into a copper, with 7 oz. of shenan tied up in a linen bag. Shenan is a species of salicornia, and is much used by dyers in the east. See SALICORNIA. Light a fire under a copper, and, when the water has boiled about a quarter of an hour, take out the bag of shenan, and put into the boiling fluid or lixivium, 1st, 2 drams of alum; 2dly, 2 drams of pomegranate bark; 3dly, ¾ oz. of turmeric; 4thly, 3 oz. of cochineal; 5thly, 2 oz. of loaf sugar. Let the whole mixture boil about six minutes, then cover the fire, and take out a quart of liquor, putting it into a flat earthen pan; and, when it is as cold as new milk, take one skin, folded lengthwise, the grain side outwards, and dip it in the liquor, rubbing it gently with the hands. Then, taking out the skin, hang it up to drain, and throw away the superfluous dye. Proceed in the same manner with the other three skins; repeating the operation of each separately, eight times, squeezing the skins by drawing them through the hands before each fresh dipping. Lay them now on one side of a large pan, set sloping, to drain off as much of the moisture as will run from them without pressure, for about two hours, or till they are cold; then tan them.

6. Tanning the red skins. Powder 4 oz. of the best white galls in a marble mortar, sifting it through a fine sieve. Mix the powder with about three quarts of water, and work the skins well in this mixture for half an hour or more, folding up the skins four-fold. Let them lie in this tan for twenty-four hours; when they must be worked again as before; then taken out, scraped clean on both sides from the first galls, and put into a like quantity of fresh galls and water. In this fresh mixture they must be again well worked for three quarters of an hour; then folded up as before, and left in the fresh tan for three days. On the fourth day they must be taken out, washed clean from the galls in seven or eight fresh quantities of water, and then hung up to dry.

7. Method of dressing the skins. When the skins are very nearly dry, they should be scraped with the proper instrument or scraper, on the flesh side, to reduce them to a proper degree of thickness. They are then to be laid on a smooth board, and glazed by rubbing them with a smooth glass. After which they must be oiled, by rubbing them with olive oil, by a linen rag, in the proportion of 1½ oz. of oil for four skins: they are then to be grained on a graining board, lengthwise, breadthwise, and cornerwise, or from corner to corner.

8. Preparations with galls, for the skins to be dyed yellow. After the four skins are taken out of the drench of bran, and clean washed, they must be very well worked, half an hour or more, in a mixture of 1½ lb. of the best white galls, finely powdered, with two quarts of clean water. The skins are then to be separately doubled lengthwise, rolled up with the flesh side outwards, laid in the mixture, and closely pressed down on each other, in which state they must continue two whole days. On the third day let them be again worked in the tan, and afterwards scraped clean from the galls, with an ivory or brass instrument; for no iron must touch them. They must then be put into a fresh tan, made of 2 lbs. of galls finely powdered, with about three quarts of water, and well worked therein fifteen times. After this they must be doubled, rolled up as before, and laid in the second tan for three days. On the third day ½ lb. of sea-salt must be worked into each skin; and the skins doubled as before, and returned into the tan, till the day following, when they are to be taken out and well washed six times in cold water, and four times in water luke-warm. The water must be then well squeezed out, by laying the skins under pressure for about half an hour, between two boards, with a weight of about 200 or 300 lbs. laid upon the uppermost board, when they will be ready for the dye.

9. Preparations for the yellow dye in the proportion for four skins. Mix 6 ozs. of cassian

gehira, or dgehira, or the berries of the eastern rhamnus, with the same quantity of alum; and pound them together till they be fine in a marble or brass mortar, with a brass pestle. These may be had at Aleppo, and other parts of the Levant, at a small price. The common Avignon or yellow berries may be substituted, but not with so good an effect; the cussiari gehira being a stronger and brighter yellow dye. After pounding them, divide the materials thus powdered, into three equal parts of 4 ozs. each, put one part into about 1½ pints of water, in a china or earthen vessel, and stir the mixture together. Let the fluid stand to cool, till it will not scald the hand. Then, spreading one of the skins flat on a table, in a warm room, with the grain side uppermost, pour a fourth part of the liquor over the upper or grain side, spreading it equally over the skin with the hand, and rubbing it well in. Afterwards do the like with the other three skins. This operation must be repeated twice more on each skin separately, with the remaining 8 ozs. of the powder of the berries and alum, with the same proportions of hot water. The skins when dyed, are to be hung up on a wooden frame, without being folded, with the grain side outwards, about three quarters of an hour to drain; when they must be carried to a stream of running water, and well washed six times or more. After this they must be put under pressure for about an hour, till the water be well squeezed out; afterwards the skins must be hung up to dry in a warm room. The skins are then to be dressed and grained, as before directed for those dyed red; except the oiling, which must be omitted.

There are various statutes relating to leather: 27 Henry VIII. c. 14 directs packers to the appointment of leather intended to be transported. The 18 Eliz. c. 9 prohibits the shipping of leather on penalty of forfeitures, &c.; though, by 20 Car. II. c. 5, transportation of leather was allowed to Scotland, Ireland, or any foreign country, paying a custom or duty; which statute was considered by divers subsequent acts. See stat. 1 Jac. I. c. 22.; and NAVIGATION LAWS.

No person must ingross leather to sell again, under the penalty of forfeiture; none but tanners are to buy any rough hides of leather, or calve-skins in the hair, on pain of forfeiture; and no person shall forestall hides, under the penalty of 6*s*. 8*d*. a hide. Leather not sufficiently tanned is to be forfeited. In London the lord mayor and aldermen are to appoint and swear searchers of leather out of the company of shoemakers, &c., and also triers of sufficient leather; and the same is to be done by mayors, &c., in other towns and corporations; and searchers allowing insufficient leather incur a forfeiture of 40*s*. Shoemakers, making shoes of insufficient leather, are liable to 3*s*. 4*d*. penalty.

Red tanned leather is to be brought into open leather markets, and searched and sealed before exposed to sale, or shall be forfeited; and contracts for sale be void: 13 and 14 Car. II. c. 7. Hides of leather are adjudged the ware and manufacture of the currier, and subject to search, &c. All persons dealing in leather may buy tanned leather searched in open market; and any person may buy or sell leather hides or skins by weight: stat. 1 W. & M. c. 33. Duties are granted on leather, and entries to be made of tan-yards, under the penalty of £50, and tanners and leather dressers using any private tan-yards, or concealing skins, &c., shall forfeit £20 leviable by justices of the peace, by distress, &c.: stats. 9 Ann. c. 11: 5 Geo. I. c. 2: 9 Geo. I. c. 27: 52 Geo. III. c. 94: 55 Geo. III. c. 102. Artificers may freely buy their leather, and cut it and sell it in small pieces: 12 Geo. II. c. 25. Penalty on curriers neglecting to curry leather, 12 Geo. II. c. 25. By stats. 39, 40, Geo. III. c. 66: 4 Geo. III. c. 53. Regulations are made to prevent the spoiling of hides and leather, by the flaying animals injudiciously: and inspectors appointed to insure their execution.

LEAVE, *n. s.*, *v. a.* & *v. n.* } Saxon, leꝼe,
LEFT, *part. preter.* } leaꝼ (lyꝼan, to
LEA'VER, *n. s.* } grant); Swedish, *laf;* Dan. *lov;* Belg. *lof.* Permission; grant; allowance; liberty; consent: hence farewell; permission to depart; and, probably hence also the verb to leave, i. e. to permit to remain; to quit consentingly; to desist from; to give, or voluntarily to resign; to bequeath; to abandon; not to choose or select; not to deprive of; not to take away; to reject: as a verb neuter, to cease; desist. It is compounded with *off*, which gives it intensity, both in the active and neuter form of the verb; and in the former with *out*, when it signifies to omit or neglect.

Jhesus answeride to hem, now ghe bileuen, lo the our cometh and now it cometh, that ghe be disparpled ech into hise owne thingis, and that ghe *leue* me aloone: and I am not aloone, for the fadir is with me. *Wiclif. Jon.* xvi.

A man shall *leave* his father and his mother, and cleave to his wife. *Gen.* ii. 24.

He began at the eldest, and *left* at the youngest. *Id.* xliv. 12.

He shall eat the fruit of thy cattle; which also shall not *leave* thee either corn, wine, or oil. *Deut.* xxviii. 48.

Let us return, lest my father *leave* caring for the asses, and take thought for us. 1 *Sam.* ix. 5.

When him his dearest Una did behold,
Disdaining life, desiring *leave* to die. *Spenser.*

Grittus, hoping that they in the castle would not hold out, *left off* to batter or undermine it, wherewith he perceived he little prevailed. *Knolles.*

Vastius gave strict commandment, that they should *leave* behind them unnecessary baggage. *Id.*

I make bold to press upon you.
— You're welcome; give us *leave*, drawer. *Shakspeare.*

Take *leave* and part, for you must part forthwith. *Id.*

Alas, poor lady; desolate and *left*;
I weep myself to think upon thy words. *Id.*
She is my essence, and I *leave* to be,
If I be not by her fair influence
Fostered, illumined, cherished, kept alive. *Id.*
And since this business so far fair is done,
Let us not *leave* till all our own be won. *Id.*
Let the world rank me in register
A master-*leaver* and a fugitive. *Id.*
I am so fraught with curious business, that
I *leave* out ceremony. *Id. Winter's Tale.*

If it be done without order, the mind comprehendeth less that which is set down: and besides, it

leaveth a suspicion, as if more might be said than is expressed. *Bacon.*

What is set down by order and division doth demonstrate that nothing is *left out*, or omitted, but all is there. *Id.*

You may partake: I have told 'em who you are.
— I should be loth to be *left out*, and here too.
Ben Jonson.

If they love lees, and *leave* the lusty wine,
Envy them not their palates with the swine. *Id.*
The days
Of Sylla's sway, when the free sword took *leave*
To act all that it would. *Id. Catiline.*

These things must be *left* uncertain to farther discoveries in future ages. *Abbot.*

But, my dear nothings, take your *leave*,
No longer must you me deceive. *Suckling.*

If Chaldea had not been grossly idolatrous, Abraham had not *left* it. *Bp. Hall.*

Wrongs do not *leave off* there where they begin,
But still beget new mischiefs in their course. *Dan.*

They still have *left* me the providence of God, and all the promises of the gospel, and my charity to them too. *Taylor.*

Befriend till utmost end,
Of all thy dues be done, and none *left out*,
Ere nice morn on the Indian steep
From her cabined loop-hole peep. *Milton.*

Many stars may be visible in our hemisphere, that are not so at present; and many shall take *leave* of our horizon, and appear unto southern habitations. *Browne.*

But, when you find that vigorous heat abate,
Leave off, and for another summons wait.
Roscommon.

Thrice happy snake! that in her sleeve
May boldly creep; we dare not give
Our thoughts so unconfined a *leave*. *Waller.*

If a wise man were *left* to himself, and his own choice, to wish the greatest good to himself he could devise; the sum of all his wishes would be this, That there were just such a being as God is.
Tillotson.

Offended that we fought without his *leave*,
He takes this time his secret hate to shew. *Dryden.*

If, upon any occasion, you bid him *leave off* the doing of any thing, you must be sure to carry the point. *Locke.*

Who those are, to whom this right by descent belongs, he *leaves* out of the reach of any one to discover from his writings. *Id.*

This I *leave* with my reader, as an occasion for him to consider how much he may be beholden to experience. *Id.*

In either of these cases, though a man perhaps does but his duty in changing his side, he not only makes himself hated by those he *left*, but is seldom heartily esteemed by those he comes over to.
Addison.

In proportion as old age came on, he *left off* fox-hunting. *Id. Spectator.*

I always thought this passage *left out* with a great deal of judgment, by Tucca and Varius, as it seems to contradict a part in the sixth Æneid.
Id. On Italy.

My father has this morning called together,
To this poor hall, his little Roman senate,
The *leavings* of Pharsalia. *Id. Cato.*

In all the common incidents of life,
I am superiour, I can take or *leave*. *Steele.*
We ask, if those subvert,
Reason's established maxims, who assert
That we the worlds's existence may conceive
Though we one atom *out* of matter *leave*?
Blackmore.

He began to *leave off* some of his old acquaintance, his roaring and bullying about the streets: he put on a serious air. *Arbuthnot.*

LEAVEN, LOCH; a lake of Scotland, about twelve miles in circumference, in the county of Kinross. It contains four islands, on one of which was formerly a priory, and on another stand the remains of the castle of Loch Leaven, once a royal residence, which was granted by Robert III. to Douglas. In this castle Mary Stuart was confined, after her separation from Bothwell, and her capture by the confederate lords, at the battle of Carberry Hill. After several unsuccessful attempts, she made her escape, by the aid of George Douglas, her keeper's brother.

LEAV'EN, *n. s.* & *v. a.* Fr. *levain;* Ital. *levane, levatura;* Span. *levadura*, all perhaps of Lat. *levo, levando*, lifting up. Any ferment or fermenting substance; dough fermented; yeast; and, metaphorically, any thing that powerfully but gradually changes or affects the mind and its qualities. It is used in the Bible both in a good and bad sense.

Whosoever eateth *leavened* bread, that soul shall be cut off. *Exod.* xii. 17.

It shall not be baken with *leaven*.
Lev. vi. 17.

Let us keep the feast, not with old *leaven*, neither with the *leaven* of malice and wickedness.
1 *Cor.* v. 8.

You must tarry the *leavening*.
Shakspeare.

Breads we have of several grains, with divers kinds of *leavenings*, and seasonings; so that some do extremely move appetites. *Bacon.*

Many of their propositions savour very strongly of the old *leaven* of innovations. *King Charles.*

This gospel of mine is like unto *leaven*, which, though in a very small quantity it be hid amongst much dough, yet seasoneth the whole batch; so shall this gospel of mine diffuse the power and virtue thereof, to all the whole mass of the habitable world. *Bp. Hall.*

That cruel something unpossest,
Corrodes and *leavens* all the rest. *Prior.*

All fermented meats and drinks are easiest digested; and those unfermented, by barm or *leaven*, are hardly digested. *Floyer.*

Pride, like *leaven* in a mass of flour,
Tainted her laws, and made e'en virtue sour.
Churchill.

LEAVEN is used to ferment and render light a much larger quantity of dough or paste. See BREAD and YEAST. Leaven was strictly forbidden by the law of Moses during the seven days of the passover; and the Jews, in obedience to this law, very carefully purified their houses from all leaven as soon as the vigil of the feast began. Nothing of honey or leaven was to have place in any thing presented upon the altar during this solemnity. If, during the feast, the least particle of leaven was found in their houses, the whole was polluted.

LEBADEA, or LEBADIA, an ancient town of Bœotia, on the borders of Phocis, situated between Helicon and Chæronea, near Coronæa. In it stood the oracle of Jupiter Trophonius, where all who went to consult it descended into a subterraneous gulf.

LEBANON, a celebrated mountain in the south of Syria and north of Canaan. See Libanus.

Lebanon, a post town of New York, county of Maine, on the Piscataqua. It is twenty-eight miles north-west of New York. 2. Also a post town of Grafton county, New Hampshire, on the east side of the Connecticut, opposite Hartford, with which it is connected by a bridge; four miles south-east of Dartmouth College. White River flows into the Connecticut opposite this town. 3. A post town of Windham county, Connecticut; nine miles north-west of Norwich, and thirty south-east of Hartford. It is a pleasant and valuable agricultural town among the best in the state. 4. A post town pleasantly situated, and the capital of Lebanon county, Pennsylvania, is regularly laid out, and contains an elegant court house, a number of other public buildings, and many handsome houses, and has considerable trade. It is situated on the Quitipihilla Creek, within about a mile of the Schuylkill Canal which connects this stream with the Tulpehocken. About five miles from this town there are extensive mines of iron and copper, called the Cornwall mines. 5. A post town, the capital of Warren county, Ohio; four miles west of the Little Miaine.

Lebanon, New, a post town in Canaan, Columbia county, New York, six miles west of Pittsfield, and twenty-four south-east of Albany. It is on the turnpike between Pittsfield and Albany. Here is a spring of considerable celebrity. It is a thermal water of the temperature of 72° of Fahrenheit, but is not characterised by any mineral substance in solution. The spring is kept constantly in ebullition by a copious emission of azotic gas.

LEBEDOS, one of the twelve ancient cities of Ionia, situated south of Smyrna. It was the residence of players, where they met from all parts of Ionia, as far as the Hellespont, and celebrated annual games in honor of Bacchus. Strabo. It was overthrown by Lysimachus, who removed the inhabitants to Ephesus; after which it dwindled down to a village. Horace.

LEBEN, or Lebena, one of the port towns of the Gortynians, near the promontory of Leon, on the south-east side of Crete; famous for a temple of Æsculapius, built in imitation of that of Cyrenaica.

LEBRUN (Ponce Denis Ecouchard), called the French Pindar, was born in 1729, and early manifested a talent for poetry. He became secretary to the prince of Conti, and at the age of twenty-six he had taken his place in the first rank of French lyric poets: an ode which he now addressed to Voltaire was the means of interesting the latter in the support of the niece of Corneille. At the revolution he celebrated the birth of freedom in various odes and epigrams; but in 1793 deplored in harmonious verses the fate of his country. On the restoration of order, Lebrun became a member of the Institute, and received from Buonaparte a pension of 6000 francs: he died September 1807.

LECCE, a considerable trading town of Naples, in the province of Otranto. It is well built, and is a bishop's see. The surrounding district is fertile, but ill cultivated. It supplies, however, the chief commerce of the town, which is in flax and tobacco. The flax is spun and manufactured into lace. Other products of this neighbourhood are oil and cotton; and its wool is esteemed. Seventeen miles west of Otranto, and twenty-eight south-east of Brindisi. Population 14,000.

LECCO, a town in the Milanese, Italy, situated on the eastern branch of the lake of Como. It has flourishing manufactures of silk, woollens, and hardware. Population 4000. Fourteen miles E. N. E. of Como.

LECH, *v. a.* Fr. *lecher;* or perhaps Lat. *litus.* To lick or smear over.

> Hast thou yet *leched* the Athenian's eyes
> With the love-juice? *Shakspeare.*

Lech, a large river of Bavaria, which rises in the Tyrol, and flows northward between Bavaria and Suabia. It passes Fuessen, Landsburg, Augsburg, and joins the Danube five miles below Donawert. Its stream is only navigable for rafts of wood and boats.

LECH'ER, *n. s.* & *v. n.*
Lech'erous, *adj.*
Lech'erously, *adv.*
Lech'erousness, *n. s.*
Lech'ery.
} According to Skinner, from old Fr. *luxure:* but the Teut. *leker* or *leiker;* Lat. *ligurius,* seems the more probable derivation. A loose libidinous person; an adulterer or whoremonger: the verb signifies to be addicted to the habits or practices of such a person: lecherous, tending to luxury or lust.

> Ye han herd that it was seid to olde men thou schalt not do *leecherie.* *Wiclif. Matt.* v.

> A *lecherous* thing is wine, and dronkenesse
> Is ful of striving and of wretchednesse.
> *Chaucer. Canterbury Tales.*

> The rest welter with as little shame in open *lechery* as swine do in the common mire. *Ascham.*

> I will now take the *lecher;* he's at my house; he cannot 'scape me. *Shakspeare.*

> Against such lewdsters, and their *lechery,*
> Those that betray them do no treachery. *Id.*

> Gut eats all day, and *letchers* all the night.
> *Ben Jonson.*

> Ho! all ye females that would live unshent,
> Fly from the reach of Cyned's regiment.
> If Trent be drawn to dregs and low refuse,
> Hence, ye hot *lechour!* *Bp. Hall's Satires.*

> The *lecher* soon transforms his mistress; now
> In Io's place appears a lovely cow. *Dryden.*

> The sapphire should grow foul, and lose its beauty, when worn by one that is *lecherous;* the emerald should fly to pieces, if it touch the skin of any unchaste person. *Derham.*

> She yields her charms
> To that fair *lecher,* the strong god of arms.
> *Pope.*

LECOMTE (Felix), a modern French sculptor of eminence, was a native of Paris, and the pupil of Falconet and Vassé. Having obtained a prize for a bas-relief of the massacre of the Innocents, he was sent to Rome as a pensionary of the French school of arts. On his return he presented to the academy of painting and sculpture, a model for a statue of Phorbas preserving Œdipus, which he afterwards executed in marble; and procured in 1771 admission into the academy. The statue of Fenelon, in the hall of

the National Institute, is perhaps his chef-d'œuvre. That of Rollin is also celebrated. In 1810 he was appointed by Buonaparte a member of the fourth class of the Institute; and under the regal government professor of sculpture. He died in 1817, at the age of eighty.

LECTI, beds or couches, were of two kinds amongst the Romans, being destined to two different uses; to lie upon at entertainments, and to repose on for sleep. The former were called lecti triclinares, the latter lecti cubicularii. See BED.

LECTICA was a litter, or vehicle, in which the Romans were carried. It was of two kinds, covered and uncovered. The covered lectica is called by Pliny cubiculum viatorum, a traveller's bed-chamber. Augustus frequently ordered his servants to stop his litter, that he might sleep upon the road. This vehicle was carried by six or eight lecticarii. The lectica differed from the sella; for in the first the traveller could recline himself for sleep, in the latter he was obliged to sit. The lectica was invented in Bithynia; the sella was a Roman machine, and esteemed the more honorable of the two. Lectica was also the name of the funeral bed, or bier for carrying out the dead.

LECTICARIUS was also an officer in the Greek church, whose business it was to bear off the bodies of those who died, and to bury them. These were otherwise denominated decani and copiatæ.

LEC'TION, *n. s.*
LEC'TURE, *n. s., v. a.* & *v. n.*
LEC'TURER, *n. s.*
LEC'TURESHIP.
} Lat. *lectio;* Fr. *lecture;* Ital. *lettione, lettura;* Span. *lecion, lectina.* A reading; a variety in a given or similar passage of an author. A lecture is a formal discourse read or pronounced: hence the act or art of reading or delivery; as a verb, to instruct formally or solemnly; to read or pronounce a discourse in public. Both the verb and noun are often used satirically.

Wrangling pedant,
When in musick we have spent an hour,
Your *lectures* shall have leisure for as much.
Shakspeare.

When you meet with several readings of the text (scripture) take heed you admit nothing against the tenets of your church: but do as if you was going over a bridge, be sure you hold fast by the rail, and then you may dance here and there as you please; be sure you keep to what is settled, and then you may flourish upon your various *lections*. *Selden.*

When letters from Cæsar were given to Rusticus, he refused to open them till the philosopher had done his *lectures*. *Taylor's Holy Living.*

If any minister refused to admit into his church a *lecturer* recommended by them, and there was not one orthodox or learned man recommended, he was presently required to attend upon the committee.
Clarendon.

In the *lecture* of holy scripture, their apprehensions are commonly confined unto the literal sense of the text. *Browne.*

Mark him, while Dametas reads his rustic *lecture* unto him, how to feed his beasts before noon, and where to shade them in the extreme heat. *Sidney.*

Virtue is the solid good, which tutors should not only read *lectures* and talk of, but the labour and art of education should furnish the mind with, and fasten there. *Locke.*

Numidia will be blest by Cato's *lectures*.
Addison.

He got a *lectureship* in town of sixty pounds a year, where he preached constantly in person.
Swift.

Every critick has his own hypothesis: if the common text be not favourable to his opinion, a various *lection* shall be made authentick. *Watts.*

Heaven waits not the last moment; owns her friends
On this side death, and points them out to men;
A *lecture* silent, but of sovereign power!
To vice confusion, and to virtue peace. *Young.*

Narcissa's youth has *lectured* me thus far:
And can her gaiety give counsel too? *Id.*

The auditor, therefore, listens as to a *lecture*, without passion, without anxiety. *Johnson.*

From dearth to plenty, and from death to life,
Is nature's progress, when she *lectures* man
In heavenly truth: evincing, as she makes
The grand transition, that there lives and works
A soul in all things, and that soul is God. *Cowper.*

But I will venture to affirm, from experience, that, if a professor does no more than deliver a set of *lectures*, his young audience will be little the wiser for having attended him. *Beattie.*

LECTISTERNIUM, a solemn ceremony observed by the Romans in times of public danger, wherein an entertainment was prepared with great magnificence, and served up in the temples. The gods were invited to partake of the good cheer, and their statues placed upon couches round the table, in the same manner as men used to sit at meat. The first lectisternium held at Rome was in honor of Apollo, Latona, Diana, Hercules, Mercury, and Neptune, to put a stop to a contagious distemper which raged amongst the cattle, A. U. C. 354. At these feasts the Epulones presided, and the sacred banquet was called epulum. Something like the lectisternium was occasionally observed among the Greeks, according to Casaubon.

LECTIUS (James), syndic of Geneva, a respectable poet and critic of the sixteenth century. His chief work is his collection entitled Poetæ Græci Veteres, in 2 vols. folio. He died in 1612.

LECTORES, among the ancient Romans, servants in great men's houses, who read while their masters were at supper. They were called by the Greeks anagnostæ.

LECTOURE, a town of France, in the department of the Gers, and on the river Gers, is situated on a hill and accessible only on one side. It has manufactures of leather; and a trade in corn and wine. Several Roman inscriptions have been found in the neighbourhood. Population 5500. Sixteen miles north of Auch.

LECTURERS, in the church of England, are an order of preachers, distinct from the rector, vicar, and curate. They are generally chosen by the vestry or chief inhabitants, supported by voluntary subscriptions and legacies, and often preach on the Sunday afternoon. But the term is most generally applied to those who preach on any stated day. By 13 and 14 Car. II., c. 4, lecturers in churches, unlicensed, and not conforming to the liturgy, shall be disabled, and shall suffer three months' imprisonment in the com-

mon gaol; and two justices, or the mayor in a town corporate, shall, upon certificate from the ordinary, commit them. Where there are lectures founded by the donations of pious persons (such as that of lady Mayer at St. Paul's) the lecturers are appointed by the founders, without any interposition of rectors, &c., only with the leave of the bishop. But the lecturer is not entitled to the pulpit, without the consent of the rector or vicar, who is possessed of the freehold of the church.

LEDA, in fabulous history, a daughter of king Thespius and Eurythemis, who married Tyndarus king of Sparta. Jupiter saw her bathing in the Eurotas, when she was some few days advanced in pregnancy, and, struck with her beauty, resolved to deceive her. He persuaded Venus to change herself into an eagle, while he assumed the form of a swan; and after this metamorphosis Jupiter, as if fearful of the bird of prey, fled through the air into the arms of Leda, who willingly sheltered the trembling swan from the assaults of his superior enemy. Nine months after this adventure, Leda brought forth two eggs, from one of which sprung Pollux and Helena, and from the other Castor and Clytemnestra. The two former were deemed the offspring of Jupiter, and the others claimed Tyndarus for their father. Some mythologists attribute this amour to Nemesis, and not to Leda; and say that Leda was entrusted with the education of the children, which sprung from the eggs brought forth by Nemesis; others maintain that Leda received the name of Nemesis after death. Homer and Hesiod make no mention of the metamorphosis of Jupiter into a swan, whence some think that the fable was unknown to these two ancient poets, and invented after their time.

LEDBURY, a market-town of Herefordshire near the extremity of the Malvern Hills, sixteen miles east from Hereford, and 120 west by north from London. Thé town is well built, consisting chiefly of two streets, crossing each other at right angles. The church is a large building. Here are a free-school, a well endowed hospital, and several alms-houses. The chief manufactures are ropes and sacking. Great quantities of fine cider are made in this neighbourhood. Market on Tuesday.

LEDGE, *n. s.* Sax. leʒan; Goth. *leggia*, to plan, or order. A layer or row; ridge; or prominence.

> Beneath a *ledge* of rocks his fleet he hides,
> The bending brow above a safe retreat provides.
> *Dryden.*

> The lowest *ledge* or row should be merely of stone, closely laid without mortar: a general caution for all parts in building contiguous to board.
> *Wotton's Architecture.*

> The four parallel sticks rising above five inches higher than the handkerchief, served as *ledges* on each side. *Gulliver.*

LEDUM, marsh cistus, or wild rosemary, a genus of the monogynia order, and decandria class of plants: natural order eighteenth, bicornes. CAL. quinquefid: COR. plain and quinquepartite: CAPS. quinquelocular, and opening at the base. The principal species is

L. palustre, with very narrow leaves. It grows naturally upon bogs and mosses in Yorkshire Cheshire, and Lancashire; rising with a slender shrubby stalk about two feet high, dividing into many slender branches, garnished with narrow leaves, like those of heath. The flowers are produced in small clusters at the end of the branches, and are shaped like those of the strawberry tree, but spread wider at top. They are of a reddish color, and are succeeded by seed-vessels filled with small seeds which ripen in autumn. This plant is with difficulty raised in a garden: for, as it naturally grows upon bogs, unless it has a similar soil it will not thrive. It must be procured from the place of its growth, and taken up with good roots, otherwise it will not live.

LEDYARD (John), a native of North America, and greatly celebrated as a traveller. After living several years with different tribes of the American Indians, he made a voyage to the South Sea, in the humble station of a corporal of marines, with the celebrated captain Cook. On his return he became anxious to traverse the vast continent between the Pacific and Atlantic Ocean. With only ten guineas he crossed the British Channel to Ostend, and proceeded by Denmark and the Sound to Stockholm and Petersburgh. On his arrival at this last metropolis he was observed as an extraordinary person; and, though without stockings and shoes, was invited to dine with the Portuguese ambassador. Being now supplied with necessaries, he travelled eastward 6000 miles through Siberia to Yakutzk, thence to Oczakow, and back again to Yakutzk, where he was seized in the empress's name by two ruffians who conveyed him on a sledge through the deserts of North Tartary, and left him on the borders of Poland, telling him that, if he returned to Russia, he would be hanged. In spite of poverty, he made his way to Konigsberg, where he obtained pecuniary assistance, which enabled him to reach London. Being introduced to th Society for promoting the discovery of the interior parts of Africa, they employed him; and he proceeded to Grand Cairo in Egypt, where he engaged with the conductor of a caravan, and was on the point of setting out for Sennaar, when he was seized with an indisposition, on the 17th of January 1789, which terminated in his death. He was a man of an amiable disposition; and, in his various peregrinations, suffered many hardships among the barbarous nations whom he visited; but, in the account he published of his travels, he pays this compliment to the female sex. 'To a woman, whether civilised or savage, I never addressed myself in the language of decency and friendship, without receiving a decent and friendly answer. With man it has often been otherwise. In wandering over the barren plains of inhospitable Denmark, through honest Sweden and frozen Lapland, rude and churlish Finland, unprincipled Russia, and the wide spread regions of the wandering Tartar, if hungry, dry, cold, wet, or sick, the women have ever been friendly to me, and uniformly so; and to add to this virtue (so worthy the appellation of benevolence), these actions have been performed in so free and so kind a manner, that if I was dry, I drank the sweetest draught; and if hungry, I ate the coarse morsel with a double relish.'

LEE, *n. s.* } Fr. *lie;* Span. *lias;* Port. *lia;*
LEES, *plur.* } qu. Lat. *liquidus.* Dregs; sediment: more frequently used in the plural.

The memory of king Richard was so strong, that it lay like *lees* at the bottom of men's hearts; and, if the vessel was but stirred, it would come up.
Bacon's Henry VII.

If they love *lees*, and leave the lusty wine,
Envy them not their palates with the swine.
Ben Jonson.

Behold all purity above; below, the dregs and *lees* of all. *Bp. Hall.*

Those *lees* that trouble it refine
The agitated soul of generous wine. *Dryden.*

My cloaths, my sex, exchanged for thee,
I'll mingle with the people's wretched *lee.* *Prior.*

Life's *lee* is not more shallow than impure
And vapid. *Young.*

LEE, *n. s.* } Sax. lee leepeaןԁ; Teut.
LEE'WARD, *adj.* } *lee;* Belg. and Goth. *ly;* 'Isl. *hlifa*, to cover,' observes Mr. Thomson: 'lee shore denotes that the wind blows on a vessel from the sea towards the land.' Leeward is the direction towards which the wind blows. See below.

Him, haply slumb'ring on the Norway foam,
The pilot of some small night-foundered skiff,
Deeming some island, oft, as seamen tell,
With fixed anchor in his scaly rind,
Moors by his side under the *lee*, while night
Invests the sea. *Milton.*

If we, in the bay of Biscay, had had a port under our *lee*, that we might have kept our transporting ships with our men of war, we had taken the Indian fleet. *Raleigh.*

The Hollanders were before Dunkirk with the wind at north-west, making a *lee* shore in all weathers.
Id.

Unprovided of tackling and victualling, they are forced to sea by a storm; yet better do so than venture splitting and sinking on a *lee* shore.
King Charles.

Battered by his *lee* they lay,
The passing winds through their torn canvass play.
Dryden.

The classicæ were called long ships, the onerariæ round, because of their figure approaching towards circular: this figure, though proper for the stowage of goods, was not the fittest for sailing, because of the great quantity of *leeward* way, except when they sailed full before the wind. *Arbuthnot.*

Let no statesman dare
A kingdom to a ship compare;
Lest he should call our common weal
A vessel with a double keel;
Which just like ours, new rigg'd and mann'd,
And got about a league from land,
By change of wind to *leeward* side,
The pilot knew not how to guide. *Swift.*

And others went on as they had begun,
Getting the boats out, being well aware
That a tight boat will live in a rough sea,
Unless with breakers close beneath her *lee.*
Byron.

LEE is used by seamen to distinguish that part of the hemisphere to which the wind is directed, from the other part whence it arises; which last is called to windward. This expression is chiefly used when the wind crosses the line of a ship's course, so that all on that side of her is called to windward, and all on the opposite side to leeward. Hence, Under the lee, implies farther to the leeward, or farther from that part of the horizon whence the wind blows. Under the lee of the shore, i. e. at a short distance from the shore which lies to windward. This phrase is commonly understood to express the situation of a vessel anchored, or sailing under the weather shore, where there is always smoother water, and less danger of heavy seas, than at a great distance from it.

LEE-SIDE, all that part of a ship or boat which lies between the mast and the side furthest from the direction of the wind; or, otherwise, the half of a ship, which is pressed down towards the water by the effort of the sails, as separated from the other half by a line drawn through the middle of her length. That part of the ship which lies to windward of this line is accordingly called the weather-side. Thus, admit a ship to be sailing southward, with the wind at east, then is her starboard, or right side, the lee-side; and the larboard, or left, the weather-side.

LEE (Charles), a celebrated general in the service of the American congress, was a native of England. He served under general Burgoyne, in the British army in Portugal, which he afterwards quitted for the American service. Upon the commencement of the revolution he was appointed a major-general. See AMERICA. But in 1776 he was taken prisoner by colonel Harcourt, and closely confined as a deserter; though six field officers were offered in exchange for him. He was even threatened to be tried for high treason; but the spirited conduct of general Washington, and the congress, prevented that measure. On the capture of Burgoyne and his army he was allowed his parole in New York, and, being soon after exchanged, rejoined the American army. But general Lee's misfortunes were not over. His defeat and disorderly retreat at Monmouth, with the flower of the American troops under his command, subjected him to a court martial, who suspended him from his command for one year, which he spent at his estate in Berkley county, Virginia, and during which he arranged his letters, and other papers on public affairs, for the press. These he sent by his aid-de-camp to Philadelphia, to be printed. But this ungrateful young man betrayed his trust, and gave the papers to the governor, who, on perusal, found it his interest to suppress the publication. In the beginning of 1782 Lee went to Philadelphia on this business; but, soon after his arrival, was seized with a fever, of which he died. His body was interred with military honors, and the members of the congress attended the funeral.

LEE (Nathaniel), an English dramatic writer, the son of a clergyman, educated at Westminster under the famous Dr. Busby, and afterwards at Trinity College, Cambridge, where he took the degree of B.A. in 1668. He went thence to London, where he attempted to commence actor in 1672; but, failing, he became a dramatic author. His first piece, entitled Nero, Emperor of Rome, appeared in 1675, and was well received. He continued to write one piece every year, till November 1684, when, showing symptoms, of insanity, he was confined. In April, 1688, he was discharged, and wrote two other plays. He died in 1690, in consequence of a

drunken frolic. Lee is allowed to have great power over the passions, but his language is mere rant and bombast. His Rival Queens and Theodosius, however, are still acted with applause. He wrote eleven tragedies in all, which contain a great portion of poetic enthusiasm. Addison commends his genius highly; observing, that none of our English poets had a happier turn for tragedy, although his natural fire, and unbridled impetuosity, hurried him beyond the bounds of probability. While he was confined, a coxcomb scribbler had the cruelty to jeer him with his misfortune, observing that it was easy to write like a madman:—'No,' said Lee, 'it is not easy to write like a madman; but it is very easy to write like a fool.'

LEE (Sophia), an English novelist, and dramatic writer, of reputation, was born in London in 1750. She first became known to the public in 1780, when she published her comedy, called The Chapter of Accidents. The profit of this enabled her to open an academy at Bath. In 1784 appeared her well known novel, The Ruin, or a Tale of other Times. This was followed, in 1787, by the ballad, A Hermit's Tale, found in his Cell; and, in 1796, by a tragedy, called Almeyda, Queen of Grenada; but, although aided by the talents of Mrs. Siddons, it disappointed the public. The following year, Miss Harriet Lee published the first five volumes of the Canterbury Tales, three of which were from the pen of her sister; and one of them, Krutzner, was selected by lord Byron as the subject of a tragedy. In 1803 our authoress retired from her school, soon after which appeared her Life of a Lover, written in early life. In 1807 another comedy by Miss Lee, The Assignation, was produced at Drury Lane, but did not succeed. She died at Clifton, March 13th, 1824.

LEE (Charles Lewes), a modern comic actor of some celebrity, first appeared as a harlequin at Covent Garden. In 1776 he took the parts previously played by Woodward; and removed, in 1783, to Drury Lane. He now travelled throughout the country, delivering Stevens's Lecture on Heads; after which he went to the East-Indies, Scotland, and Dublin, where he was well received. But the latter part of his life was spent in embarrassments: it terminated 24th of June, 1803, on the morning of which day he was found dead in his bed. There appeared, in 1805, an amusing work, entitled Memoirs of C. Lee Lewes, 4 vols. 12mo.

LEECH, *n. s.* & *v. a.*
LEECH'CRAFT, *n. s.*
LEECH'LESS, *adj.*
} Saxon læc, lece; Mæso-Goth. *lek;* Gothic and Swed. *lækare*, from Sax. lacan, and Goth. *laka*, to diminish. A physician, surgeon, or medical practitioner of any kind; also a species of water serpent, much used to draw blood. Leechcraft is the art of healing. Leechless seems used by Mr. Maturin for neglected wounds.

And he seide to him, sotheli ye schulen seye to me this likenesse, *leche* heale thi silf. *Wiclif*, *Luk.* 4.

The clotered blood for any *leche-crafte*
Corrumpeth, and in his bouke ylaft,
That neyther veine-blood ne ventousing,
Ne drinke of herbes, may ben his helping.
Chaucer. Cant. Tales.

A *leech*, the which had great insight
In that disease of grieved conscience,
And well could cure the same; his name was Patience. *Spenser's Faerie Queen.*

We study speech, but others we persuade:
We *leechcraft* learn, but others cure with it.
Denham.

I drew blood by *leeches* behind his ear.
Wiseman.

Sticking like *leeches*, till they burst with blood,
Without remorse insatiably. *Roscommon.*

Physick is their bane.
The learned *leeches* in despair depart,
And shake their heads, desponding of their art.
Dryden.

The hoary-wrinkled *leech* has watched and toiled,
Tried every health-restoring herb and gum,
And wearied out his painful skill in vain. *Rowe.*

A skilful *leach*,
They say, had wrought this blessed deed;
This *leach* Arbuthnot was yclept.
Gay's Pastorals.

In want, and war, and peril,
Things that would thrill the hearer's blood to tell of,
My heart grew human when I thought of thee—
Imogine would have shuddered for my danger—
Imogine would have bound my *leechless* wounds—
Imogine would have sought my nameless corse,
And known it well. *Maturin.*

LEECH. See HIRUDO.

LEECHES, in a ship, the borders or edges of a sail, which are either sloping or perpendicular. The leeches of all sails whose tops and bottoms are parallel to the deck, or at right angles to the mast, are denominated from the ship's side, and the sail to which they belong; as, the starboard leech of the main-sail, the larboard leech of the fore top-sail, &c. But the sails which are fixed obliquely on the masts have their leeches named from their situation with respect to the ship's length; as, the fore leech of the mizen, the after leech of the jib or fore stay-sail, &c.

LEECH-LINES, certain ropes fastened to the middle of the leeches of the main-sail and fore-sail, and communicating with blocks on the opposite side of the top, whence they pass downwards to the deck, serving to truss up those sails to the yard, as occasion requires.

LEECH-ROPE, a name given to that part of the bolt-rope to which the border or skirt of a sail is sewed. In all sails whose opposite leeches are of the same length, it is terminated above the ear-ring, and below the clue. See BOLT-ROPE.

LEEDS, a populous and flourishing market town in the wapentake of Skyrac, in the liberty of the honor of Pontefract, in the West Riding of the county of York, England, is situate principally upon the north side of the river Aire, upon an easy ascent, which rises from the north bank of the river; it extends nearly two miles along the river from east to west, but is not quite a mile in breadth from north to south.

It is a place of considerable antiquity, and is registered in the Domesday survey. There was formerly a strong castle here, built probably by Ilbert de Lacy, and which was besieged by king Stephen when on his march towards Scotland in 1139: here the unfortunate Richard II. was confined about the year 1399, a short time before his barbarous murder in Pontefract Castle. No vestige of this fortress remains; but its site

is said to have been at a place called Mill Hill. The borough of Leeds was incorporated by Charles I. in 1626; a second charter was given to it by Charles II. in 1661; and a third by James II. in 1684. The second charter was restored by William and Mary in 1689, under which it is governed by a mayor, 12 aldermen, 24 common-council-men: it returns 2 members to parliament. Leland speaks of Leeds as 'a pretty market-town, subsisting chiefly by clothing, reasonably well builded, and as large as Bradford, but not so quick as it.' At the commencement of the troubles of the reign of Charles I. it was held for the king by Sir William Saville; but its fortifications, after a sharp action, were stormed by the forces which marched out of Bradford under Sir Thomas Fairfax.

The river Aire is navigable from the Humber up to the town; and the Leeds and Liverpool Canal communicates with it about a quarter of a mile above Leeds bridge. Thus situate, in the centre of that line of fine inland navigation which extends across the island, it is equally open to the eastern and western seas, having a ready communication with those great depôts of commerce, Hull and Liverpool. The Aire also supplies the principal part of the town with water. The neighbouring mines supply the town, and the surrounding district north of the town, with coals; and to these local advantages, together with other circumstances which have rendered Leeds and its vicinity the seat of the woollen manufactures, its increasing wealth, population, and prosperity, are chiefly to be attributed. The bridge, which connects the northern and southern parts of the town, is substantially built with free stone, and is of a tolerable width; but such has been the increase of traffic in that part of the town, of late years, that it has become necessary either to widen it or to erect another bridge or bridges in the same neighbourhood; this, however, has not yet been effected. It was enlarged for carriages to pass and repass in 1730, and further enlarged in 1760. Upon this bridge the woollen market used formerly to be held, on the Tuesdays and Saturdays; the cloths being laid upon the battlements, and upon benches below: thus it continued till the 14th of June 1648, when it was removed into Briggate for greater accommodation. The market for cloth was held here till the erection of the mixed cloth hall in 1758.

This building is quadrangular, enclosing an open area 127½ yards long, and sixty-six yards broad. It is divided into six streets, each street containing two rows of stands, and every stand measuring twenty-two inches in front, with the name of the owner and his residence marked upon it. The total number of stands, each of which is freehold property, is 2500, and cost originally three guineas each. About thirty years ago they sold at from £16 to £24 each, but since that time the value has been greatly reduced, and the average price is about £2 10*s*. In the year 1810 an additional story was erected on the north side of the colored-cloth hall, and is now used principally for the sale of ladies' cloths in the undyed state. In the year 1775 the white-cloth hall, over the north side of which is an assembly-room, was erected on the same plan as the other, and of nearly the same dimensions, containing about 1300 stands; the price of which has undergone similar fluctuations. This depreciation in their value is not occasioned by any diminution in the quantity of woollen goods manufactured, but is owing to the great increase of factories, and the very general use of machinery, which has prevailed over the domestic system of manufacture. Cloth used formerly to be woven by hand by the clothiers in the neighbourhood, and brought to the cloth halls in an unfinished state, whence it was purchased by the merchants and dressed; but, in the factories, the operations are completed throughout, and great quantities of cloth have, since 1823, been sold at the mixed-cloth hall in a finished state. The markets for cloth are held on the Tuesdays and Saturdays, on which days only the merchants are permitted to purchase, or even to look at, the cloth in the halls. The regulations are similar in both, and tend greatly to promote expedition and regularity. The mixed-cloth hall opens at half-past eight in the morning during the summer season; at nine in spring and autumn; and at half-past nine in winter; the white-cloth hall opens when the other closes. The halls open at the ringing of a bell, and in a few minutes the merchants walk in, each manufacturer appearing behind his own cloth, and they immediately proceed to make their bargains in the most silent and expeditious manner. At the expiration of an hour a warning bell announces the approaching close of the market; and the sound of a third bell, in a quarter of an hour afterwards, terminates the business of the day; when each merchant quits the hall on pain of a penalty of 5*s*. for every five minutes he remains there after the last bell has rung: thus in an hour and a quarter transactions are completed, often to the amount of £15,000 or £20,000, and sometimes to a much greater extent.

From the year 1732 to the year 1821, inclusive, an annual return was made, at the general quarter sessions, held at Pontefract, according to a late act of parliament, of the quantity of cloth milled at the fulling-mills in the West Riding of Yorkshire; from which returns the following statement, showing the quantity produced in each ten years, will serve to exhibit the astonishing progress of this branch of staple manufacture:—

Years.	No. of Pieces of Broads.	No. of Pieces of Narrows.	Total No. of Pieces.
From 1732 to 1741, inclusive . . .	387,486½	193,159	580,645½
From 1742 to 1751	557,212	679,092	1,236,304
From 1752 to 176	529,225½	726,114	1,255,339½
From 1762 to 1771	749,653¾	797,169	1,546,822¾

The quantity manufactured in these years is not expressed in yards

Years.	Broads.		Narrows		Total.
	Pieces.	Yards.	Pieces.	Yards.	No. of Pieces.
From 1772 to 1781, inclusive	1,063,268	31.542,321¾	946,704½	24,997,158	2,009,972½
From 1782 to 1791 . .	1,507,097	47,674,316	1,261,103	38,249,317	2,768,200
From 1792 to 1801 . .	2,370,073	75,612,373	1,570,154	53,277,085	3,940,227
From 1802 to 1811 . .	2.817,807	91,762,295	1,526,204	57,199 714	4,344,011
From 1812 to 1821 . .	3,169,686	100,078,027	1,352,056	53,038,125	4,521,742

In the year 1644, or 1645, a plague commenced in this town, which raged with such violence that the inhabitants were appalled and confounded. The return of deaths to major-general Carter, governor of Leeds, from March 1644—5 to December 1645, amounted to no less than 1325. The air was so very warm in July that 126 died in one day, and it was so infectious that dogs and cats, mice and rats, died; also several birds, in their flight over the town, dropped down dead. Here are now eight ecclesiastical edifices appropriated to the established religion. Of these, the original is the parish church of St. Peter, built in the form of a cross, with a tower in the middle; and has a painting in fresco of the ascension, by Parmentier, who presented the town with this specimen of his genius. The whole edifice is 165 feet in length and ninety-seven in breadth; the high choir fifty-seven feet in length, in breadth twenty-two, in height thirty-six; and 274 in circumference, and is well adapted to, perhaps, one of the most numerous congregations in the kingdom. The steeple tower is ninety-six feet high Leeds continued without any other place of worship than the parish church till the beginning of the reign of Charles I., when John Harrison, who also enlarged the free grammar-school and built the market-cross, which was taken down in 1825, a native of the parish, who had acquired considerable fortune by trade, and, being childless, built and endowed St. John's Church, which was consecrated September 21st in 1634. It is neither convenient nor elegant, but possesses all the gloom and obstructions of an ancient church, without one vestige of its dignity and grace. The foundation-stone of the third church in Leeds, dedicated to the Holy Trinity, was laid by Mr. Henry Robinson, on the 28th of August 1721, and it was consecrated by archbishop Blackburn, August 27th 1727. This is a beautiful edifice of moor-stone, and of the Doric order; though the capitals of the columns within are composite. The expenses of erection amounted to £4563 9*s.* 6*d.* The masonry, carpentry, and joiners' work, are all admirable. St. Paul's church, a plain, neat, handsome, commodious, and modern structure, was built by the Rev. Miles Atkinson, at an expense little short of £10,000, and was consecrated by Dr. William Markham, archbishop of York, on the 10th of September 1793. St. James's church was erected shortly after St. Paul's. It was at first intended for an independent chapel, but was afterwards purchased by the Rev. John King, who is still the minister. This church, which is built in the form of an octagon, had formerly a dome upon it; but, the roof being found too weak to support it, it was removed. There are also three new churches here, erected by his majesty's commissioners, called Christ Church, St. Mary's, and St. Mark's; the latter of which is at Woodhouse, but a short distance from the town.

The first endowment of a free grammar-school at Leeds is found in the last will and testament of a 'Syr William Sheaffield Priest, dated in the sixth yere of the reigne of king Edward VI.' The school was subsequently removed, and endowed, by Mr. Harrison. The national school, adapted for the instruction of 320 poor boys and 180 poor girls, on Dr. Bell's system, was opened in February 7th, 1813; the foundation-stone was laid by the Rev. P. Haddon, vicar, May 18th, 1812. The royal Lancasterian free-school was established in 1811. There are also other charity schools, schools of industry, Sunday schools, and infant and adult schools, connected with Christians of various denominations. The Methodists have five chapels; the Independents four; the Methodist new connexion two; the Baptists two; the Friends one chapel; the Unitarians one; the Arians one; the Roman Catholics one; the primitive Methodists, male, one; the primitive Methodists, female, one; the Swedenborgians one; and the Inghamites one.

Among the public buildings of Leeds we may also notice the following:—the court-house, situated at the bottom of Park Row: the principal front consists of a confined portico of Corinthian columns and two wings, which have pannels highly wrought in bas-relief, containing the fasces, fleece, wreaths, &c. The foundation-stone was laid on the 2d of September 1811, and it was opened in October 1813. The horse-barracks, which are situate about half a mile on the north road,

are a spacious brick building, comprising genteel apartments for the officers, rooms and stabling for 400 men and horses, a canteen, riding-school, hospital, magazine, guard-rooms, and every other convenience requisite for a military station. The site of the building, together with parade, ground, &c., occupy an enclosed space of about eleven acres. The philosophical hall is a handsome stone edifice, fronting Park Row and Bond Street. The society has for its object the discussion of literary and philosophical subjects, and was established on the 14th of January, 1820. Its officers consist of a president, two vice-presidents, two secretaries, a treasurer, a librarian, a curator, a sub-curator, and a council of twelve members. The museum contains rare and valuable specimens of fossils, minerals, coins, natural history, &c. There are, also, a library and a collection of apparatus connected with the institution. There is another museum, in Commercial Street, the property of a private gentleman, open for public exhibition, also, comprising many rare and beautiful specimens.

The general infirmary is a large commodious brick building, situate in a line with the colored cloth hall, opened March 1st, 1771. This is an excellent hospital, diffusing its extensive benefits to the country around, and is liberally supported by annual subscriptions and voluntary contributions. The south front is tastefully laid out in pleasure-grounds, 4000 square yards of which were presented to the trustees by Richard Fountayne Wilson, esq., M. P. for Yorkshire, at a cost of £1500; at once forming a monument to the munificence of the donor, an ornament to the town, and a lasting benefit to the institution. The town is also indebted to Mr. Wilson for his liberal gift of one-half the expenses of commuting the tythes of the parish, by act of parliament, for ever, amounting to upwards of £7000. The house of recovery, in Vicar Lane, for the reception of persons attacked by infectious fevers, was built by public subscription in 1802; connected with this institution there is also a general dispensary. The lying-in hospital, established in 1824, for the reception of poor married women, is in St. Peter's Square.

The Leeds subscription library was established about sixty years ago. The subscribers had formerly some apartments in Kirkgate, but in the year 1808 the present handsome edifice, built of ashlar stone, was opened. It is situate in Commercial Street, and cost nearly £5000. There is a row of shops on the basement floor, and the library is above, ascended by a flight of steps on the west end of the building. Dr. Whitaker, in his Loidis and Elmete, says, 'It would not disgrace the library of a college.' There are some other libraries of a minor description. There are five banks in the town, exclusive of the bank of England branch in Bank Street, which was opened in August, 1827. The two principal news-rooms are in Briggate.

Among the charitable institutions are the Benevolent Strangers' Friend Society, Harrison's hospital, Potter's alms-houses, Jenkinson's alms-houses, Mrs. Dixon's charity, the Guardian Asylum, for the reception of unfortunate females; and the workhouse. The religious charitable institutions are the Society for Promoting Christian Knowledge, bible, missionary, and tract societies. The mechanics' institute is situate in Basinghall Street. The public baths, a neat and commodious building, stands opposite the south front of the infirmary, and was completed in 1820.

The music-hall, a large brick building, consisting of a suite of rooms, including a spacious saloon, commodious picture gallery, &c., is in Albion Street. The theatre, in Hunslet Lane, is an old dilapidated, unsightly, black brick building. There are also several billiard-rooms. There are three newspapers in the town: The Leeds Intelligencer, published by Messrs. Robinson and Hernamen, in Commercial Street, on the Thursday; at which office also the Leeds and Yorkshire Almanack is printed: the Leeds Mercury, by Messrs. Baines and Son; and the Leeds Patriot, by Messrs. Fothergill and Thompson, both in Briggate. The Leeds and Yorkshire fire-office, established in 1824, is in Commercial Street; besides this there are several agents to other offices of a similar description. The coal-gas works, established in 1818, are situate in York Street; the oil-gas works are at New Road end, on the opposite side of the town, established in 1824.

One of the most substantial and serviceable edifices in the town, is the central market, in Duncan Street, which was opened on the 6th of October 1827; the foundation stone of which was laid in December 1824. The expenses of erection amounted to nearly £30,000. The principal part of the building is an enclosed market-house, the roof of which is supported by twelve cast-iron columns, and sixteen oaken pillars, and is thirty-four feet six inches high; the height from the floor to the upper point in the ceiling being fifty-four feet four inches. The size within the walls is 138 feet by 103 feet. There are twenty shops within and the same number without the building; and an outer line of shops for butchers and fishmongers, forming three sides of a quadrangle, with a street between them and the principal building. Above the shops within is a most commodious bazaar, forming together one of the most complete markets in this part of the kingdom. The main front is built of stone, the remainder of brick: the architecture is of the Grecian order. There is another bazaar in the shambles, near the top of Briggate. The corn exchange, opened in August, 1827, is a brick building, forming three sides of a quadrangle, with a colonnade on each side supported by cast-iron pillars, with offices under the north and west colonnades. The free-market is a large open space of ground, situate in the centre of the town, and is a great convenience to the inhabitants. Here the fortnight cattle fair is held every other Wednesday—established 1827. This market is bounded on the south by Kingsgate, on the west by Vicar Lane, and on the north by Ludgate Hill. Upon this site the old vicarage stood, but it was taken down in 1826; and was exchanged for an elegant house in Park Place where the Rev. Richard Fawcett, A. M., the vicar, now resides. The south market, a neat and commodious pile of buildings, with a circular

cross in the centre, is situate between Hinslet Lane and Meadow Lane. Here a quarterly leather fair was established in 1827 which is resorted to by the principal tanners and leather dealers in the county. The streets in Leeds are for the most part spacious and uniform, particularly at the west end of the town, where there are some beautiful squares, and open parades. Briggate, the main street in the centre of the town, extends nearly half a mile from north to south, and contains 177 shops. Till the year 1825 this street was obstructed by an old pile of buildings, one of which was the Moot Hall, used as a court-house, extending 120 yards from a little above Commercial Street, upwards, dividing Briggate into two inconvenient and dangerous alleys. That on the east was the shambles, and that on the west was formerly the wool-market. A little above the upper end of these buildings stood the market-cross, built by Mr. Harrison in 1776. These obstructions are now removed, and Briggate is equalled by few streets out of the metropolis. Leeds is 196 miles from London.

The greatest ornament to the town, in point of architectural beauty, is now in a considerable state of forwardness; and is expected to be completed in a few months. This is the Leeds commercial buildings, erecting at the bottom of Park Row, and intended as a place of resort for merchants and others, similar to the exchange in Liverpool and Manchester. The architecture is of the Grecian Ionic order, and in classical simplicity and elegance will exceed any public structure in this neighbourhood. The front extends from West Street to Park Row, and the entrance is at the junction of the two. Along the front are ten chaste columns, surmounted with beautiful capitals. Above the grand staircase in the centre of the building, there will be a circular tower, richly embellished with groups of figures, and ornamented battlements.

LEEF, or LIEVE, *adj.* } Sax. leoꝼ; Belg. *lieve; leve.* Kind; fond. Obsolete. See LIEF.

Whilome all these were low and *leef*,
And loved their flocks to feed;
They never strove to be the chief,
And simple was their weed. *Spenser's Pastorals.*

LEEK, *n. s.* Sax. leac; Dan. *leeg;* Goth. and Teut. *lauk*; Belg. *loock*, of Heb. לח, smooth, fresh, (applied to vegetables generally). A well-known plant. See ALLIUM.

We remember the fish which we did eat in Egypt freely; the cucumbers, and the melons, and the *leeks*. *Numb.* xi. 5.

Knowest thou Fluellen?—Yes.
—Tell him I'll knock his *leek* about his pate,
Upon St. David's day. *Shakspeare.*
Leek to the Welsh, to Dutchmen butter's dear. *Gay.*

We use acrid plants inwardly and outwardly in gangrenes; in the scurvy, water-cresses, horse-radish, garlick, or *leek* pottage. *Floyer on Humours.*

LEEK, in botany. See ALLIUM.

LEEKATOO, or LATAKOO, a town of South Africa, in the Boshuanna country, and the best known to us of any of their towns. It has been visited since 1801 by Messrs. Trutter and Somerville, Dr. Lichtenstein, and Mr. Campbell. It contains about 8000 inhabitants, who display considerable knowledge of the arts.

LEER, *n. s.* & *v. n.* Sax. ꝥleaꞃe; Swedish *leera.* A smile or oblique glance or view; arch or malignant look; to look obliquely or archly.

I spy entertainment in her; she gives the *leer* of invitation. *Shakspeare. Merry Wives of Windsor.*

I will *leer* upon him as he comes by; and do but mark the countenance that he will give me. *Shakspeare.*

Aside the devil turned
For envy, yet with jealous *leer* malign
Eyed them askance. *Milton.*

Bertran has been taught the arts of courts,
To gild a face with smiles, and *leer* a man to ruin. *Dryden.*

Damn with faint praise, concede with civil *leer*. *Pope.*

I wonder whether you taste the pleasure of independency, or whether you do not sometimes *leer* upon the court. *Swift.*

A grey-haired, withered, bloody-eyed,
And bloody-handed, ghastly, ghostly thing,
Female in garb, and crowned upon the brow,
Furrowed with years, yet sneering with the passion
Of vengeance, *leering* too with that of lust,
Sate:—my veins curdled. *Byron.*

LEESE, *n. s.* Belg. *lesen, liezen;* Swed. *lisa.* To destroy; to lose. Obsolete.

A nyght theef cometh not, but that he stele, sle, and *lese:* and I cam that thei haue lyf and haue more plenteously. *Wiclif, Jon* 10.

But nathelesse yet had I lever *lese*
My lif than of my body have a shame,
Or know myselven false, or *lese* my name. *Chaucer. Cant. Tales.*

Then sell to thy profit both butter and cheese,
Who buieth it sooner the more he shall *leese*. *Tusser.*

No cause, nor client fat, will Chev'ril *leese*,
But as they come on both sides he takes fees;
And pleaseth both: for while he melts his grease
For this, that wins for whom he holds his peace. *Ben Jonson.*

How in the port our fleet dear time did *leese*,
Withering like prisoners, which lie but for fees. *Donne.*

LEET, *n. s.* Sax. leðe. 'Otherwise called a law-day,' says Cowell. 'The word seemeth to grow from the Saxon leðe, which was a court of jurisdiction above the wapentake or hundred, comprehending three or four of them, otherwise called thirshing, and contained the third part of a province or shire.' See LATH.

Who has a breast so pure,
But some uncleanly apprehensions
Keep *leets* and law-days, and in sessions sit
With meditations lawful? *Shakspeare. Othello.*

You would present her at the *leet*,
Because she bought stone jugs, and no sealed quarts. *Shakspeare.*

A LEET, or COURT LEET (leta visus franci), is a court of record, ordained for punishing offences against the crown; and is said to be one of the most ancient courts of the land. It enquires of all offences under high treason; but those who are to be punished with loss of life or member, are only enquirable and presentable here, and to be certified over to the justices of assise. Stat. 1. Edw. III. And this court is called the view of frank pledge, because the king

is to be there certified by the view of the steward, how many people are within every leet, and have an account of their good manners and government; and every person of the age of twelve years, who hath remained there for a year and a day, may be sworn to be faithful to the king, and the people to be kept in peace, &c. A leet is incident to a hundred, as a court baron to a manor; for, by grant of a hundred, a leet passeth; and a hundred cannot be without a leet. The usual method of punishment in the court-leet, is by fine and amercement; the former assessed by the steward, and the latter by the jury.

LEEUW (William de), an eminent engraver of the seventeenth century. He was a native of Flanders, and the disciple of Sootman, whose manner of engraving, or rather etching, he imitated. His prints generally appear harsh at first sight; but become more agreeable upon examination. Several of them have great effect; particularly his Daniel in the lion's den, a large plate lengthwise, from Rubens. The first impressions of this plate are before the name of Dankertz was added, and are extremely rare and dear.

A LEEWARD SHIP is a vessel that falls much to leeward of her course, when sailing close-hauled, and consequently loses much ground.

LEFEBVRE (Francis Joseph), duke of Dantzic, born at Rufack, in the department of the Upper Rhine, October 25th, 1755, entered when young into the French guards, and was a sergeant at the beginning of the revolution. From being a captain he passed to the rank of adjutant-general in September, 1793; and, in the beginning of 1794, to that of general of division. In June this year he distinguished himself at the battle of Fleurus, and after the death of Hoche was raised to the command of the army of the Meuse and Sambre. Being wounded at the battle of Stockhet in 1799, he retired to Paris, where he assisted Buonaparte in seizing the supreme power. He was now made pretor of the conservative senate, which office he held to the end of the imperial government. In 1804 he was created a marshal; and at the battle of Jena he commanded the imperial guard; but his greatest exploit was the taking of Dantzic, May 24th 1807, after which he was raised to the dignity of a duke. He subsequently commanded in Spain and Germany, and he contributed greatly to the success of the French at Eckmuhl and Wagram. After the restoration of royalty, he was made a peer, and died at Paris September, 1820.

LEFOOGA, one of the Friendly Islands, in the cluster called Hapaees; about seven miles long, and three broad; very fertile, and highly cultivated; the fences running parallel from spacious public roads. Captain Cook sowed melons, pine-apples, Indian corn, &c., on it. In this island, in 1800, the Port au Prince privateer was cut off, and almost the whole crew massacred. Long. 185° 40′ E. lat. 19° 49′ S.

LEFT, *adj.*
LEFTHAND'ED,
LEFTHAND'EDNESS, *n. s.*
} Lat. *levus;* Gr. λαιος. Some etymologists however trace this adjective and the Belg. *lefts,* Teut. *links,* Lat. *linquo,* to the verb leave, i. e. as expressing the usual preference for the right hand, this being 'left.' Sinistrous: opposed to the right; not on the right side.

Among all this people there were there seven hundred chosen men *left handed.* *Judges* xx. 16.

The limbs are used most on the right side, whereby custom helpeth; for we see, that some are *left handed,* which are such as have used the left hand most. *Bacon.*

Although a squint *left handedness*
Be ungracious; yet we cannot want that hand.
Donne.

That there is also in men a natural prepotency in the right, we cannot with constancy affirm, if we make observation in children, who, permitted the freedom of both hands, do ofttimes confine it unto the *left,* and are not without great difficulty restrained from it. *Browne's Vulgar Errours.*

For the seat of the heart and liver on one side, whereby men become *left handed,* it happeneth too rarely to countenance an effect so common: for the seat of the liver on the left side is very monstrous. *Id.*

The gods of greater nations dwell around,
And, on the right and *left,* the palace bounds;
The commons where they can. *Dryden.*

A raven from a withered oak,
Left of their lodging was obliged to croak:
That omen liked him not. *Id.*

The man who struggles in the fight,
Fatigues *left* arm as well as right. *Prior.*

LEG, *n. s.* Sax. læᵹ; Dan. *leg;* Goth. *legg, litha,* to bend.—Thomson. The limb used in walking: that part of it particularly which is between the knee and the foot: hence the support of any thing: and a bow with the leg drawn back or upwards.

The elephant hath joints, but none for courtesy; his *legs* are for necessity, not for pleasure.
Shakspeare.

At court, he that cannot make a *leg,* put off his cap, kiss his hand, and say nothing, has neither *leg,* hands, lip, nor cap. *Id.*

Purging comfits, and ants' eggs,
Had almost brought him off his *legs.* *Hudibras.*

Their horses never give a blow,
But when they make a *leg,* and bow. *Id.*

They haste; and what their hardy feet denied,
The trusty staff, their better *leg,* supplied. *Dryden.*

If the boy should not put off his hat, nor make *legs* very gracefully, a dancing-master will cure that defect. *Locke.*

Such intrigues people cannot meet with, who have nothing but *legs* to carry them. *Addison*

Persons of their fortune and quality could well have stood upon their own *legs,* and needed not to lay in for countenance and support. *Collier.*

He made his *leg,* and went away. *Swift.*

And I appeal to the first and most natural feelings of mankind, whether on beholding a beautiful eye, or a well fashioned mouth, or a well turned *leg,* any ideas of their being well fitted for seeing, eating, or running, ever present themselves.
Burke on the Sublime.

At length a generation more refined,
Improved the simple plan; made three *legs* four,
Gave them a twisted form vermicular. *Cowper.*

Halting on crutches of unequal size,
One *leg* by truth supported, one by lies;
They sidle to the goal with awkward pace,
Secure of nothing—but to lose the race.
Id. Progress of Errour.

Here agonizing rolled the mouse in gore;
And there the frog (a scene full sad to see!)
Shorn of one *leg*, slow sprawled along on three
He vaults no more with vigorous hops on high,
But mourns in hoarsest croaks his destiny.
Beattie.

Leg, in anatomy, the whole lower extremity from the acetabula of the ossa innominata, is commonly divided into three parts, viz. the thigh, the leg properly so called, and the foot. See Anatomy.

LEG'ACY, *n. s.*, Leg'atary, Legatee', Legator'. Lat. *legatum*. A bequest by will: legatary and legatee both mean the party to whom a legacy is left: legator, he who leaves one.

If there be no such thing apparent upon record, they do as if one should demand a *legacy* by force and virtue of some written testament, wherein there being no such thing specified, he pleadeth that there it must needs be, and bringeth arguments from the love or good-will which always the testator bore him; imagining, that these, or the like proofs, will convict a testament to have that in it, which other men can no where by reading find. *Hooker.*

Legacy is a particular thing given by last will and testament. *Cowell.*

The honour of a maid is her name; and no *legacy* is so rich as honesty. *Shakspeare.*

Fetch the will hither, and we shall determine
How to cut off some charge in *legacies*. *Id.*

When the heir of this vast treasure knew
How large a *legacy* was left to you,
He wisely tyed it to the crown again. *Dryden.*

Suppose debate
Betwixt pretenders to a fair estate,
Bequeathed by some *legator's* last intent. *Id.*

If he chance to 'scape this dismal bout,
The former *legatees* are blotted out. *Id.*

Good counsel is the best *legacy* a father can leave a child. *L'Estrange.*

Leave to thy children tumult, strife, and war,
Portions of toil, and *legacies* of care. *Prior.*

An executor shall exhibit a true inventory of goods, taken in the presence of fit persons, as creditors and *legataries* are, unto the ordinary. *Ayliffe.*

My will is, that if any of the above-named *legatees* should die before me, that then the respective legacies shall revert to myself. *Swift.*

If the *legatee* dies before the testator, the *legacy* is a lost or lapsed *legacy*, and shall sink into the residue. *Tomlin.*

If the *legatee* dies before the age of twenty-one, his representatives shall receive it out of the testator's personal estate, at the same time that it would have become payable in case the *legator* had lived. *Id.*

Legacy. See Wills.

LE'GAL, *adj.*, Legal'ity, Le'galise, *v. a.*, Le'gally. Fr. *legal*; Ital. Span. and Port. *legale*; Lat. *leges*. According to law; lawfulness: to legalise is to make lawful; authorise.

It was not in the power of the *legal* priesthood to perform, or promise innocency to her ministers.
Bp. Hall.

He had sinned concerning the dead body; and yet it was nothing but a *legal* impurity.
Bp. Taylor.

A prince may not, much less may inferior judges, deny justice, when it is *legally* and competently demanded. *Id.*

His merits
To save them, not their own, though *legal*, works.
Milton.

It was a punishment never by the Romans, under whose law our Lord suffered, *legally* inflicted upon freemen, but upon slaves only. *Barrow.*

Whatsoever was before Richard I., was before time of memory; and what is since, is, in a *legal* sense, within the time of memory. *Hale.*

If any thing can *legalize* revenge, it should be injury from an extremely obliged person: but revenge is so absolutely the peculiar of Heaven, that no consideration can impower, even the best men, to assume the execution of it. *South.*

In this situation, they have frequently a right to decide, and that upon their oaths, questions of nice importance, in the solution of which some *legal* skill is requisite. *Blackstone.*

LEG'ATE, *n. s.*, Leg'ative, *adj.*, Lega'tion, *n. s.* Fr. *legat*; Ital. *legato*; Lat. *legatus*, *legare*, to send or appoint. An ambassador or deputy, particularly of the pope. Legatine, proceeding from, or pertaining to, a legate. Legation, commission; embassy; diplomatic employment.

Look where the holy *legate* comes apace,
To give us warrant from the hand of Heaven.
Shakspeare.

All those you have done of late,
By your power *legatine* within this kingdom,
Fall in the compass of a præmunire. *Id.*

After a *legation* ad res repetendas, and a refusal, and a denunciation or indiction of a war, the war is no more confined to the place of the quarrel, but is left at large. *Bacon.*

They are called apostles of the churches, not going from Corinth with the money, but before they came thither from whence they were to be dispatched in *legation* to Jerusalem. *Bp. Taylor.*

The *legates* from the' Ætolian prince return:
Sad news they bring, that after all the cost,
And care employed, their embassy is lost. *Dryden.*

Upon the *legate's* summons, he summitted himself to an examination, and appeared before him.
Atterbury.

When any one is absolved from excommunication, it is provided by a *legatine* constitution that some one shall publish such absolution. *Ayliffe.*

In attiring, the duke had a fine and unaffected politeness, and upon occasion costly, as in his *legations*. *Wotton.*

A Legate is generally a cardinal or bishop, whom the pope sends as his ambassador to sovereign princes. See Ambassador. There are three kinds of legates, viz. legates a latere, legates de latere, and legates by office, or legati nati; of these the most considerable are the legates a latere, the next are the legates de latere. See Latere. Legates by office are those who have not any particular legation given them; but who, by virtue of their dignity and rank in the church, become legates: but the authority of these legates is much inferior to that of the legates a latere. The power of a legate is sometimes given without the title. Some of the nuncios are invested with it. It was one of the ecclesiastical privileges of England, from the Norman conquest, that no foreign legate should be obtruded upon the English, unless the king should desire it upon some extraordinary emergency, as when a case was too difficult for the English prelates to determine.

Legate, Court of the, was a court obtained by Cardinal Wolsey of pope Leo X., in the ninth year of Henry VIII., wherein he, as legate of the pope, had power to prove wills, and dispense with offences against the spiritual laws, &c. It was but of short continuance.

LEGATIO LIBERA, was a privilege frequently obtained of the state, by senators of Rome, going into any province or country upon their own private business, to assume the quality of legati or envoys from the senate, that the dignity of this nominal office might secure them a good reception, and have an influence on the management of their concerns. The cities and towns through which they passed were obliged to defray their expenses. It was called libera legatio, because they might lay aside the office as soon as they pleased, and were not encumbered with any actual trust.

LEGATUS, a military officer among the ancient Romans, who commanded as deputy of the commander-in-chief. The legati, at their first institution, were not so much to command as to advise. They were generally chosen by the consuls, with the approbation of the senate. As to their number, we have no certain information, but there appears to have been at least one to every legion. In the absence of the consul or proconsul, they had the fasces. Under the emperors there were two sorts of legati, consulares and prætorii. The first commanded whole armies, as the emperor's lieutenant generals; and the latter had the command of particular legions. The legati under the proconsuls in the provinces judged inferior causes, and managed smaller concerns, remitting affairs of great moment to the governor or president. This was their original office, though they were afterwards admitted to command in the army.

LE'GEND, *n. s.* } Fr. *legende*; Port. and LEG'ENDARY, *adj.* } Lat. *legenda*. Strictly, that which may be read. See LEGIBLE. A tale or story, true or false; any narrative, or collection of narrations; used particularly for narrations of the lives of Romish saints; an inscription on a coin or medal. Legendary, pertaining to, or partaking of the character of a legend.

Legends being grown in a manner to be nothing else but heaps of frivolous and scandalous vanities, they have been even with disdain thrown out, the very nests which bred them abhorring them.
Hooker.

And in this *legend* all that glorious deed
Read, whilst you arm you; arm you whilst you read.
Fairfax.

A religion that, instead of the pure milk of the gospel, hath long fed her starved souls with such idle *legends*, as the reporter can hardly deliver without laughter, and their abettors not hear without shame and disclamation.
Bp. Hall.

There are in Rome two sets of antiquities, the christian and the heathen; the former, though of a fresher date, are so embroiled with fable and *legend*, that one receives but little satisfaction.
Addison.

Compare the beauty and comprehensiveness of *legends* on ancient coins.
Id. On Medals.

Writing has lost more mistresses than any mistake in the whole *legend* of love.
Steele.

Who can show the *legends*, that record
More idle tales, or fables so absurd? *Blackmore.*

Then slowly climb the many-winding way,
And frequent turn, to linger as you go,
From loftier rocks new loveliness survey,
And rest ye at our 'Lady's house of woe;'
Where frugal monks their little relics show,
And sundry *legends* to the stranger tell.
Byron.

The LEGEND was originally a book used in the old Romish churches, containing the lessons to be read at divine services; hence the lives of the saints and martyrs came to be called legends, because chapters were read out of them at matins, and at the refectories of religious houses. Among these the Golden Legend, which is a collection of the lives of the saints, was received in the church with great applause, which it maintained for 200 years; though the Roman Catholics themselves are almost ashamed of it.

LEGEND is also used to signify the words engraven about the margins, &c., of coins. Thus the legend of a French crown was Sit nomen domini benedictvm; that of a moidore, In hoc signo vinces; on those of the last emperors of Constantinople, we find Jesvs Christvs basilevs basileon, ihs xps nika, i. e. Jesvs Christvs vincit. It is also applied to the inscription of medals, which serves to explain the figures or devices represented on them. In strictness, the legend differs from the inscription; this last properly signifying words placed on the reverse of a medal, in lieu of figures. It seems the ancients had intended their medals to serve both as images and as emblems; the images to represent the faces of princes; emblems their virtues and great actions. Every medal has properly two legends; that on the front, and that on the reverse. The first generally serves only to distinguish the person by his name, titles, offices, &c.; the latter is intended to express his noble deeds, and the advantages the public has reaped by him. This, however, does not hold universally; for sometimes we find the titles shared between both sides, and sometimes also the legend. In the medals of cities and provinces, as the head is usually the genius of the place, or at least some deity adored there, the legend is the name of the city, province, or deity, or of both together; and the reverse is some symbol of the city, &c., frequently without a legend, sometimes with that of one of its magistrates. Legends generally commemorate the virtues of princes, their honor and consecrations, signal events, public monuments, deities, vows, privileges, &c., which are either in Latin or Greek, or a mixture of both.

LEG'ER, *n. s.* Sax. leȝian, to place in order. See LEDGE. Any thing or person permanently fixed in a place: thus, a leger-ambassador is one constantly resident; a leger, one of the most important, and therefore most carefully deposited, books of the merchant.

I've given him that,
Which, if he take, shall quite unpeople her
Of *leidgers* for her sweet.
Shakspeare. Cymbeline.

Lord Angelo, having affairs to Heaven,
Intends you for his swift ambassador,
Where you shall be an everlasting *leiger*.
Shakspeare.

If *leiger* ambassadors or agents were sent to remain

near the courts of princes, to observe their motions, such were made choice of as were vigilant. *Bacon.*

Who can endear
Thy praise too much? thou art Heaven's *leiger* here,
Working against the states of death and hell.
Herbert.

He withdrew not his confidence from any of those who attended his person, who, in truth, lay *leiger* for the covenant, and kept up the spirits of their countrymen by their intelligence. *Clarendon.*

I call that a *ledger* bait, which is fixed, or made to rest, in one certain place, when you shall be absent; and I call that a walking bait which you have ever in motion. *Walton.*

By these means the journal is greatly shortened and simplified; but the principal advantage of such arrangement consists in posting the books; for here a whole month's cash, bills, commission, insurance, and interest, are each carried into one sum, or entry, from the journal to the *ledger*.
Nicholson's Journal.

LEG'ERDEMAIN, *n. s.* } Fr. *legereté*. Le-
LEGER'ITY. } gerdemain seems to be contracted from Fr. *legereté de main*, or *leger de main*, i. e. levis manu, light of hand.—Minsheu. Slight of hand; deception of the eye by nimbleness of the hand; juggle; trick; cosenage; knack. Legerity is lightness · nimbleness; quickness of motion.

He so light was at *legerdemain*,
That what he touched came not to light again.
Hubberd.

When the mind is quickened,
The organs, though defunct and dead before,
Break up their drowsy grave, and newly move
With casted slough and fresh *legerity*.
Shakspeare.

Whoever shall pretend that any time, easily, with a celerity, by a kind of *legerdemain*, or by any mysterious knack, a man may be settled in virtue, or converted from vice, common experience abundantly will confute him. *Barrow.*

Of all the tricks and *legerdemain* by which men impose upon their own souls, there is none so common as the plea of a good intention. *South.*

LEGERDEMAIN is a denomination given to certain deceptive performances, which either depend altogether on dexterity and address, or derive a small degree of aid from philosophical principles. The former class, though they may be styled arts in one sense of the word, yet depend so entirely upon trick and deception, and have so little connexion with real science, that we are persuaded none of our readers will regret our omitting them. Of the latter class, sufficient specimens of entertaining experiments, illusions, &c., of a philosophical nature, will be found under the articles ACOUSTICS, OPTICS, ELECTRICITY, ELECTRO-MAGNETISM, HYDROSTATICS, PYROTECHNICS.

LEGHORN, Ital. Livorno, and the Liburnum and Liburni Portus of former times, one of the most flourishing and important sea-ports of Italy, in the grand duchy of Tuscany, stands in a marshy district, intersected by canals. The harbour is formed by a mole a mile in length, but, from the sand washed into it, requires continual clearing, for which purpose a number of galley slaves are kept employed; the sand being conveyed to the neighbouring marshes to raise the soil, and render them more healthy.

Toward the sea it is fortified, and a stone rampart encloses it on the land side. The city abounds in churches: one of which, the Duomo or high church, is a Gothic fabric, chiefly remarkable for its vault. There are six other Catholic and two Greek churches, a mosque, an American chapel, and an elegant synagogue. The streets are in general wide, straight, and clean: the west end of the town, from the circumstance of canals intersecting it so frequently, is called the New Venice: and the town altogether is considered the greatest commercial depôt in Italy. The ducal palace is an inferior building; but near the harbour is a fine statue (by John of Bologne) of the grand duke Ferdinand I. Other remarkable structures are the arsenal, the salt, tobacco, and oil warehouses, the public baths and the theatre. Here are also three lazarettos; that nearest the harbour is esteemed one of the finest establishments of this kind in Europe; the literary institutions are, an academy of lectures and the arts, and an excellent public library.

Leghorn is the residence of consuls from all the principal states of Europe, and the chief medium of Italian commerce with the Levant and Barbary. It is visited annually by upwards of 4000 vessels great and small. The manufacturers of Silesia and other parts of Germany find this a valuable market for linen, the French for silks, and the English for woollens. The chief branches of manual labor are the working of coral and alabaster; manufactures of silk, leather, paper, &c. The population is at present about 50,000. Of this number a sixth part are Jews, who here enjoy considerable privileges, and are said to be very rich. This part is entirely indebted for its prosperity to the family of Medici, the princes of which successively enlarged and fortified the town, constructed the harbour and mole, and declared it free. Good water being scarce, the government has caused a stream of excellent water to be conveyed hither from the distant mountains of Colognole, by a long and expensive aqueduct. In the environs the most interesting object is the English churchyard, where, among other monuments, is to be seen one in memory of Dr. Smollett: fifteen miles south-west of Peru, forty-seven W. S. W. of Florence, and 140 N. N. W. of Rome.

LEG'IBLE, *adj.* } Fr. Span. and Ital. *legi-*
LEG'IBLY, *adv.* } *ble*; Lat. *legibilis*. See LEGEND. That may be read; discriminate; plain; apparent.

The deserts of men shall often be *legible* in the recompenses conferred or inflicted upon them.
Barrow.

People's opinions of themselves are *legible* in their countenances. Thus a kind imagination makes a bold man have vigour and enterprize in his air and motion; it stamps value and significancy upon his face.
Collier.

You observe some clergymen with their heads held down within an inch of the cushion, to read what is hardly *legible*. *Swift.*

Whate'er she meant, this truth divine
Is *legible* and plain,
'Tis power Almighty bids him shine,
Nor bids him shine in vain. *Cowper.*

LEGIO, a town of Galilee, from which Jerome determines the distances of the places in Galilee, so named from a Roman legion there. It lay fifteen miles west of Nazareth, between Mount Tabor and the Mediterranean; now thought to be Legune.

LE'GION, *n. s.* } Fr. Span. and Port. *le-*
LE'GIONARY. } *gion;* Lat *legio.* A body of Roman soldiers, amounting to about 5000; a large military force; any large number. Legionary, pertaining to, or containing a legion or great number.

My name is *legion*, for we are many. *Mark* v. 9.

Not in the *legions*
Of horrid hell, can come a devil more damned.
Shakspeare.

My name is *legion*.—The author of discord hath borrowed a name of war: from that military order of discipline by which the Jews were subdued, doth the devil fetch his denominations. *Bp. Hall.*

Too many, applying themselves betwixt jest and earnest, make up the *legionary* body of error.
Browne's Vulgar Errours.

She to foreign realms
Sends forth her dreadful *legions*. *Philips.*

The partition between good and evil is broken down; and, where one sin has entered, *legions* will force their way through the same breach. *Rogers.*

What can preserve my life! or what destroy!
An angel's arm can't snatch me from the grave;
Legions of angels can't confine me there. *Young.*

SAR. I fear it not; but I have felt—have seen—
A *legion* of the dead. *Byron.*

A LEGION, in Roman antiquity, consisted of different numbers at different periods. The word come from Lat. legere to choose; because, when the legions were raised, they chose such of their youth as were most proper to bear arms. In the time of Romulus the legion consisted of 3000 foot and 300 horse; though, after the reception of the Sabines, it was augmented to 4000. In the war with Hannibal it was raised to 5000; after this it sunk to 4000 or 4500; this was the number in the time of Polybius. In the age of Julius Cæsar we do not find any legions exceeding the Polybian number of men; and he himself expressly speaks of two legions that did not make above 7000 between them. Commentar. lib. 5. The number of legions kept in pay differed according to circumstances. During the consular government four legions were fitted up every year, and divided betwixt the two consuls; yet there were sometimes sixteen or eighteen, as the situation of affairs required. Augustus maintained a standing army of twenty-three or twenty-five legions; but this number in after times is seldom found. The different legions were named, or rather numbered, from the order in which they were raised; legio prima, secunda, tertia, &c.; and they were also surnamed from the emperors, as Augusta, Claudiana, Galbiana, Flavia, Ulpia, Trajana, Antonina, &c.; or from the provinces which had been conquered by their means, as Parthica, Scythica, Gallica, Arabica, &c.; or from the deities under whose protection the commanders had particularly placed themselves, as Minervia, Apollinaris, &c.; or from the region where they were quartered, as Cretensis, Cyrenaica, Britannica, &c.; or from particular accidents, as adjutrix, martia, fulminatrix, repax, victrix, &c. Each legion was divided into ten cohorts, each cohort into ten companies, and each company into two centuries. The chief commander of the legion was called legatus, i. e. lieutenant. The standards borne by the legion were various; at first the standard was a wolf, in honor of Romulus's nurse; afterwards a hog, which animal was usually sacrificed at the conclusion of a treaty, to indicate that war is undertaken with a view to peace; sometimes a minotaur, a horse, and also a boar; and Marius was the first who changed all these for the eagle. In the time of Marius the four divisions of the legion which had taken place under the consuls were united into one, and augmented; and cohorts were appointed from 500 to 600 men, each under the command of a tribune. Each cohort consisted of three companies of manipules, each manipule of two centuries, and the legion was divided into ten cohorts, who made as many distinct battalions, disposed in three lines; so that the legion then consisted of 6000 men.

Isidore tells us, that the legion consisted of 6000 men, and was divided into sixty centuries, thirty manipules, twelve cohorts, and 200 troops. According to the French academy, the legion consisted of 6000 foot, and 725 horse. The legion consisted of four sorts of soldiers, who differed in their age, arms, and names: they were called Velites, Hastati, Principes, and Triarii. Till the destruction at Carthage these were citizens of Rome, but after the Social War the freedom of the city was granted to other towns in Italy, and legionary troops were raised which were called Roman, because, as they shared the privilege of Roman citizens, they were incorporated in the republic.

LEG'ISLATE, *v. n.* } Lat. *legislator,*
LEGISLA'TION, *n. s.* } (*lex, legis*). To
LEG'ISLATIVE, *adj.* & *n. s.* } make or give laws.
LEG'ISLATOR, *n. s.* } Legislation, the act or power of making laws. Legislative, giving laws; and as a substantive, that department of a government which makes or gives them. Legislator, a law-giver.

Pythagoras joined *legislation* to his philosophy, and, like others, pretended to miracles and revelations from God, to give a more venerable sanction to the laws he prescribed. *Littleton.*

Without the concurrent consent of all three parts of the *legislature*, no law is, or can be made.
Hale's Common Law.

The poet is a kind of lawgiver, and those qualities are proper to the *legislative* style. *Dryden.*

It spoke like a *legislator*: the thing spoke was a law. *South.*

In the notion of a *legislature* is implied a power to change, repeal, and suspend laws in being, as well as to make new laws. *Addison.*

Heroes in animated marble frown,
And *legislators* seem to think in stone. *Pope.*

By the supreme magistrate is properly understood the *legislative* power; but the word magistrate seeming to denote a single person, and to express the executive power, it came to pass that the obedience due to the *legislature* was, for want of considering this easy distincton, applied to the administration. *Swift.*

The natural liberty of man is to be free from any superior power on earth, and not to be under the will or *legislative* authority of man, but to have only the law of nature for his rule. *Locke.*

To embarrass justice by a multiplicity of laws, or to hazard it by a confidence in our judges, are, I grant, the opposite rocks on which *legislative* wisdom has been split. *Goldsmith.*

How unbecoming must it appear in a member of the *legislature* to vote for a new law, who is utterly ignorant of the old! *Blackstone.*

Know, sirrah, in its very nature
A law can't reach the *legislature*. *Beattie.*

The first maxim of a free state is, that the laws be made by one set of men, and administered by another; in other words, that the *legislative* and judicial characters be kept separate. *Paley.*

I believe it had occupied the serious thoughts of all descriptions of persons long before its introduction to the notice of that *legislature* whose interference alone could be of real service. *Byron.*

LEGISLATORS, ANCIENT. The most celebrated ancient legislators were, MOSES among the Jews; THESEUS, DRACO, and SOLON, among the Athenians; LYCURGUS among the Lacedemonians; NUMA among the Romans, &c See these articles. The first laws among the Athenians seem to have been those of Theseus. After him came Draco, whose laws were said, for their severity, to have been written with blood: by them every offence was punished with death; so that stealing an apple, and betraying one's country, were treated as equal crimes. These were repealed by Solon, except such as related to murder: by way of distinction, Draco's laws were called Θεσμοι, and Solon's Νομοι. The laws of Solon were in a great measure suspended during the usurpation of Pisistratus; but after the expulsion of his family were revived with some additions by Clisthenes. After this the form of government was again changed, first by the 400, and afterwards by the thirty tyrants; but the ancient laws were again restored in the archonship of Euclides, and others established at the instance of Diocles, Aristophon, and finally of Demetrius the Phalerean. But many laws were enacted by the suffrages of the people on particular exigencies; the decrees of the senate continued to have the force of laws no longer than a year. If a new law was to be proposed to the assembly, it was necessary to write it upon a white tablet, and fix it up some days before the meeting, lest their judgment should be caught by surprise. The laws were carefully revised every year; and if any of them, from a change of circumstances, were found unsuitable or prejudicial, they were repealed: this was called ηπιχειροτονια των νομων, because the suffrages were given by holding up of hands. The first laws among the Grecians were not written, but composed in verse, that the people might with more ease commit them to memory. Solon penned his laws upon wooden tablets, called Αξονες; and some authors with great probability assert, that they were written in the manner called Βυστροφηδον, from left to right, and from right again to the left. See BOUSTROPHEDON. It was against the law for any person to erase a decree, and certain persons called Γραμματεις, were appointed to prevent any corruption; whose business it was also to transcribe the old and enter the new ones. At Rome the people were in a great measure their own legislators; though Solon may be said, in some sense, to have been their legislator, as the decemviri, who were created for the making of laws, borrowed a great number from those of Solon. With us the legislative power is lodged in the king, lords, and commons assembled in parliament.

LEGIT'IMATE, *adj.* & *v. a.*
LEGIT'IMACY, *n. s.*
LEGIT'IMATELY, *adv.*
LEGITIMA'TION, *n. s.*
} Fr. *legitime*; Italian, Span., and Port., *legitimo*; Lat. *legitimus*, *lege* (by law). Legal, applied particularly to being born in marriage; lawfully begotten. To legitimate is to make lawful, or obtain the right of legitimate birth. Legitimacy is lawfulness; genuineness; lawfulness of birth in particular. Legitimation, the act of investing with legitimacy, or state of being so invested.

I have disclaimed my land;
Legitimation, name, and all is gone;
Then, good my mother, let me know my father. *Shakspeare.*

Legitimate Edgar, I must have your land;
Our father's love is to the bastard Edmund. *Id.*

It would be impossible for any enterprize to be lawful, if that which should *legitimate* it is subsequent to it, and can have no influence to make it good or bad. *Decay of Piety.*

An adulterous person is tied to make provision for the children begotten in unlawful embraces, that they may do no injury to the *legitimate*, by receiving a portion. *Taylor.*

By degrees he rose to Jove's imperial seat;
Thus difficulties prove a soul *legitimately* great. *Dryden.*

From whence will arise many questions of *legitimation*, and what in nature is the difference betwixt a wife and a concubine. *Locke.*

In respect of his *legitimacy*, it will be good. *Ayliffe.*

Legitimate him that was a bastard. *Id.*

The *legitimacy* or reality of these marine bodies vindicated, I now inquire by what means they were hurried out of the ocean. *Woodward.*

Had divines taught them the true and proper and peculiar end of this revelation, they would then have seen that universal history afforded the most *legitimate* prejudice in favour of Christianity. *Warburton.*

LEGITIME, in Scottish law, the share of the moveable effects belonging to a husband and wife, which upon the husband's death falls to the children.

LEGNANO, a fortified and populous town of Italy, in the department of the Mincio, and district of Verona. It has a great trade in grain, particularly rice; and a canal erected in 1762, which runs between the Adige, the Tartaro, and the Po. It surrendered to the French September 13th 1796; but on the 26th of March 1799 the French attacked the Austrians under general Kray here, and were defeated, with the loss of 1500 killed, twenty-two officers, and 500 men taken prisoners; besides fifteen cannons, fifteen loaded waggons, &c. Population 6350. It lies twenty-two miles E.S.E. of Verona, and twenty-eight N.N.W. of Ferrara.

LEG'UME, *n. s.* } Fr. *legume*; Lat. *legumen*. Seeds not reaped, but gathered by the hand; as beans; all larger seeds; pulse: of or belonging to pulse.
LEGU'MEN,
LEGU'MINOUS, *adj.*

Some *legumens*, as peas or beans, if newly gathered and distilled in a retort, will afford an acid spirit.
Boyle.

In the spring fell great rains, upon which ensued a most destructive mildew upon the corn and *legumes*.
Arbuthnot.

The properest food of the vegetable kingdom is taken from the farinaceous seeds: as oats, barley, and wheat: or of some of the siliquose or *leguminous*; as peas or beans. *Id.*

LEGUMEN or POD. See BOTANY.

LEGUMINOUS is applied to all plants whose fruit is a legumen, or pod. See BOTANY.

LEIBNITZ (Godfrey William de), an eminent mathematician and philosopher, born at Leipsic in Saxony in 1646. At the age of fifteen he studied mathematics at Leipsic and Jena; and in 1663 maintained a thesis de Principiis Individuationis. In 1664 he was admitted M. A. He endeavoured to reconcile Plato with Aristotle, as he afterwards did Aristotle with Des Cartes. But the study of the law was his principal object, and he was admitted LL. B. in 1665. In 1666 he would have taken the degree of doctor, but was refused it, on pretence that he was too young, though in reality because he had rejected the principles of Aristotle and the schoolmen. Upon this he went to Altorf, where he maintained a thesis de Casibus Perplexis, with such applause, that the degree of LL. D. was conferred on him. He might have settled to great advantage in Paris: but his aversion to the Roman Catholic religion made him refuse all offers. In 1673 he went to England; where he became acquainted with John Collins, F. R. S., and Mr. Oldenburgh, the secretary of the Royal Society. In 1676 he returned to England, and thence went into Holland, in order to proceed to Hanover, where he proposed to settle. Upon his arrival there, he applied himself to enrich the duke's library with the best works of all kinds. The duke dying, in 1679, his successor Ernest Augustus continued to patronise him, and employed him to write the history of the house of Brunswick. He travelled over Germany and Italy to collect materials. Frederick I. king of Prussia, then elector of Brandenburgh, founded an academy at Berlin by his advice, and appointed him perpetual president, though he could not reside constantly at Berlin. He projected an academy of the same kind at Dresden, but the execution of this design was prevented by the confusions in Poland. His writings had long before made him famous over all Europe. Besides the office of privy-counsellor of justice, which king George I., then elector of Hanover, had given him, the emperor appointed him in 1711 aulic-counsellor; and Peter the Great made him privy-counsellor of justice, with a pension of 1000 ducats. He undertook the establishment of an academy of sciences at Vienna; but the plague prevented the execution of it. However the emperor, as a mark of his favor, settled a pension on him of 2000 florins, and promised him another of 4000, if he would come and reside at Vienna, but he was prevented by death in 1716. His memory was so strong, that he could, even in his old age, repeat the whole Æneid without error. He professed the Lutheran religion, but never went to church; and, upon his death bed, his favorite servant desiring him to send for a minister, he replied, he had no need of one. Foreigners for some time ascribed to him the invention of fluxions, which had been previously discovered by Sir Isaac Newton. See FLUXIONS.

LEICESTER, the capital of the county of this name, is situated on the banks of the river Soare, in the centre of the finest wool district of England. On three sides, north, south, and east, it has canal communications with the rest of the kingdom, and though, from its late rapid increase as a manufacturing town, the houses are chiefly modern, the town itself is of great antiquity, and often mentioned in our history.

It is divided into six parishes, possessing respectively the churches of St. Nicholas, St. Mary, All Saints, St. Martin, St. Margaret, and St. George: in 1220 it is said no fewer than nine churches were standing here. St. Nicholas's, a Saxon building, is the most ancient; and consists only of a nave and south aisle, with a square tower at the west end. St. Mary's is a large pile of irregular building, exhibiting various styles of architecture. All Saints is a small modern church. St. Martin's, an old building of commodious size, consists of a nave, side aisles, chancel, and handsome tower. Leland calls it the 'fairest church in the place, which once was a cathedral.' The interior is handsome, and contains several elegant monuments. St. George's is a modern erection and considered an elegant specimen of architecture. Here are also places of worship for the Particular and General Baptists, the Independents, the Methodists, the Unitarians, and the Roman Catholics. Other public buildings are, the town jail, a commodious stone edifice, erected in 1791; the infirmary, a plain square building, with two wings, at the south end of the town; and, exclusive of the fever ward, calculated to receive fifty-four patients; near it is an asylum for indigent lunatics: and the exchange, a plain building, in the open square of the market place. A new county jail has just been finished, situated near the infirmary, with all the modern improvements of which such erections are susceptible. Leicester is also distinguished for its excellent inns. The hotel is a handsome modern building, originally intended for a coffee-room and tavern, but now converted into assembly-rooms, lodgings for the judges at the circuits, and rooms for the sittings of the magistrates. Adjoining is the theatre. The free grammar school was augmented and re-established in the reign of Elizabeth, when a new school-house was erected. The New Walk, south-east of the town, is a very agreeable promenade, twenty feet broad and extending three-fourths of a mile in length. In the meadows are the ruins of the abbey where cardinal Wolsey bade farewell to this world's greatness.

Near the north bridge is an old mint house, Leicester having long had the privilege of coining; and a series of coins from Athelstan to Henry II. are preserved in the town. In what

is called the 'Newark' part of the town is an ancient mound, the only relic of the once extensive castle of Leicester: this part of Leicester appears to have an enclosed area belonging to the castle, and is said to have contained an hospital, church, college, &c.

The chief manufacture of Leicester is connected with the staple production of the county, i. e. wool, and consists in the combing, spinning, and manufacturing it into stockings. A very considerable portion of what is called the Nottingham lace has likewise for some years past been manufactured in this town and neighbourhood. Between 10,000 and 12,000 persons are said to be employed in the various branches of the hosiery business; there are about 150 master hosiers, and 3500 stocking machines. In prosperous times, about 6000 dozen stockings are manufactured per week. The government of the town is vested in a corporation, consisting of a mayor, recorder, steward, bailiff, twenty-four aldermen, and forty-eight common-council-men, &c. It has sent two members to parliament since the time of Edward I. The right of election vests in the freemen not receiving alms, and the inhabitants paying scot and lot; the number of whom together is about 5000.

Leicester, previously to that period the capital of the Coritani, became after the Roman conquest the Ratæ of the itinera and was situated in the Fosse way. Tesselated pavements, and coins of brass and silver, have been found in such numbers, that, had they been collected together, they would have formed a complete series from the emperor Nero to Valerius; also urns, and various domestic and military relics: a Roman mile-stone was discovered in 1771, on the side of the Fosse road, two miles north of the town. During the Saxon heptarchy, Leicester was called a city, and some think it was a bishop's see. At the Norman conquest it was very populous, according to the Doomsday book. It suffered greatly during the subsequent civil wars, and in that of Charles I. was stormed by the royal army, and with a considerable slaughter of the inhabitants. The market is on Saturday and the fairs are numerous. It is ninety-eight miles north-west of London.

Leicester, a post town of Worcester county, Massachusetts, distant six miles south-west from Worcester, forty-eight W. S. W. from Boston. Large quantities of cotton and wool cards are manufactured in this town; and here is a respectable and flourishing academy, which was incorporated in 1784, and has a principal, an assistant, and about 100 students. The building is a spacious and elegant edifice, three stories high, and has an elevated and pleasant situation. The town contains also three meeting-houses for the Baptists, and one for Friends.

LEICESTERSHIRE, an important county of England, situated between 52° 24′ and 53° N. lat., and between 35′ and 1° 32′ W. long. It is an inland county, bounded on the north by Derbyshire and Nottinghamshire; on the east by Lincolnshire and Rutlandshire; on the south by Northamptonshire, from which it is divided by the river Welland; and on the south-west and west by Warwickshire; from which it is divided by the Roman road Watling-Street Way, from near Atherstone to south of Lutterworth about twenty miles. It also just touches upon Staffordshire in one point between Warwickshire and Derbyshire. Its greatest length, from the south of Lutterworth to the north part of the vale of Belvoir, is forty-five miles; and its greatest breadth, from Nethersoil in the west to Wymondham or Easton Magna in the east, is upwards of forty miles. Its mean diameter is about thirty miles, and it contains about 816 square miles and 522,240 acres. This county is divided into six hundreds, containing twelve market-towns and 196 parishes. It is in the province of Canterbury and diocese of Lincoln.

The Saxon word Ledcesterscyre has been generally supposed to signify a town or castle upon the Seir, which was the ancient name of the river Soar. Previous to the Roman invasion this county formed part of the principality of the Coritani. The Romans made it part of the province of Flavia Cæsariensis. During the Saxon heptarchy it belonged to the kingdom of Mercia.

The climate, says Mr. Pitt in his Agricultural Report, is in general mild and temperate, as there are no mountains or bogs. He conjectures that the average annual fall of rain may be about thirty inches. There is no surface *soil* that can properly be denominated clay or sand; it has no chalk, and its peat bogs, having been long since drained, are now become a meadow soil, being a compost of peat and sediment; the peat being originally formed by aquatic vegetation, and the sediment brought down by streams and rain water from the upland. The soil of the county may therefore be divided into three classes: first, clay loam, having a considerable degree of tenacity, and holding the rain as it falls, generally of a good depth. Secondly, sandy or gravelly loam, more loose, porous, and friable than the last, generally of a good depth. Thirdly, meadow soil, formed as above. The best soil is generally upon the hills, and the worst and coldest in the valleys. The soil varies much in short distances, respecting its strong or friable qualities. The general characteristic of the uplands is grayish-brownish friable loam, of greater or less depth, upon an under stratum of clay, marl, gravel, or rock, and may be divided as follows:— strong clay loam 160,000 acres; one-half only in occasional tillage, 80,000 acres; milder friable loam, in occasional tillage, 160,000 acres; total occasional tillage 240,000. Strong clay loam in permanent grass 80,000 acres; natural meadows in permanent grass, upland pasture attached to farms and occupations, and near towns, parks, and pleasure-grounds in permanent grass about 240,000.

The general face and appearance of the county is marked with interest and variety; the hills and vales are connected by easy slopes, and with few abrupt precipices: so that almost the whole surface is practicable and useful. There is nothing that approaches the sterility of sand or the hardness of clay. The margins of rivers, brooks, and rivulets, are natural grass lands; and the upland is in some places gravelly, but generally loam, more or less tenacious, the strongest of which is in the vale of Belvoir.

The principal *rivers* are the Welland, the Soar and the Anker. The Welland rises near Market-Harborough, and, running in a north-west direction, divides Leicestershire from Northamptonshire; and, entering Rutlandshire, continues its course through that county and through the south part of Lincolnshire, and falls into a bay of the German Ocean, called the Wash. The Soar rises about half way between Lutterworth and Hinckley, and running north-east, by Leicester, receives a small rivulet called the Eye; and then directing its course N. N. W. falls into the Trent, a few miles north of Ashby-de-la Zouch. The Anker has its origin near the source of the Soar; and running north-west, dividing Leicestershire from Warwickshire, falls into the Avon, a river belonging to this latter county. Leicestershire is tolerably well supplied with the conveniences of inland navigation, although it may be considered more an agricultural than a commercial district, and is also deprived of any particular mines. We may enumerate the following canals. *Loughborough Canal*:—This canal commences at the river Soar, a little below Grace-Dieu Brook, and takes a straight course to the Rushes at Loughborough. This being a chain of connexion with the river Trent, and from thence with most of the canals in the kingdom, is of the greatest utility, particularly to the town of Loughborough. Its course is about a mile, the whole of which is level. *Leicester Canal* commences at, and connects itself with, the basin of the Loughborough Canal, passes on the north side of the town, and falls into the river Soar at Quorndon. Thus far it is a new cut; the remainder is only an improvement of the river, with occasional cuts and deviations. From Thrinkstone Bridge to the Loughborough Canal is about seven miles and a half, with a fall of about 185 feet. From the Loughborough Canal to its junction with the Soar is a level of about three miles; and from thence to Leicester is eleven miles, with a rise of forty-five feet. *Union Canal*:—We must not omit to notice in this place the Union Canal, for which an act of parliament was obtained some years back. The following may be stated as the line of route originally suggested:—It was proposed that it should join the River Soar on the west side of Leicester, and, passing on by Aylestone and Saddington by means of two tunnels, it was to have united with the branch at Market-Harborough. From thence it was to make a bend, and cross the river Welland, and pass between Marston, Trussel, and Halhorp, and turn up by East Farndon and Oxendon Magna, with a small tunnel of thirteen chains. Near here was to be the reservoir for the summit level, supplied by the Oxendon Brook. From Oxendon it was to pass by Kelmarsh, and thence, by another tunnel of forty-five chains, proceed through Maidwell, Lamport, Hanging, Houghton, Brixworth, and parallel with that branch of the river Nen called the Northern River. Its route was to be continued by Stratton, Pitsford, Chapel Brampton, Kingsthorp, Dillington, and, on the west side of Northampton, join the river Nen navigation. *Ashby-de-la-Zouch Canal*:—This canal joins the Coventry Canal at Morston Bridge, about two miles to the south of Nuneaton, from whence it passes to Stoke Golding, crosses the river Leuce, and at Snareston has a small tunnel, whence it winds along to Ashby-de-la-Zouch; from whence it is continued about a mile and a half, and then, passing a tunnel of near a mile, one branch goes to Tickenhall to the west, and another to the lime-works at Cloudhil to the east. From the Tickenhall branch is also a short cut to the lime-works at Stanton. The total length of this canal is fifty miles, with 252 feet lockage. The *Grantham Canal* commences on the east side of Grantham, passes Harleston, the Point, at the foot of Woolsthorp Hill, Stainworth, Redmill, along Belvoir Vale, by Brakestone, Plainger, Harby, Long Clomton, to Hinckley, being from Grantham a south-west course. From Hinckley it bends to the north and passes through Kinnoulton, Coulton Basset, Cropwell Bishop, and joins the Trent between Holme Pierrepoint and Radcliffe. There is a branch from near Cropwell Bishop to Bingham. The length of this canal from Grantham to the river Trent is thirty miles, with 148 feet fall to the river. The branch to Bingham is more than three miles, and level. Melton Navigation:—The rivers Wreak and Eye are made navigable from the junction at Turnwater Meadow to Melton Mowbray, by several new cuts and deviations where necessary. *Oakham Canal*:—This canal commences at and joins the Melton navigation on the south side of the town of Melton; and, proceeding on the north side of the river Eye, passes Brentingby, Wively, Stapleford, Saxby, Wymondham, Edmonthorpe, Teigh, Market-Overton, Barrow, Coltesmore, and Busley; and joins the town of Oakham on the north side, being a course of fifteen miles, with 126 feet regular rise in the first eight miles and a half, that is to Edmonthorpe, and from thence to Oakham is level. The reservoir is on the west side of the canal near Langham.

Leicestershire is famous for its breed of large black cart-horses, and for its fine cattle and sheep. Though there are but few mineral or fossil productions peculiar to this county, or very common in it, yet it produces more or less of limestone, lead, coal, ironstone, slate, and freestone; and there have been found in the fissures of the limestone at Barrow many curious fossil productions; also, in the neighbourhood of Hinckley, fossil shells in gravel are frequently found. There are a few medicinal springs, particularly one at Burton Lazars; and a cathartic water at Nevil Holt, near Market-Harborough.

This county returns only six members to the British parliament, viz. four for the county, and two for the town of Leicester.

Leicestershire is biographically rich: for in this county were born, among others,—John Bainbridge, physician and astronomer. He was born at Ashby-de-la-Zouch in the year 1582, and died at Oxford, in a house opposite Merton College, in the year 1643.—Robert Bakewell, the experimental farmer and cattle breeder.—Francis Beaumont, the dramatic writer. He died in March 1615, not being then thirty years of age.—The learned bishop Beveridge. He was born at Barrow in 1638, and died on the 5th of March 1707.—William Burton, historian of this

county. Born at Lindley, August 24th, 1575, and became a barrister and reporter in the court of common pleas. His history of this county, so often and justly praised, is valuable only on account of its being early written, being preceded only by Lambard's Kent in 1576, Carew's Cornwall in 1602, and Norden's Surveys. (Mr. Nicholas has, however, entirely superseded the use of all other works on this county, by his elaborate and valuable history.)—Robert Burton, brother of William, and author of the Anatomy of Melancholy, known also by the name of Democritus junior. He also was born at Lindley, February 8th, 1576.—The learned Dr. William Cave, the biographer and ecclesiastical historian, born in 1637.—William Cheselden, the physician and anatomist.—Dr. R. Farmer, an ingenious poet and critic.—George Fox, the founder of the Quakers, born at Drayton-in-the-Clay in the year 1624.—The excellent bishop Hall, author of Meditations, &c., born in Bristow Park, within the parish of Ashby-de-la-Zouch, July 1, 1574.—John Henley, commonly called Orator Henley.—Daniel Lambert, who exhibited himself as an instance of extraordinary weight and size.—William de Langton, bishop of Litchfield and Coventry, and lord high treasurer of England in the reign of Edward I.—The pious martyr, Dr. Hugh Latimer, born at Thurcaston about 1470.—Sir Edward Leigh, critic and Hebrew lexicographer.—William Lilly, the celebrated astrologer.—Thomas Marshall, divine, and Anglo-Saxon critic. Died 1685.—William Melton, archbishop of York, and lord chancellor in the reign of Edward III.—John Ozell, dramatic and miscellaneous writer.—Dr. Richard Pulteney, the botanist.—T. Simpson, the mathematician.—Dr. Thomas Skeffington, bishop of Bangor. Died in 1533.—Thomas Staveley, author of the Romish Horse-leech.—Dr. Styan Thirlby, a learned and ingenious critic.—George Villiers, duke of Buckingham, the celebrated statesman and royal favorite. His profligate son, author of the Rehearsal, died a beggar.—The honest, learned, but eccentric William Whiston.—William Wirley, antiquary and heraldic writer. —The late amiable Rev. Hugh Worthington, of Salters' Hall. Mr. W. died in the year 1813.

LEIGH (Charles), M. D., and F. R. S., an eminent physician and naturalist, born in Lancashire. He published, 1. An Account of the Natural History of Lancashire, Cheshire, and Derby; 2. A History of Virginia; and several other works. He died about 1701

Leigh (Sir Edward), a learned historical writer and divine, was born at Shawell in Leicestershire, in 1602, and entered as commoner of Magdalen Hall, Oxford, in 1616; after taking his degree of M. A. he removed to the Middle Temple as a student of law. In 1625, the plague being in London, he went to France: on his return he devoted many years to literary researches, and, soon after the commencement of the civil war, was chosen M. P. for Stafford He was one of the commons who were delegates to the assembly of divines at Westminster. Sir Edward was also colonel of a regiment in the service of parliament; but in 1648 was, with other Presbyterian members, expelled from the house of commons, and imprisoned. After the Restoration he chiefly occupied himself in literature. He died at his seat, Rushall Hall, in Staffordshire, in 1671. His works are chiefly biblical: the most important is his well known Critica Sacra.

LEIGHLIN, a town of Ireland, in the county of Carlow, Leinster: about forty-three miles from Dublin, near the river Barrow. At the east end of the church is a famous well, covered with ash trees, and dedicated to St. Lazarian. This place was formerly a city, though now only a village, and the cathedral has been kept in good repair. It was a sole bishopric, founded in 63[illegible], but joined to Ferns in 1600. Gurmund, a Danish prince, was buried in this church. This cathedral was burnt by lightning, and rebuilt A. D. 1232; since the sees were joined it has been used as a parish church.

LEIGHTON (Alexander), a presbyterian divine, born in Edinburgh in 1587, and remarkable for his sufferings under archbishop Laud. Having published some pieces against episcopacy, and censured the measures of king Charles I., he was tried for sedition, and condemned to be publicly whipped, to have his ears cut off, and his nose slit; which barbarous sentence was accordingly executed. As some compensation for his sufferings, the parliament, in 1640, appointed him keeper of Lambeth palace, which they had converted into a state prison. He died in 1644.

Leighton (Robert), D. D., archbishop of Glasgow, the son of the preceding, was also born in Edinburgh. During the times of the Commonwealth he was minister of a church near Edinburgh, and distinguished himself by his charity, and his aversion to religious disputations. The ministers were then called over yearly in the synod; and were commonly asked, Whether they had preached to the times? When all my bretheren, answered Leighton, preach to the times, pray suffer me to preach about eternity. His moderation, however, giving offence, he retired to a life of privacy. But soon after he was called, by the unanimous voice of the magistrates, to preside over the college of Edinburgh; where, during ten years, he displayed all the talents of a prudent, wise, and learned governor. In 1662 it was resolved to introduce episcopacy into Scotland, and Leighton was consecrated bishop of Dunblane; when, however, Sharpe and the other bishops proposed to enter Edinburgh in a pompous manner, Leighton remonstrated, and went to Edinburgh alone. In his own diocese, he set such an example of moderation, that he was revered even by the most rigid Presbyterians. He went about preaching without pomp; gave liberally to the poor; and removed none of the ministers however exceptionable he might think their political principles. But finding that none of the other bishops could be induced to join in his moderate plan, he resigned his bishopric. He was, however, persuaded in 1669 to accept of the archbishopric of Glasgow; but, finding it not in his power to stem the violence of the times, he resigned this also in 1675, and retired into Sussex, where he devoted himself to acts of piety. He died in London, in 1684. He wrote a Commentary on St. Peter;

besides many sermons and useful tracts, which are greatly esteemed. He bequeathed his library to the church and clergy of Dunblane; and sunk about £840 for bursaries and other charitable purposes, in the colleges of Edinburgh and Glasgow.

LEIGHTON, or LEIGHTON-BUZZARD, a market town of Bedforshire, standing on the river Ouse, forty-one miles N. N. W. from London, and six west by north from Dunstable. The church is a fine ancient pentangular building, with a handsome cross ornamented with the figures of the saints. There are also several dissenting meeting houses; the Grand Junction Canal passes this place. The business of the town consists of cattle, corn, lace, platted straw, &c. The market on Tuesday is generally well supplied with cattle.

LEINSTER (anciently called Lagenia) is one of the four provinces into which Ireland was ecclesiastically divided, in the year 1152, by pope Eugenius III.; this arrangement is topographically injurious, and, in the Ordinance Survey now executing, should be wholly neglected. Leinster is bounded on the north by the province of Ulster; on the west by the river Shannon; on the south by the province of Munster; and on the east by the Irish Sea. The ancient Lagenia was the kingdom of the notorious Dermod, who occasioned and invited the English invasion of Ireland; to whom succeeded the famous Strongbow, earl of Strigul. After centuries of warfare and devastation, Leinster conferred the honor of a dukedom on Schomberg in 1690, but that prince did not long survive the dignity, and it is now the ornament of the ancient and illustrious house of Fitzgerald. The province of Leinster is partitioned into twelve shires or counties: Carlow, Dublin, Kildare, Kilkenny, King's County, Longford, Louth, East Meath, Queen's County, West Meath, Wexford, and Wicklow. Its superficial contents amount to 4,460,657 English acres, which are divided between ninety-two baronies, and 992 parishes.

Its mineral productions are granite and limestone, in great abundance. Copper and lead ore, the latter in large quantities. Carbonaceous or stone coal, in Kilkenny, Queen's County, and Carlow; and gold has been found in the county of Wicklow. There are, besides, quarries of excellent marble in the limestone district, adjacent to the coal. The chief rivers of this province are the Boyne, Barrow, Slaney, Inney, Brusna, and Liffey, none of which are considerable; this deficiency of natural inland navigation is amply compensated by two noble artificial water-courses, called the Royal and Grand Canals. These great ducts connect the bay of Dublin with the river Shannon, the one locking in at Tarmonbury, in the county of Longford, the other at Banagher, in the King's County. The Grand Canal projects a branch also to the river Barrow at Monasterevan, thereby completing an inland navigation to Waterford Harbour and Dunmore from Dublin Bay. The surface of Leinster is in general level, the soil productive, resting chiefly on limestone, which presents itself at the surface also, sufficiently often, both for agricultural and architectural purposes. One county only, Wicklow, is totally encumbered with mountains, the highest of which, Lugnaquilla, is 3070 feet above sea-level; this county abounds in natural beauties and curiosities, and is extremely rich in mineral wealth. The greatest natural disadvantage under which this province labors is a want of safe or commodious harbours, the line of coast having scarcely any; and, though art has been called in to alleviate the misfortune, its pressure still continues to be felt. The bays of Carlingford, Dundalk, Drogheda, and the coasts of Wicklow and Wexford continue in a state of either inutility or imminent peril, while King's-town is the only port in Leinster capable of affording safe anchorage and deep water at all times of tide, for vessels of any magnitude.

LEIPSIC, a circle of the kingdom of Saxony, is bounded on the east by that of Meissen, on the south by Erzgebirg and the principality of Altenburg, and on the west and north by Prussian Saxony. It has an area of 1537 square miles, and is fertile in corn, but deficient in wood. Potters' clay, limestone, marble, porphyry, chalk, and near Frohburg excellent jasper are found. This circle comprises fourteen bailiwics, and is the seat of considerable manufactures. Population 220,000.

LEIPSIC, the capital of the foregoing province, is situate on the river Pleisse, and was anciently fortified, but its fortifications have been dismantled, and its ramparts converted into gardens. It, however, is still entered by four handsome gates, and contains several fine churches and hospitals, with a spacious square. Its streets are kept clean, but the town is represented as having on the whole rather a grotesque appearance. Goethe describes its houses, we are told, correctly, when he calls them 'extraordinary shining buildings, with a front to two streets, enclosing courts, and containing every class of citizens, within heaven-high buildings, which resemble large castles, and are equal to half a city.' 'Roofs,' says another writer, 'which alone contain six stories of windows, with small steeples on their tops; circular houses diminishing at every story, resembling the pictures of the tower of Babel; two or three towers placed by the sides of houses, as if a staircase separate from the building had been provided for it; some fronts which had been modernised, and disfigured by a multitude of pillars and pilasters above pillars and pilasters; and the ancient gaol-like, but fantastical town-house, made the market-place of Leipsic one of the most grotesque looking spots I ever saw.' Among the public edifices of this city may be noticed the exchange, the cloth-hall, the church of St. Nicholas, the Catholic chapel, the theatre, and some of the hospitals. The university, one of the most celebrated in Germany, particularly for its medical departments, contains usually from 900 to 1200 students: it is divided into four nations, the Misnian, Saxon, Polish, and Franconian, and is composed of six colleges; the number of its regular professors is twenty-seven. The largest book trade belonging to any one place in Germany is here carried on, and there are several literary and scientific societies, with libraries,

and collections of curiosities. Upwards of fifty booksellers are settled in the town, and between 200 and 300 assemble at the Easter fair, from other parts of the continent, bringing the books they have published. The average number of works that are thus exposed to sale, is estimated at 5000, and the annual value of them exceeds £200,000. Here are, also, manufactures of silk, velvet, linen, musical instruments, jewellery, &c., which, added to its central situation, render it a kind of emporium of North Germany. Its three great fairs are held at the commencement of the year, at Easter, and at Michaelmas, and are frequented by merchants from all parts of the civilised world. Immense quantities both of native and foreign manufactures and products are disposed of, or exchanged, on these occasions, the whole annual amount of this trade having been stated at £3,000,000, exclusively of the book-trade.

Leipsic has been the theatre of numerous bloody conflicts. It was more than once distinguished as the scene of action during the thirty years' war; and became in 1813 the general hospital of the French army. The battle which took place here in the October of that year, between the French and allies, involved the greatest number of men of any conflict recorded in the last two centuries. The former were 160,000, the latter 240,000 strong. It began on the 18th of that month, about seven miles east of Leipsic, and soon became close and sanguinary, particularly at the village of Probstheyde, on the right of the French, where Buonaparte soon appeared in person. This place was repeatedly taken and retaken; the fire of the artillery on both sides was most destructive, and all was undecided, when at noon a messenger from the left of the French position announced that the Saxon artillery and cavalry had gone over to the allies. This was followed at three o'clock by the still more alarming information of the desertion of the Saxon infantry, and though the intelligence was kept secret, and a detachment of the French guards replaced the Saxons, the superiority now acquired by the allies was decisive, and the battle closed with the loss of a great part of the French position. A retreat to the Rhine was finally unavoidable, and orders for it were issued at night fall, but the execution was necessarily slow, all the men and baggage being obliged to take one road. The French army accordingly suffered dreadfully on this occasion, and from this conflict the superiority of the allies and the deliverance of Europe may be dated. Sixty-four miles west by north of Dresden, ninety south by west of Berlin, and 180 E. N. E. of Frankfort on the Maine. Population 35,000.

LEIS'URE, *n. s.*
LEIS'URABLE, *adj.*
LEIS'URABLY, *adv.*
LEIS'URELY, *adj.* & *adv.*
} Fr. *loisir*; Swed. *lisa*; Dan. *lisé* (fortè à Gr. λυσις, Minshen); or perhaps Sax. 'ear, loose. Freedom from occupation, hurry, or anxiety; convenience in regard to time. Johnson strangely defines the use of it in Shakspeare's Richard III. 'Want of leisure,' which, he says (happily), is obsolete: it clearly means, in the instances subjoined, convenience, or the leisure considered as to its limit, i. e. the little leisure possessed by the speakers.

Wherefore we axen *leiser* and space to have deliberation in this cas to deme.
Chaucer. Cant. Tales.

Let us beg of God, that, when the hour of our rest is come, the patterns of our dissolution may be Jacob, Moses, Joshua, and David, who, *leisurably* ending their lives in peace, prayed for the mercies of God upon their posterity. *Hooker.*

We'll make our *leisures* to attend on yours.
Shakspeare.

They summoned up their meiny, strait took horse;
Commanded me to follow and attend
The *leisure* of their answer. *Id. King Lear.*

More than I have said, loving countrymen,
The *leisure* and enforcement of the time
Forbids to dwell on. *Id. Richard III.*

Farewell. The *leisure* and the fearful time
Cuts off the ceremonious vows of love.
Id. Stanley in Richard III.

A gentleman fell very sick, and a friend said to him, Send for a physician: but the sick man answered, It is no matter; for if I die, I will die at *leisure*.
Bacon's Apothegms.

The earl of Warwick, with a handful of men, fired Leith and Edinburgh, and returned by a *leisurely* march. *Hayward.*

There are some men who are busy in idleness, and make the *leisure* of peace not only more troublesome, but even more wicked than the business of war.
Burton.

Where ambition and avarice have made no entrance, the desire of *leisure* is much more natural than of business and care. *Temple.*

You enjoy your quiet in a garden, where you have not only the *leisure* of thinking, but the pleasure to think of nothing which can discompose your mind.
Dryden.

The Belgians hoped, that with disordered haste,
Our deep-cut keels upon the sands might run;
Or if with caution *leisurely* we past,
Their numerous gross might charge us one by one.
Id.

I shall leave with him that rebuke, to be considered at his *leisure*. *Locke.*

We descended very *leisurely*, my friend being careful to count the steps. *Addison.*

You shall seldom find a dull fellow of good education, but, if he happens to have any *leisure* upon his hands, will turn his head to one of those two amusements for all fools of eminence, politics or poetry. *Steele.*

It has been computed by some political arithmetician, that, if every man and woman would work for four hours each day on something useful, that labour would produce sufficient to procure all the necessaries and comforts of life; want and misery would be banished out of the world, and the rest of the twenty-four hours might be *leisure* and pleasure.
Franklin.

Just now I've taen the fit o' rhyme,
My barmie noddle's working prime,
My fancy yerkit up sublime
Wi' hasty summon:
Hae ye a *leisure*-moment's time
To hear what's comin?
Burns.

Such short recollections as these, and a little *leisure* to take a view of the nature and consequences of things or actions, before we reject or approve them.
Mason.

The expectations of those who retire from their shops and counting-houses, to enjoy the remainder of their days in *leisure* and tranquillity, are seldom answered by the effect. *Paley.*

LEITH, a sea-port town of Scotland, in the county of Edinburgh, and the port of that city, is situate between one and two miles north-east of the metropolis, on the banks of the Water of Leith, at its confluence with the Frith of Forth, which forms the harbour. This also divides the town into two districts, called South and North Leith, communicating by two drawbridges. Formerly there was here a stone bridge of three arches, founded in 1493 by Robert Ballentine, abbot of Holyrood. The largest ships lie in the roads, a mile and a half from Leith, perfectly secure. At the entrance of the harbour is a noble stone pier, erected at the beginning of the last century.

The town stands principally on the south side of the river, and, with the exception of the numerous modern erections, is irregularly built. The new streets are laid out on a regular and generally excellent plan; and consist of well-built and elegant houses. North Leith, indeed, is now full three times its former size; and the whole town is rapidly extending on all sides. On the east of what is called Leith Walk, additions are in course of being made, which, when completed, will entirely unite Leith with Edinburgh. Extensive improvements were projected, in 1800, for the accommodation of the increasing trade of this port; amongst which were a magnificent suite of wet-docks, the first of which was opened in 1806, and a second in 1817. These, together with three graving-docks, cost £250,000; and it is intended to construct another, equal in size to the two former, which will be capable of receiving frigates. A battery of nine guns was erected to the west of the citadel of Oliver Cromwell, during the American war, in consequence of the appearance of Paul Jones in this neighbourhood: since that period the boundaries of the fort have been extended; and it is now the head-quarters of the royal artillery in Scotland, who have commodious barracks; and there are besides warehouses and magazines for the various military and naval stores, which may be required in the service. The harbour is defended by a martello tower, about a quarter of a mile from the pier. In 1785 a naval yard or depôt was established here, for supplying materials to his majesty's vessels coming to the Forth. What is called the parish church is a Gothic edifice, surmounted with a tower and spire: but in 1816 was erected, in North Leith, a new church, which has a spire 140 feet high. The chapel of ease to the church of South Leith is a plain but neat building; and an episcopal chapel was erected here in 1805. The other places of worship are, two burgher meeting-houses, and an anti-burgher one. The public charities are numerous: the principal are, King James VI.'s Hospital, founded in 1614; the Mariner's Hospital, or Trinity House, rebuilt in a stately manner in 1817; a female society, for relieving indigent and sick women; a society for the relief of the destitute sick; a female school of industry; a boy's charity school, and many religious societies. Leith high school was built in 1805. The exchange is also an extensive edifice, of free-stone, containing the assembly-rooms, coffee-rooms, sale-rooms, subscription library, and reading-rooms. The custom-house, which contains the excise-office, was re-built in 1812. East of the town are the baths, which are constructed upon a grand scale, and in a style of great elegance. The prison was erected in 1565, and contains the court-house, and town-clerk's office. The butchers' shambles have been lately erected. The bank is in Bernard Street. The harbour of Leith was granted to the town of Edinburgh by king Robert I. in 1329; but, the adjacent ground belonging to Logan of Restalrig, the inhabitants were obliged to purchase it on high terms, for their accommodation. It has been gradually improved, according to the increase of its trade. There were, at an early period, no quays for the accommodation of the shipping; the vessels, which were small, lying at the mouth and on the banks of the river which runs through the harbour. A breastwork or quay was first built by the city of Edinburgh, some time after the purchase of Leith, with the adjoining lands; but, at the beginning of the last century, it was prolonged to the northward, a considerable way into the sea, somewhat in the form of a crescent, by the extension of wooden and stone piers, at the extremity of which is a light-house.

Leith has a considerable trade with the Baltic, Holland, France, Spain, Portugal, the Mediterranean, and the West Indies. In the London trade twenty-seven smacks were lately employed by four companies; registering from 145 to 195 tons. They sail regularly twice a week. There are two Hamburgh shipping companies, who employ ten vessels of 150 tons, which sail weekly; and there are, besides, regular traders to Hull, Newcastle, Berwick, Liverpool, Dublin, and on the east coast of Scotland to Arbroath, Montrose, Dundee, Aberdeen, Banff, Shetland, the Orkneys, &c. The Greenland fishery is also prosecuted with activity. Betwixt Leith and Kinghorn, on the opposite shore of Fife, a distance of about seven miles, large passage-boats and pinnaces ply twice a-day; and steam-boats are constantly sailing from Leith to Grangemouth, Stirling, &c. It has also extensive rope-works and canvas manufactories; six or seven glass-houses; sugar refineries, soap-works, breweries, iron and vinegar works, distilleries, a card manufactory, with an apparatus for drawing wire, and a large manufactory of excellent agricultural implements. Ship-building is also carried on to a great extent. Leith is under the civil jurisdiction of three bailies, who continue two years in office, aided by an assessor appointed by the magistrates of Edinburgh, one of whose number presides as admiral of Leith. In conjunction with Porto Bello and Musselburgh, it returns one representative. The annual amount of shore dues averages £10,000; harbour dues, after deducting pilotage, about £2000; and dock-dues, £5000.

LEITRIM (i. e. Liath-druim, the gray ridge), a county in the province of Connaught, in Ireland, bounded on the north by Donegal Bay and part of Fermanagh County; on the east by the county of Cavan; on the west by parts of Sligo and Roscommon; and on the south by Langford County; having a sea-coast of two miles in

length only, intercepted between the rivers Duffe and Bundroise. The length of this county is about fifty-two miles, while its breadth varies from seven and a half to twenty statute miles. The superficial contents amount to 407,260 acres, i. e. 652 square miles, which are partitioned into five baronies, viz. Carrigallen, Dromahaire, Leitrim, Mohill, Rosclogher; and into seventeen parishes.

The surface is varied and uneven, the greater part mountainous, but nowhere completely barren, excellent pasturage abounding amidst the recesses of the mountainous district; hence the universal practice in this shire of rearing black cattle. The linen trade is cultivated here with vigor and success, and tillage is adopted in the low lands. But the greatest and most certain supply of wealth and occupation in this county is yet hardly opened to the inhabitants; this consists in the beds of coal and quantities of iron stone which appear in every region of the county. Three miles from Manor-Hamilton, and only ten from Sligo, is an extensive bed of inflammabie coal, in Lacca Mountain, at an elevation of 1150 feet above the first mentioned town. A second bed of coal is known to exist in Lugnaquilla Mountain (part of which is in this county), and a third at Meneask, 1010 feet above Lough Allen. To the two latter there is not, at present, any road. Another bed exists at Aughnarashiel, where pits have been sunk, and works carried on, with profit to the proprietary, and benefit to the county. Besides these prospects of advantage to Leitrim, the iron-stone of Drumshabro, and of the Sliebh-an-Erin Mountain, promises greater accessions of wealth and occupation. Limestone occurs in abundance and of fine quality: fire-clay of excellent quality is readily raised in many places; and superior sandstone, which is used not only for flagging but for ornamental work, is wrought in the quarries of Glanfarn and elsewhere. The towns of Leitrim are but few, and these not important. Carrick-on-Shannon, the assizes town, contains only a population of 1600, exclusive of the military in barrack at this station; and the village of Leitrim has only a population of 246, in forty-nine houses. The other towns, or rather villages, are Ballynamore, Dromahaire, where there is a pottery established, Killargy, Manor Hamilton, Drumker, the picturesque and elegant village of Drumsna, with Cashgarin and Mo. The family of Clements now bear the title of Leitrim. The ancient families were O'Rourke's, Macgauran's, and M'Ranalls. The ruins of the monastic edifices remain in Leitrim, besides many ancient castles, chiefly of the O'Rourke's or O'Ruarc's. Leitrim is also the name of a river in the county of Wicklow.

LELAND (John), the great English antiquary, was born in London about the year 1507. Having lost his parents when a child, he found a friend and patron in Mr. Thomas Miles, who placed him in St. Paul's school, of which the grammarian Lily was master. From that school he was sent to Cambridge, and, after some years, to Oxford From Oxford he went to Paris, chiefly with a design to study the Greek language, which was then but little understood in this kingdom. On his return to England he entered into orders, and was appointed chaplain to Henry VIII., who also gave him the rectory of Poppeling, in the marshes of Calais, appointed him his librarian, and in 1533 made him king's antiquary; an office never borne by any other person before or since. By this commission he was empowered to search for ancient writings in all the libraries of colleges, abbeys, priories, &c., in his majesty's dominions. It is said that he renounced popery soon after his return to England. In 1536 he obtained a dispensation to keep a curate at Poppeling, and set out on his journey in search of antiquities. In this employment he spent six years, during which time he visited every part of England where monuments of antiquity were to be expected. After his return, in 1542, the king gave him the rich rectory of Haseley in Oxfordshire; and, in 1555, a prebend of King's College, now Christ's Church, in Oxford, besides that of east and west Knowles, in Salisbury. Being thus amply provided for, he retired to a house of his own in the parish of St. Michael le Querne in London, where he spent six years in digesting the materials he had collected. Henry VIII. died in 1547; and, not long after, Leland lost his senses. In this dreadful state he continued till 1552, when he died. He was a man of great learning, a universal linguist, an excellent Latin poet, and a most indefatigable and skilful antiquary. On his death, Edward VI. gave all his papers to Sir John Checke, his tutor and Latin secretary of state. The king dying, and Sir John being obliged to leave the kingdom, he gave four folio volumes of Leland's collections to Humphrey Purefoy, esq.; which, in 1612, were, by his son, given to William Burton, author of the History of Leicestershire. This gentleman also became possessed of the Itinerary, in 8 vols. folio, which, in 1632, he deposited in the Bodleian library. Many other of Leland's MSS., after the death of Sir John Checke, fell into the hands of lord Paget, Sir William Cecil, and others, and at last, fortunately, came into the possesion of Sir John Cotton. These MSS. were of great use to all our subsequent antiquarians, particularly Camden, Sir William Dugdale, Stowe, Lambard, Dr. Batteley, Anthony Wood, &c. His Itinerary throughout most parts of England and Wales was published by Mr. Hearne, in 9 vols. 8vo. in 1710–11; as was also his Collectanea de rebus Britannicis, in 6 vols. 8vo. in 1715.

LELAND (John), an eminent writer in defence of Christianity, born at Wigan in Lancashire, in 1691. His parents settled in Dublin, which gave him an easy introduction to learning and the sciences. When properly qualified, he was called to be pastor to a congregation of Protestant dissenters in that city. He was an able preacher, but his labors were not confined to the pulpit. The many attacks made on Christianity, and some of them by writers of no contemptible abilities, led him to examine the subject with the strictest care. After the most deliberate enquiry, he published answers to several authors who successively appeared in that cause. He was, endeed, a master in this controversy; and his history of it, entitled A View of the

Deistical Writers, that have appeared in England, in the last and present Century, &c., is highly and justly esteemed. In the decline of life he published another laborious work, entitled The Advantage and Necessity of the Christian Revelation, shown from the State of Religion in the ancient Heathen World, especially with respect to the Knowledge and Worship of the One True God; a Rule of Moral Duty, and a State of future Rewards and Punishments; to which is prefixed a long preliminary Discourse on Natural and Revealed Religion: 2 vols. 4to. This noble and extensive subject, the several parts of which have been slightly and occasionally handled by other writers, Leland has treated at large with the greatest care, accuracy, and candor. And, in his View of the Deistical Writers, his cool and dispassionate manner of treating their arguments and his solid confutation of them, have contributed more to depress the cause of atheism and infidelity than the angry zeal of warm disputants. According to Dr. Watkins he died in 1766, or in 1761.

LELEGES, an ancient people of Asia, of Greek original; the name denoting a collection of people. They first occupied the islands; then, passing over to the continent, they settled partly in Mysia on the Sinus Adramyttenus, and partly in that part of Ionia next to Caria.

LELEGES, a people of Laconia, who went to the Trojan war with Altes their king. Achilles plundered their country, and obliged them to retire to the neighbourhood of Halicarnassus, where they fixed their habitation.

LELONG (James), a French ecclesiastic, born in 1655. He wrote a curious work, entitled An Historical Library of France. He died in 1721, aged sixty-six.

LELY (Sir Peter), a celebrated painter, born in Westphalia in 1617. He was a disciple of Peter Grebber at Haerlem; and, in 1641, was induced, by the encouragement Charles I. gave to the fine arts, to come to England. He became state painter to Charles II., who knighted him. As a portrait-painter he was preferred before all his contemporaries: and had so many engagements always on his hands that he was prevented from going to Italy to finish his studies. To compensate for this, he procured the best drawings, prints, and paintings, of the most celebrated Italian masters. Among these were part of the Arundel Collection, which he procured from that family, many of which were sold after his death at prodigious prices, bearing upon them his usual mark of P. L. In his correct draught and beautiful coloring, but especially in the graceful airs of his heads, and the pleasing variety of his postures, together with the gentle and loose management of the draperies, he excelled most of his predecessors. Yet critics remark, that he preserved in almost all his female faces a drowsy sweetness of the eyes peculiar to himself; for which he is reckoned a mannerist. The hands of his portraits are remarkably fine and elegantly turned; and he frequently added landscapes in the back grounds of his pictures, in a style peculiar to himself. He excelled, likewise, in crayon-painting. He became enamoured of a beautiful English lady, whom he married; and he purchased an estate at Kew, in Surrey, to which he often retired. He died of an apoplexy in 1680, at London; and was buried in Covent Garden church.

LEM'AN, *n. s.* According to Junius from leof, beloved, and man: other etymologists suggest the Fr. *l'aimant;* and Minsheu Fr. *le mignon,* i. e. minion; favorite. Our old poets (see the instances from Chaucer) use the word both for a male and female favorite; a gallant, or a mistress.

> Unto his *lemman* Dalila he told
> That in his heres all his strength lay,
> And falsely to his foman she him sold.
> *Chaucer. Cant. Tales.*
>
> A theef that had reneyed our creance
> Came into the ship alone, and said he wolde
> Hire *lemman* be whether she wolde or n'olde.
> *Id.*
>
> O hold thy mortal hand for ladie's sake.
> Hold for my sake, and do him not to die;
> But vanquished, thine eternal bondslave make,
> And me thy worthy meed unto thy *leman* take.
> *Spenser.*
>
> A cup of wine,
> That's brisk and fine,
> And drink unto the *leman* mine.
> *Shakspeare.*

LEMAN, or LAC LEMAN, a former department of France, comprehending the republic of Geneva; and so named from Lemanus, the ancient name of the lake of Geneva. See GENEVA.

LEMBERG, a city of Austrian Poland, once the capital of Red Russia, and now of Galicia and Lodomeria, stands on the Pelten, a branch of the Dniester. It contains, with the suburbs, 29,000 Christian and 15,000 Jewish inhabitants. Its former ramparts are now converted into streets and public walks; but it has still two castles. The towers and cupolas of the cathedral and churches, and the height of the house , which are generally built of stone, give the town from a distance an air of grandeur. Several of the streets are wide, and the squares spacious. The environs contain numerous villas. Here is a high-school, two Jewish schools, and a university, which was removed to Cracow. Next to Brody, Lemberg is the greatest trading town of Galicia. Its nankeen and cotton manufactures are also considerable. The circle has an area of 720 square miles and a population of 130,000. 156 miles east of Cracow.

LEMERY (Nicholas), a celebrated chemist, born at Rouen in Normandy in 1645. After having made the tour of France, he, in 1672, commenced an acquaintance with M. Martyn, apothecary to the prince; and performed several courses of chemistry in his laboratory at the Hotel de Condé. Having procured a laboratory of his own, he gave lectures on chemistry, which were attended by such numbers of scholars as scarcely to allow him room to perform his operations. He was the first modern chemist who abolished the senseless jargon of barbarous terms, reduced the science to clear and simple ideas, and promised nothing that he did not perform. In 1681 he was persecuted on account of his religion; and came to England, where he was well received by Charles II.: he returned to France, where,

on the revocation of the edict of Nantes, he became a Catholic. He then became associate chemist and pensionary in the royal academy of sciences, and died in 1715. He wrote, 1. A Course of Chemistry; 2. A Universal Pharmacopœia; 3. A Universal Treatise of Drugs; and, 4. A Treatise on Antimony.

Lemma, λαμβανω, I assume, in mathematics, denotes a proposition laid down to clear the way for some following demonstration; and prefixed either to theorems, to render their demonstration less intricate; or to problems, to make their resolution more easy. Thus, to prove a pyramid one-third of a prism, or parallelopiped, of the same base and height with it, the demonstration of which, in the ordinary way, is difficult and troublesome; this lemma may be premised, which is proved in the rules of progression, that the sum of the series of the squares in numbers in arithmetical progression, beginning from 0, and going on 1, 4, 9, 16, 25, 36, &c., is always subtriple of the sum of as many terms, each equal to the greatest; or is always one-third of the greatest term multiplied by the number of terms. Thus, to find the inflection of a curve line, this lemma is first premised: that a tangent may be drawn to the given curve in a given point. So, in physics, to the demonstration of most propositions, such lemmata as these are necessary first to be allowed:—that there is no penetration of dimensions; that all matter is divisible; and the like: and, in medicine, that where the blood circulates there is life, &c.

LEMNA, duck's meat, in botany, a genus of the diandria order and monœcia class of plants; natural order fifty-fourth, miscellaneæ. Male, cal. monophyllous: cor. none. Female, cal. monophyllous: cor. none; one style: caps. unilocular. There are three species; all natives of Britain, growing in ditches and stagnant waters; all acceptable food for ducks and geese.

LEMNIAN Earth, in mineralogy, sometimes also called sphragide, as a substance of a yellowish gray color, frequently variegated with rusty spots. Lustre dull. Fracture fine earthy. Meagre to the feel. Adheres slightly to the tongue. When plunged in water, it falls to pieces with disengagement of air-bubbles. Its constituents are, according to Klaproth, 66 silica, 14·5 alumina, 0·25 magnesia, 0·25 lime, 3·5 soda, 6 oxide of iron, 8·5 water. It has hitherto been found only in the island of Stalimene or Lemnos. It is reckoned a medicine in Turkey; and is dug up only once a year, with religious solemnities, cut into spindle-shaped pieces, and stamped with a seal. It was esteemed an antidote to poison and the plague in the days of Homer.

LEMNIUS (Lævinius), a famous physician, born at Zeric-Zee in Zealand, in 1505. He practised physic with applause; and after his wife's death, being made priest, became canon of Zerich-Zee, where he died in 1560. He wrote, 1. An Account of the Plants mentioned in Scripture: 2. A book on astrology: 3. De Occultis Naturæ Miraculis.

LEMNOS, an island in the northern part of the Archipelago, lying at almost equal distances from mount Athos and that part of the Asiatic continent called the Troad, having the island of Imbro to the north-east, and the peninsula of mount Athos rather to the north-west of it, and situated in N. lat. 39° 55', E. long. 22° 46'. In ancient times it was dedicated to the god Vulcan, who was supposed to have established his forges in the volcanoes of this island, and, every time the craters threw out smoke and flames, it was thought to arise from the blows of the Cyclops, striking their anvils. From the time of Homer to the age of Pericles, and even later, Greek authors speak of the eruptions of Lemnos; so that its continual fires passed into a proverb, and the Greeks were accustomed to say, when speaking of a great fire, that it was like the fire of Lemnos. In time, however, its eruptions ceased, and nothing is now left but the traces of these devastations. Towards the reign of the emperor Antoninus, it appears that a part of the island was engulphed by one of those revolutions so common in this part of the Archipelago, and another island called Chryseıs, or the Isle of Gold, was also swallowed up.

It was on the island of Lemnos, that Philoctetes was abandoned: Lucullus saw here in his time the altar near which a serpent had wounded the Grecian hero. The soundings taken during the voyage of count Choiseul-Gouffier, enabled him to trace the line of the sand banks and the rocks under water, to the east of the island, which appeared to be the remains of the destroyed part of the ancient Lemnos and Chryseıs. The situation of the ancient volcano has been a subject of much dispute among the learned, as well as the site of Hephæstia, or the city of Vulcan. In a corner of the precincts of this ancient city, called by the present inhabitants Palaio-Castro, or the Old Fort, you descend by a flight of fifty-one steps, of which nearly every twelfth is of marble, into a subterraneous cavern, where many have expected to find the celebrated labyrinth, but the stairs terminate in a small saloon, containing a well which the Christians of the island hold to be sacred. No sculptures or ancient medals have been found in these ruins; generally not a single medal is to be met with in the whole island, and the only Grecian remains are some blocks of white marble, one pillar of granite, and a few fragments of ancient Greek pottery.

Lemnos has been famed from the earliest antiquity for the quarries, whence is extracted the bole, known in ancient medicine under the name of terra sigillata. The Greek priests, who were clever at availing themselves of every branch of revenue, used to accompany the working of these quarries with religious ceremonies, ascribing to them wonderful properties, and the present inhabitants never fail to boast of its effects as a febrifuge. Galen took a journey to Lemnos on purpose to procure it. On the 16th of August every year the Lemnians begin working the quarry, before the rising of the sun, without which precaution, they pretend, it would not heal fevers; they mix it with water, riddle it through a sieve, and harden it into various forms. In the neighbourhood of these quarries, near the village of Charous, there is a warm spring which appears to have some medicinal qualities. Hassan Pacha

caused some baths and an inn to be built on the spot.

Pieces of calcined rock, scoriæ, red-brown earth, and a soil shaded by not a single tree, announce the destructive effects of volcanic eruptions throughout the whole island; but the valleys covered with vegetable mould and watered by numerous rivulets, present an aspect of fertility amidst the surrounding desert. The islanders, in number about 10,000 and almost all of them Greeks, cultivate a sufficient quantity of grain to be able to export it; they also send out oil, silk, wax, and honey; and they have a sort of dark red wine of little value, of which they export a part. Besides the grape, the soil produces figs; but oranges and citrons will not grow in it. They have about fifty vessels, with which they trade to Constantinople and the ports of Egypt. The dock yard is situated near the city and port of Lemnos. At the back of this city, which lies on the southwest coast, is a rock, which, jutting out into the sea, separates two bays, and on which the citadel stands. At the time that the Russians made their appearance in the Archipelago, Orlow's squadron blockaded Lemnos without success for three months. The Turks have lately kept up a garrison there of 300 janissaries and 400 cannoniers; the artillery consisted of fifty pieces of cannon and a few mortars. Only 1000 of the islanders live in the city: the rest inhabit different villages. They have excellent anchorage on the coasts of the island. At Saint Antoine and Condée or Candia, on the southern coast, vessels find a safe and commodious harbour. The road of Cape Cochino is not safe on account of the northerly winds, to which it is exposed. A French traveller, Sonnini, was much struck with the beauty of the women; and another, an Englishman, admired their costume, consisting of a corset of scarlet cloth with wide sleeves, a short jacket, pantaloons drawn close round the ancles, yellow slippers without stockings, and a head-dress of white stuff in the form of a turban. They always veil themselves at the appearance of a Turk.

The coasts of Lemnos swarm with fish; such as red and gray mullets, several kinds of sparus, graylings, pike, &c.

LEM'ON, *n. s.* } Fr. *limon*, Ital. *limini*;
LEM'ONADE. } barb. Lat. *limenum*. A species of CITRUS, which see; the tree bearing lemons: lemonade, a beverage in which the juice of lemons is a principal ingredient.

The dyers use it for dying of bright yellows and *lemon* colours. *Mortimer.*

The juice of *lemons* is more cooling and astringent than that of oranges. *Arbuthnot.*

Thou, and thy wife and children, should walk in my gardens, buy toys, and drink *lemonade*.
Id. John Bull.

Bear me, Pomona!
To where the *lemon* and the piercing lime,
With the deep orange, glowing through the green,
Their lighter glories blend. *Thomson.*

The *lemon* tree hath large stiff leaves; the flower consists of many leaves, which expand in form of a rose: the fruit is almost of an oval figure, and divided into several cells, in which are lodged hard seeds, surrounded by a thick fleshy substance, which, for the most part, is full of an acid juice. *Miller.*

Lemons are cooling and grateful to the stomach, quenching thirst and increasing appetite.
Dr. A. Rees.

LEMON, in botany. See CITRUS.

LEMON (George William), an English divine and lexicographer of considerable learning and industry. He was born in 1726; and published An English Etymological Dictionary, in one vol. 4to., which is esteemed. He died in 1797, aged seventy-one.

LEMON ISLAND, one of the Skelig Islands, situated off the coast of Kerry, in Munster, Ireland. It is a round rock, always above water, and therefore no way dangerous to ships. An incredible number of gannets and other birds breed here; and it is remarkable that the gannet nestles nowhere on the coast of Ireland but on this rock on the south, and another on the north coast, though many of them are seen on all parts of our coasts on the wing.

LEMOVICES, a people of Aquitania, situated between the Bituriges Cubi on the north, the Arverni on the east, the Cadurci on the south, and the Pictones on the west.

LEMPRIERE (John), D. D., a learned classical author, was a native of Jersey, and educated at Winchester school, whence he removed to Pembroke College, Oxford, and graduated A. M. in 1792, B. D. in 1801, and D. D. in 1803. His reputation for learning procured him in 1792 the head mastership of Abingdon grammar school, which he conducted several years. He then removed to the free grammar school at Exeter, where he remained till, in consequence of some disputes with the trustees, he was obliged to resign. In the year 1811 he was presented to the rectory of Meeth, Devonshire, which living, together with that of Newton Petrock, in the same county, he held till his death. Dr. Lempriere's Bibliotheca Classica, first published in 8vo. in 1788, has furnished one of the most useful assistants in the study of the heathen mythology. The year following he published a sermon, preached on the 12th of August in that summer, at the parish church of St. Helier, in his native island, the great object of which seems to be his own vindication from aspersions. His other writings are the first volume of a translation of Herodotus, with notes, which appeared in 1792, and was intended to have been followed by two others, but, an entire translation of that historian being given to the world in the mean time by Mr. Beloe, Dr. L. desisted. A compilation of Universal Biography, first printed in 4to., with an abridgment of the same in 8vo., both in 1808, was his last work. He died of apoplexy February 1st, 1824, in Southampton Street, Strand.

LEMUR, the maucauco, in zoology, a genus of the mammalia class of quadrupeds, and of the order of primates. The characters are these:—There are four fore teeth in the upper jaw, the intermediate ones being remote; and six long, compressed, parallel teeth in the under jaw, the dog teeth are solitary, and the grinders somewhat lobated. Kerr and Gmelin enumerate thirteen species; viz.

1. L. bicolor, the American maucauco, inhabits South America. It has a tail; the upper parts of the body are a blackish-gray, the under,

a dirty white color; with a heartshaped spot of the same color on the forehead. The head resembles a bull-dog; the toes have narrow sharp claws.

2. L. catta, the ring-tailed maucauco, inhabits Madagascar, Mauritius, Joanna, and the neighbouring African continent. It is of the size of a cat; has the hair on the top and hind part of the head of a deep ash-color, the back and sides reddish, the belly and insides of the limbs white; all its hair is very soft, close, and fine, and erect like the pile of velvet; the tail is twice the length of the body. In a wild state they go in troops of thirty or forty, but are easily tamed when taken young.

3. L. ecaudatus, the tail-less maucauco, a small animal found in Bengal and the island of Ceylon. It is of a very singular construction, and perhaps longer in proportion to its thickness than any other quadruped. The head is roundish, with a sharp-pointed nose and small ears; the body is covered with short, soft, and silky ash-colored and reddish fur: the toes are naked, and the nails flat; excepting those of the inner toe on each hind foot, which are long, crooked, and sharp. Its length from the nose to the rump is sixteen inches. It lives in the woods, and feeds on fruits: in a tame state it appears to be fond of eggs, and devours small birds. This animal has the inactivity of the sloth, and creeps slowly along the ground; it is very tenacious of its hold, and makes a plaintive noise. Some confound this species with the loris.

4. L. indri, the indri, inhabits Madagascar. It is black and has no tail; is about three feet and a half high; has eight canine teeth in each jaw, two cutting teeth in the upper jaw, and four close set in the lower; all the feet have five toes, with flat sharp nails; the great toes are very large; the hair is silky and thick, gray on the face, white and curled on the rump; all the rest black. It is easily tamed. Its voice resembles that of a child.

5. L. laniger, the curly maucauco, inhabits Madagascar. It is of a brick-dust color on the upper parts, and white on the under; the face black; the tail a tawny red. The head and body are twenty-one inches long; the tail nine. It has two foreteeth in the upper, and four in the lower jaw: the eyes are large; the ears small: the paws have five toes each: the thumbs and great toes have flat rounded nails; the rest pointed claws. The hair is very soft and curled like wool; whence the name.

6. L. macaco, or caudatus, the ruffed maucauco, or the vari of Buffon, is an inhabitant of Madagascar. It is somewhat larger than the catta, and has long hair standing out round the sides of the head like a ruff; a long tail; the color of the whole animal generally black; but sometimes white spotted with black. In a wild state it is very fierce; and makes such a noise in the woods, that the cries of two might be easily mistaken for 100. Kerr distinguishes four varieties of this species.

7. L. mongoz, the mongooz or woolly maucauco, inhabits Madagascar, and the islands to the eastward, as far as Celebes. It is about the size of a cat, and has the whole upper part of the body and the tail covered with long, soft and thick fur, a little curled or waved, of a deep brownish ash-color; the tail is very long. It lives on fruits, turns its tail over its head to protect it from rain, and sleeps on trees; it is very sportive and good-natured; and very tender. Kerr describes five varieties of the Mongooz.

8. L. murinus, the murine maucauco, inhabits Madagascar; is of an ash color, with a rusty brown tail; all the toes and fingers have flat rounded nails.

9. L. podji, the tarsier of Buffon, has a pointed visage; slender nose, bilobated at the end: eyes large and prominent; ears erect, broad, naked, semitransparent, an inch and a half long, with a tuft of hair between them on the top of the head, and long hairs on each side of the nose and on the upper eye-brow. In each jaw are two cutting and two canine teeth; which form an exception in this genus. There are four long slender toes, and a distinct thumb on each foot; the thumbs on the hind feet are very broad and greatly dilated at their ends: the tail is almost naked; the greater part round and scaly like that of a rat, but growing hairy towards the end, which is tufted. Its length from nose to tail is nearly six inches; to the hind toes eleven and a half, the hind legs being of a great length; the tail is nine inches and a half long. It inhabits the remotest islands of India, especially Amboyna.

10. L. potto, the potto, inhabits Guinea; has a tail, and is all of a pale rusty brown color. In other particulars it is very like the indri.

11. L. prehensilis, the prehensile or little maucauco, has a rounded head, sharp nose, long whiskers; two canine teeth in each jaw; four cutting teeth in the upper jaw, six in the lower: seven grinders on each side: the nearest sharp, the more distant lobated: the ears are large, roundish, naked, and membranaceous; the eyes very large and full. The toes are long, and of unequal lengths; the ends round; the nails round, and very short; the tail is hairy, as long as the body, and prehensile. The animal is rather less than the black rat: and, in Mr. Pennant's opinion, seems to be the same which Buffon calls le rat de Madagascar. It is supposed to live in the palm-trees, and feed on fruits. It holds its food in its fore feet like a squirrel; is lively, and has a weak cry; and when it sleeps it rolls itself up.

12. L. tardigradus of Seba, the lorris of Buffon, or sloth of Ceylon, has a produced dog-like visage, with the forehead high above the nose: the ears are large, thin, and rounded: the body is slender and weak; the limbs are very long and slender; the thumb on each side is distinct, and separate from the toes: the hair on the body is universally short and delicately soft; the color on the upper part tawny, beneath whitish. From the tip of the nose to the anus the animal is only eight inches long. It differs totally in form and nature from the ecaudatus; and, notwithstanding the epithet of tardigradus or sloth given in Seba, it is very active, and ascends trees most nimbly. It has the actions of an ape; and Seba says, the male climbs the

trees, and tastes the fruits, before it presents them to its mate.

13. L. volans, the flying maucauco, the colugo of Pallas, or flying cat of Ternate, resembles a bat, being furnished with a strong membrane like that animal, by which it is enabled to fly. It inhabits the country about Guzarat, the Molucca Isles, and the Philippines; feeds on fruits, and is very distinct both from the bat and flying squirrel. Pennant says it is three feet long, nearly as broad when expanded; the tail one foot; the head long; mouth, teeth, and ears small; the hair ash-colored; the legs covered with yellow down; the paws five-toed; the claws crooked and very sharp.

LEMURES, in antiquity, sprites or hobgoblins; restless ghosts of departed persons, who were supposed to return to terrify and torment the living. These are the same with the larvæ, whom the ancients imagined to wander round the world, to frighten good people, and plague the bad. For which reason, at Rome, they had lemuria, or feasts instituted to appease the manes of the defunct. See LARES. Apuleius explains the ancient notion of manes thus: the souls of men released from the bands of the body, and freed from performing their bodily functions, become a kind of dæmons or genii, formerly called lemures. Of these lemures, those that were kind to their families were called lares familiares; but those who, for their crimes, were condemned to wander continually, without meeting with any place of rest, and terrified good men and hurt the bad, are vulgarly called larvæ. Apuleius observes, that, in the ancient Latin, lemur signified the soul of a man separated from the body by death.

LEMURIA, or LEMURALIA, a feast solemnised at Rome on the 9th of May, to pacify the manes of the dead, or in honor of the lemures. It was instituted by Romulus, to appease the ghost of his murdered brother Remus, which he thought was continually pursuing him to revenge the horrid crime. Sacrifices continued for three nights, the temples were shut up, and marriages were prohibited during the solemnity. A variety of whimsical ceremonies were performed, magical words made use of, and the lemures desired to withdraw, without endeavouring to hurt or affright their friends above ground. The chief formalities were ablution, putting black beans into their mouths, and beating kettles and pans to make the goblins keep at a distance.

LENA, a river of Asiatic Russia, rises in the mountains to the north-west of the lake Baikal, and flows almost from south-west to north-east, till near Yakoutsk. Here it receives the Wilime and the Olekma, and, combined with the Obi and the Toungouska, furnishes an almost continued navigation from west to east, across Siberia. Soon after, passing Yakoutsk, it receives the Aldane, the largest of its tributaries, by which the navigation is continued nearly to Okhotsk. The course of the Lena is now north, with a slight declination westward. The Wilhoui is the only other considerable river which falls into it. The channel of this river is broad and deep, and it forms numerous islands in its course, which may be estimated at nearly 2000 miles

LENÆA, from ληνος, a wine-press; a festival kept by the Greeks in honor of Bacchus, at which there was much feasting and Bacchanalian jollity, accompanied with poetical contentions, and the exhibition of tragedies. A goat was generally sacrificed on the occasion, and treated with various marks of cruelty and contempt, as being naturally fond of brousing on the vine shoots.

LEND, *v. a.* } Sax. lænan; Belg. *leenen;* LEND'ER, *n. s.* } *lehen.* To grant the use of; to grant, afford, or bestow generally; to let on hire: a lender is one who either freely, for hire, or by way of trade, lends or lets out any thing.

Thou shalt not give him thy money upon usury, nor *lend* him thy victuals for increase. *Lev.* xxv. 37.

> Thou pinchist at my mutabilitie,
> For I the *lent* a droppe of my richesse,
> And now me likith to withdrawin me,
> Why shouldist thou my roialtie oppresse? *Chaucer's Balades.*

In common worldly things 'tis called ungrateful
With dull unwillingness to pay a debt,
Which, with a bounteous hand, was kindly *lent*:
Much more to be thus opposite with Heaven. *Shakspeare.*

I'll *lend* it thee, my dear, but have no power to give it from me. *Id.*

Let the state be answered some small matter, and the rest left to the *lender;* if the abatement be small, it will not discourage the *lender:* he that took ten in the hundred, will sooner descend to eight than give over his trade. *Bacon.*

This gave them at once freedom, victory, riches; bestowing upon them the remainder of that wealth, which the Egyptians had but *lent.* *Bp. Hall.*

One would think a man of sense would grutch to *lend* his ear, or incline his attention to such motley ragged discourse. *Barrow.*

> They dare not give, and e'en refuse to *lend,*
> To their poor kindred, or a wanting friend. *Dryden.*

Covetousness, like the sea, receives the tribute of all rivers, though far unlike it in *lending* any back again. *Decay of Piety.*

From thy new hope, and from thy growing store,
Now *lend* assistance, and relieve the poor. *Dryden.*
Whole droves of *lenders* crowd the bankers' doors
To call in money. *Id. Spanish Fryar.*

> Cato, *lend* me for a while thy patience,
> And condescend to hear a young man speak. *Addison.*

> By Jove the stranger and the poor are sent,
> And what to those we give, to Jove is *lent.* *Pope.*

> Cephisa, thou
> Wilt *lend* a hand to close thy mistress' eyes. *A. Philips.*

> Man wants but little, nor that little long;
> How soon must he resign his very dust,
> Which frugal nature *lent* him for an hour! *Young*

He now began to engage in the controversies of the times, and *lent* his breath to blow the flames of contention. *Johnson.*

L'ENFANT (James), a learned French writer, born in 1661. After studying at Saumur, he went to Heidelberg, where he became minister of the French church in 1684, and chaplain to the electress dowager Palatine. The descent of the French into the palatinate obliged him to leave Heidelberg in 1688. He went to Berlin, where the elector Frederick, afterwards king of

Prussia, appointed him one of the ministers. There he continued thirty-nine years, distinguishing himself by his writings. He was preacher to Charlotta Sophia, queen of Prussia; and, after her death, to Frederick the Great. In 1707 he took a journey to England and Holland, where he preached before queen Anne. In 1712 he went to Helmstadt, in 1715 to Leipsic, and in 1725 to Breslaw, to search for rare books and MSS. He died in 1728. His principal works are, 1. The History of the Council of Constance, 2 vols. 4to.; 2. A History of the Council of Pisa, 2 vols. 4to.; 3. The New Testament translated from the Greek into the French, with Notes by Beausobre and L'enfant, 2 vols. 4to.; 4. The History of Pope Joan, from Spanheim's Latin Dissertation; 5. Several Pieces in the Bibliotheque Choisie, La Republique des Lettres, La Bibliotheque Germanique, &c.

LENGLET (Nicholas, du Fresnoy, abbè), a celebrated French author, born at Beauvois, in 1674. He wrote on various subjects. The following works merit notice: 1. A Method of Studying History, with a Catalogue of the Principal Historians of every Age and Country; 1713. This work was translated into most modern languages, particularly our own, with improvements, by Richard Rawlinson, LL. D. and F.R.S., and published in London in 1730, in 2 vols. 8vo.; 2. A copious abridgment of universal history and biography, in chronological order, under the title of Tablettes Chronologiques; which first appeared at Paris in 1744, in 2 vols. 8vo., and was universally admired. In subsequent editions he made several corrections and improvements; and from one of these an English translation was published in London, in 1762, in 2 vols large 8vo. Another edition appeared in 1763 in which the general history was brought down to 1762. Du Fresnoy, however, loaded his work with catalogues of saints, martyrs, councils, heresies, and other ecclesiastical matters, fit only for the libraries of popish convents. He was secretary to the French ambassador at Cologne in 1705, where he discovered a plot of delivering up Mons to the English. In 1721 he became librarian to prince Eugene. He lived eighty-two years, but his end was tragical; for, falling asleep by the fire, he fell into it, and was burnt to death before the accident was discovered. This happened in 1756.

LENGTH, *n. s.* }
LENGTH'EN, *v. a.* & *v. n.* }
LENGTH'WISE, *adv.* } Sax. lenᵹ; Teutonic *langheit*; Belg. *lenghde*. See LONG

Full extent; utmost expansion or duration; uncontracted state; comparative extent (in which sense it admits of a plural); distance; end; from which last sense comes the phrase at length: once written 'at the length.' To lengthen is, to draw out; elongate; make longer; protract: it sometimes has 'out,' affixed by way of emphasis; also, to grow, or become longer. Lengthwise is, in the direction of the length; longitudinally.

That ghe rootid and groundid in charite moun comprehende with alle seyntis which is the breede and the *lengthe* and the hyghenesse and the depnesse. *Wiclif, Effes.* iii.

Break off thy sins by righteousness, and thine iniquities by showing mercy to the poor: if it may be a *lengthening* of thy tranquillity. *Dan.*

A crooked stick is not straitened, unless it be bent as far on the clear contrary side, that so it may settle itself at *length* in a middle state of evenness between them both. *Hooker.*

Large *lengths* of seas and shores
Between my father and my mother lay.
Shakspeare

Frame your mind to mirth and merriment,
Which bars a thousand harms, and *lengthens* life.
Id.

There is in Ticinum a church that is in length one hundred feet, in breadth twenty, and in height near fifty; it reporteth the voice twelve or thirteen times.
Bacon.

He had marched to the *length* of Exeter, which he nad some thoughts of besieging. *Clarendon.*

To get from the' enemy, and Ralph, free;
Left dangers, fears, and foes, behind,
And beat, at least, three *lengths* the wind.
Hudibras.

Mezentius rushes on his foes,
And first unhappy Acron overthrows:
Stretched at his *length* he spurns the swarthy ground.
Dryden.

Time glides along with undiscovered haste,
The future but a *length* beyond the past. *Id.*
What *length* of lands, what oceans have you passed. *Id.*
May Heaven, great monarch, still augment your bliss,
With *length* of days, and every day like this. *Id.*
At length, at length, I have thee in my arms,
Though our malevolent stars have struggled hard,
And held us long asunder. *Id. King Arthur.*

The learned languages were less constrained in the quantity of every syllable, besides helps of grammatical figures for the *lengthening* or abbreviation of them. *Dryden.*

Having thus got the idea of duration, the next thing is to get some measure of this common duration, whereby to judge of its different *lengths*.
Locke.

One may as well make a yard, whose parts *lengthen* and shrink, as a measure of trade in materials that have not always a settled value. *Id.*

If Lætitia, who sent me this account, will acquaint me with the worthy gentleman's name, I will insert it at *length* in one of my papers.
Addison's Spectator.

In *length* of time it will cover the whole plain, and make one mountain with that on which it now stands.
Addison.

It *lengthens out* every act of worship, and produces more lasting and permanent impressions in the mind, than those which accompany any transient form of words. *Id.*

Still 'tis farther from its end;
Still finds its error *lengthen* with its way.
Prior.

Relaxing the fibres, is making them flexible, or easy to be *lengthened* without rupture. *Arbuthnot.*

It is in our power to secure to ourselves an interest in the divine mercies that are yet to come, and to *lengthen* the course of our present prosperity.
Atterbury's Sermons.

Falling dews with spangles decked the glade,
And the low sun had *lengthened* every shade. *Pope.*

I do not recommend to all a pursuit of sciences, to those extensive *lengths* to which the moderns have advanced. *Watts.*

What folly can be ranker? like our shadows,
Our wishes *lengthen* as our sun declines. *Young.*

Extension is either in *length*, height, or depth.
Burke on the Sublime.

In faithful memory she records the crimes
Or real, or fictitious, of the times;
Laughs at the reputations she has torn,
And holds them dangling at arm's *length* in scorn.
Cowper.

'Comrades, good night!'—The Hetman threw
His *length* beneath the oak-tree shade,
With leafy couch already made,
A bed nor comfortless nor new
To him, who took his rest whene'er
The hour arrived, no matter where. *Byron.*

Those lonely walks, and *lengthening* reveries,
Could not escape the gentle Julia's eyes;
She saw that Juan was not at his ease. *Id.*

LENGTHENING, in ship carpentry, the operation of cutting a ship down across the middle, and adding a certain portion to her length. It is performed by sawing her planks asunder in different places of her length, on each side of the midshipframe, to prevent her from being too much weakened in one place. The two ends are then drawn apart to a limited distance, which must be equal to the proposed addition of length. An intermediate piece of timber is next added to the keel, upon which a sufficient number of timbers are erected to fill up the vacancy produced by the separation. The two parts of the kelson are afterwards united by an additional piece, which is scored down upon the floor timbers, and as many beams as may be necessary are fixed across the ship in the new interval. Finally, the planks of the side are prolonged so as to unite with each other; and those of the ceiling refitted in the same manner; by which the whole process is completed.

LE'NIENT, *adj.* & *n. s.*
LEN'IFY, *v. n.*
LEN'ITIVE, *adj.* & *n. s.*
LEN'ITY, *n. s.*
Fr. *lenifier, lenitif;* Lat. *lenio, leniens.* Assuasive; softening; qualifying; laxative; emollient. To lenify, is to mitigate or assuage. Lenitive is an adjective synonymous with lenient: as a substantive, any thing applied to relieve pain or suffering. Lenity, generally applied to the mind or temper, signifies mercy; tenderness; sweetness.

Henry gives consent,
Of meer compassion, and of *lenity*,
To ease your country. *Shakspeare. Henry VI.*

Used for squinancies, and inflammations in the throat, it seemeth to have a mollifying and *lenifying* virtue. *Bacon.*

Some plants have a milk in them; the cause may be an inception of putrefaction; for those milks have all an acrimony, though one would think they should be *lenitive.* *Id.*

Albeit so ample a pardon was proclaimed touching treason, yet could not the boldness be beaten down either with severity, or with *lenity* be abated.
Hayward.

Lenity must gain
The mighty men, and please the discontent. *Dan.*

Consolatories writ
With studied argument, and much persuasion sought,
Lenient of grief and anxious thought. *Milton.*

These jealousies
Have but one root, the old imprisoned king,
Whose *lenity* first pleased the gaping crowd:
But when long tried, and found supinely good,
Like Æsop's log, they leapt upon his back. *Dryden.*

All softening simples, known of sov'reign use,
He presses out, and pours their noble juice;
These first infused, to *lenify* the pain,
He tugs with pincers, but he tugs in vain. *Id*

There are *lenitives* that friendship will apply, before it would be brought to decretory rigours.
South's Sermons.

There is aliment *lenitive* expelling the fæces without stimulating the bowels; such are animal oils.
Arbuthnot.

Oils relax the fibres, are *lenient*, balsamick, and abate acrimony in the blood. *Id. on Aliments.*

In this one passion man can strength enjoy;
Time, that on all things lays his *lenient* hand,
Yet tames not this: it sticks to our last sand. *Pope.*

I dressed it with *lenients.* *Wiseman's Surgery.*

The king, with *lenity* of which the world has had perhaps no other example, declined to be the judge or avenger of his own or his father's wrongs. *Johnson.*

LENNEP (John Daniel Van), an able critic and classical scholar, a native of Leenwarden in Friesland, commenced his career in 1747, by an edition of the Greek poem of Coluthus, on the Rape of Helen. He was professor of Greek and Latin literature at Groningen in 1752; and in 1768 succeeded Gisbert Koen as professor at Franeker. He died February 6th, 1771, at Aix-la-Chapelle. Lennep was the author of two treatises, De Analogiâ Linguæ Græcæ; and Etymologicon Linguæ Græcæ, republished at Leyden in 1805-1808, with the Notes of Scheidius.

LENNOX, or Dunbartonshire, a county of Scotland, twenty-four miles long and twenty broad, bounded on the south by the river and frith of Clyde; on the west by Lochlong and Argyleshire; on the north by the Grampians; and on the east by Monteith and Stirlingshire. Great part of it is fit for nothing but pasturage and sport; even in the lower lands the soil is not fertile: yet the face of the country is agreeably diversified with hills, dales, mountains, heaths, rivulets, rivers, lakes, woods, fields of corn, and gentlemen's seats and plantations. Part of it is washed by the Clyde, which, at the castle of Dunbarton, is two miles broad at high water, and continues extending in width and depth until it joins the ocean. From the mouth of the Clyde, the two bays of Lochlong and Lochfyne make large indentations in the county. The only river of any note is the Leven. See LEVEN. But the greatest curiosity of this county is Loch-lomond, a vast body of fresh water supplied by subterraneous springs and rivulets, surrounded with huge mountains extending twenty-five miles in length, and in some places five in breadth, incredibly deep in every part, interspersed with twenty-four verdant isles, some of which are stocked with red-deer, and inhabited. Nothing can be more wildly romantic than this part of the country during summer, on the south side of the lake: the high road runs in some places through natural woods; overhung, on one hand, by steep mountains covered with flowery heath; and on the other opening in long vistas upon the lake, terminated by green islands that seem to float upon the water. Among the rivers we must not omit the Blane, which, though an inconsiderable stream, has been rendered famous by the birth of George Buchanan, the celebrated Latin poet and historian, on its banks. Near his birth-place (which, however, lies in Stirlingshire), is Buchanan House, an elegant seat belonging to the duke of Mon-

trose, head of the noble family of Graham, so often distinguished by its loyalty, integrity, and valor. The same part of the country gave birth to the great mathematician and naturalist, Napier, lord Merchiston, inventor of the logarithms. The title of Lennox, with the property of great part of the shire, was formerly vested in a branch of the royal family of Stuart, with which it was reunited in the person of king James VI., whose father, Henry lord Darnley, was son to the earl of Lennox. This prince conferred the title upon his kinsman Esme Stuart, son of John lord Aubigny in France: but his race failing at the death of Charles duke of Lennox and Richmond, and the estate devolving to the crown, Charles II. conferred both titles on his own natural son by the duchess of Portsmouth; and they are still enjoyed by his posterity. The people of Lennox are chiefly Lowlanders, though in some parts of it divine service is performed in the Erse language. The most numerous clans in this district are the Macfarlanes, the Colquhouns, and the Buchanans. They generally profess the Protestant faith, according to the Presbyterian discipline; though some of the gentry follow the English ritual. The people are sober, honest, and industrious; and are tall, vigorous, and healthy.

Lennox (Charlotte), a literary lady, a native of North America, much respected by Dr. Johnson and Samuel Richardson. She was born at New York in 1720 (her father, colonel James Ramsay, being then governor of that state), but received her education in England. Little is known of her subsepuent history until she married a Mr. Lennox. In 1751 she published the Memoirs of Harriet Stuart; and in 1752 The Female Quixote, a very ingenious production; to which a dedication was written by Johnson In the following year appeared her Shakspeare Illustrated. In 1756 she published the Countess de Berci, from the French, and translated Sully's Memoirs. These were followed by Philander, a dramatic pastoral, and the novel of Henrietta, in 2 vols. In 1759 she was assisted by the earl of Cork and Dr. Johnson, in translating Brumoy's Greek Theatre; and the next year started the well known Ladies' Museum. Her other works are, Sophia, a novel, 2 vols.; The Sisters, a comedy; Old City Manners; and Euphemia, a novel in 4 vols. published 1790. With all her talents and industry, however, she was doomed to penury and sickness in declining life, but was effectually relieved, we are told, by the Literary Fund Society. She died 4th of June, 1804.

LENS, *n. s.* } Lat. *lens*, a plant. This
Lentic'ular, *adj.* } word is understood to be
Len'tiform. } formed from the resemblance of the glass in question to the seed of the lentil. A glass generally convex on both sides: but there are also concave lenses. Lenticular, lentiform, of the form of a lens.

The crystalline humour is of a *lenticular* figure, convex on both sides. *Ray on the Creation.*

A glass spherically convex on both sides, is usually called a *lens*; such as is a burning-glass, or spectacle-glass, or an object-glass of a telescope. *Newton's Opticks.*

According to the difference of the *lenses*, I used various distances. *Id.*

So the clear *lens* collects with magic power
The countless glories of the midnight hour,
Stars after stars with quivering lustre fall,
And twinkling glide along the whitened wall.
Darwin.

A Lens is a piece of glass, or any other transparent substance, the surfaces of which are so formed, that the rays of light by passing through it, are made to change their direction, either tending to meet in a point beyond the lens, or made to become parallel after converging or diverging; or proceeding as if they had been from a point before they fell upon the lens. See Optics.

LENT, *n. s.* } Saxon lenꞇ; Belgic *lente*;
Len'ten, *adj.* } Teut. *lente, glent* (spring). See the extract from Camden. The quadragesimal fast in spring: hence any fast. Lenten, pertaining to, or used in Lent; sparing.

My lord, if you delight not in man, what lenten entertainment the players shall receive from you. *Shakspeare. Hamlet.*

Lent is from springing, because it falleth in the spring; for which our progenitors, the Germans, use *glent*. *Camden.*

What the church debars us one day, she gives us leave to take out in another: first we fast, and then we feast; first there is a carnival, and then a lent. *Selden.*

Giving of ashes on Ash Wednesday, is *to put in* remembrance every Christian man in the beginning of *Lent* and penance, that he is but ashes and earth, and thereto shall return. *Fair.*

She quenched her fury at the flood,
And with a *lenten* sallad cooled her blood,
Their commons, though but coarse, were nothing scant. *Dryden's Hind and Panther.*

Those have a short *Lent* who owe money to be paid at Easter. *Franklin.*

Lent is a solemn time of fasting in the church. Those of the Romish church, and some of the Protestant communion, maintain, that it was always a fast of forty days, and, as such, of apostolical institution. Others think it was only of ecclesiastical institution, and that it was variously observed in different churches, and grew by degrees from a fast of forty hours to a fast of forty days. This is the opinion of Morton, bishop Taylor, Du Moulin, Daillé, and others. The ancient manner of observing Lent, among those who were piously disposed, was to abstain from food till evening: their only refreshment was a supper; and it was indifferent whether it was flesh or any other food, provided it was used with sobriety and moderation. Lent was thought the proper time for exercising, more abundantly, every species of charity. Thus what they spared from their own bodies by abridging them of a meal was usually given to the poor; they employed their vacant hours in visiting the sick, and those that were in prison; in entertaining strangers, and reconciling differences. The imperial laws forbad all prosecution of men in criminal actions that might bring them to corporal punishment and torture, during the whole season. This was a time of more than ordinary strictness and devotion, and therefore, in many of the great churches, they had religious assemblies for prayer and preaching every day. All public games and stage plays were prohibited; as well as the celebration of all festivals, birth-days, and marriages,

as unsuitable to the occasion. The Christians of the Greek church observe four Lents; the first commences on the 15th of November; the second is the same with that of the church of England; the third begins the week after Whitsuntide, and continues till the festival of St. Peter and St. Paul; and the fourth commences on the 1st of August, and lasts till the 15th. All these Lents are observed with great strictness; but on Saturdays and Sundays they drink wine and use oil, which are prohibited on other days.

LEN'TIL, *n. s.* Fr. *lentille;* Lat. *lens.* A species of ERVUM, which see.

The Philistines were gathered together, where was a piece of ground full of *lentiles.* 2 *Sam.* xxiii, 11.

Lentils grow a foot and a half in length, with stalks and leaves like those of tares, but smaller; and, like them, they bear their seeds generally three or four in a pod. *Dr. A. Rees.*

LENTISCK, in botany. See PISTACIA.

LENTISCK, AFRICAN, } in botany. See SCHINUS.
LENTISCK, PERUVIAN, }

LENT'NER, *n. s.* Lat. *lentus*, slow. A kind of hawk.

I should enlarge my discourse to the observation of the haggard, and the two sorts of *lentners.* *Walton's Angler.*

LEN'TOR, *n. s.* } Fr. *lenteur;* Lat. *lentor.*
LEN'TOUS, *adj.* } Tenacity; viscosity; slowness.

Some bodies have a kind of *lentor*, and more depectible nature than others. *Bacon.*

In this spawn of a *lentous* and transparent body, are to be discerned many specks which become black, a substance more compacted and terrestrious than the other; for it riseth not in distillation. *Browne.*

The *lentor* of eruptions, not inflammatory, points to an acid cause. *Arbuthnot on Diet.*

LENTULUS, the surname of a branch of the Cornelian family at Rome, which produced several great men during the republic. See ROME.

LENTULUS (Cneius Cornelius), surnamed Gætulicus, was consul A. D. 26, and was also a literary character. He wrote a history, mentioned by Suetonius, and Martial informs us that he was a poet; but his works are lost. He was put to death by Tiberius, who was jealous of his popularity.

LEO, in zoology. See FELIS.

LEO, a native of Byzantium, who flourished about A. A. C. 350, and wrote some treatises on physic and history, which are lost. His philosophy, patriotism, and political abilities, while they endeared him to his countrymen, who employed him as ambassador to Athens, Macedonia, &c., on their most important business, excited the jealousy of Philip III. of Macedon; who saw his ambitious designs would be frustated while such a vigilant patriot lived. He therefore forged a letter in Leo's name, offering to betray Byzantium to the king of Persia, which produced the desired effect. The mob ran enraged to the house of the philospher, who, to avoid their fury, killed himself.

LEO III., the Isaurian, emperor of Constantinople, was the son of a poor mechanic, but entering the army, became one of the bodyguard to Justinian II; and was made a general by Anastasius II., who, in 717, made him his colleague in the empire. The Saracens having ravaged Thrace, besieged Constantinople, but Leo bravely defended it, and repulsed them. After this he proved a tyrant, and burnt the library of Constantinople, containing above 30,000 volumes, besides a vast quantity of medals and other antiquities. He died in 741, and was succeeded by his son Constantine V.

LEO VI., surnamed the philosopher, the son of Basil I., was associated by his father in 876, and succeeded him in 878. The Saracens, Bulgarians, and Hungarians, having united against him, he imprudently called the Turks to his aid, who ravaged Bulgaria with fire and sword. He drove out and deposed the patriarchs Phocas and Nicholas; and died in 911. He wrote several books; the principal of which is a Treatise on Tactics; printed at Leyden in 1612.

LEO I., surnamed the Great, an Italian, who succeeded Sextus III. in 440. He showed great zeal against the Manichees and other heretics. His works amount to 3 vols. folio. He died in 461.

LEO X., whose proper name was John de Medicis, was made a cardinal at fourteen years of age, and some years after a legate, by Julius II. He was in that quality in the army which was defeated by the French near Ravenna, in 1512, where he was taken prisoner. The soldiers who took him humbly asked his pardon, besought him to give them absolution for it, and promised never to bear arms against the pope. When Julius died, Medicis was very ill at Florence, and was carried to Rome in a litter. The cardinals consulted his physicians to know whether he was likely to live long, and they being bribed, said the cardinal de Medicis could not live a month; which principally occasioned his being chosen pope. Thus when not thirty years of age, he was elected and soon recovered his health. He was better calculated for a temporal than a spiritual prince, being ambitious, luxurious, and a connoisseur in the fine arts; he is supposed to have disbelieved Christianity itself, which he called a very profitable fable for him and his predecessors. In 1517 he published general indulgences throughout Europe (and ordered the priests to recommend them) in favor of those who would contribute any sum towards completing the church of St. Peter; and thus paved the way for the reformation. (See INDULGENCE and LUTHER). Leo died in 1521, aged forty-five. It is but justice to add, that to this pope was principally owing the revival of literature in Italy. He spared neither pains nor expense to recover ancient MSS. and procure good editions of them; he favored the arts and sciences; and gloried in being the patron of learned and ingenious men, who, in return, have been very lavish in his praise. Pope, in his Essay on Criticism, celebrates this pontiff in the following lines:—

But see! each muse, in Leo's golden days,
Starts from her trance, and trims her withered bays;
Rome's ancient Genius, o'er its ruins spread,
Shakes off the dust, and rears his reverend head.
Then sculpture and her sister arts revive:
Stones leap to form, and rocks begin to live;
With sweeter notes each rising temple rung,
A Raphael painted, and a Vida sung.

Leo of Modena, a learned rabbi of Venice, who flourished in the seventeenth century. He wrote a history of the Jewish rites and ceremonies; and compiled a Hebrew and Italian Dictionary.

Leo Pilatus, the first professor of Greek at Florence, about A. D. 1360. He was a man of great erudition; and went to Constantinople to procure MSS., but was shipwrecked on his return to Italy, in the Adriatic.

LEOBEN, a town of Austria, on the Mur, in Upper Styria. It has a traffic in iron, there being mines in the vicinity; and here are barracks, and a public magazine for salt. The convention was concluded here between the French and Austrians, on the 20th of April 1797, which terminated in the peace of Campo Formio. Population 2400. Eighty miles south-west of Vienna.

LEOMINSTER, a large and populous borough of Herefordshire, seated on the Lug, which waters the north and east sides of it, and over which it has several bridges. It extends about a mile from north to south, and half a mile from west to east. The modern houses are well built with brick, but those of ancient date are of timber and plaster, ornamented with grotesque carvings. The town-hall stands on twelve oak pillars, and under it is held the butter-market. In this hall are held the town quarter-sessions, and the corporation meetings. In 1750 a new gaol was built, and in 1803 a neat market-house was erected for the sale of wheat and other grain, hops, flax, wool, and cider, of which articles the neighbourhood yields great plenty. The church is a neat spacious building, and appears to have been built at different periods; the roof is supported by four large Tuscan pillars. It has a beautiful altar-piece from Rubens, and in the tower is a musical peal of eight bells. In king John's reign this town was burnt, but soon rebuilt. It was incorporated by queen Mary I. and is governed by a high steward, bailiff, recorder, twelve burgesses, and a town-clerk. Its market is on Friday, and its fairs are noted for horses and black cattle. The inhabitants carry on a considerable trade in wool, gloves, leather, hats, &c., and they have mills and other machines on the river. Near its church are some remains of its ancient priory. It has several good inns, and sends two members to parliament. It lies twenty-six miles west by north of Worcester, and 137 W. N. W. of London.

Leominster, a town of Massachusetts, in Worcester county; forty-six miles west of Boston. It carries on various manufactures of cloth, bricks, combs, &c.

LEON (Peter Cicca de), author of the history of Peru. He left Spain, his native country, at thirteen years of age, to go into America. The first part of his history was printed at Seville in 1553. He began it in 1541, and ended it in 1550. He was at Lima, the capital of the kingdom of Peru, when he finished it, and was then thirty-two years of age.

LEON, an important north-west division of Spain, still retaining the title of a kingdom, is surrounded by Estremadura, Old Castile, Galicia and Portugal. It is of an irregular oblong figure being about 200 miles from north to south and 168 from east to west, and having a territorial area of 21,000 square miles. It is divided into six provinces, of which the population has been thus given:—

Provinces.	Inhabitants
Leon . . .	240,000
Salamanca . . .	210,000
Palencia . . .	120,000
Zamora . . .	72,000
Toro . . .	100,000
Valladolid . . .	188,000
Total	930,000

This province is divided by the Douro into two nearly equal parts; and is watered besides by the Carrion, the Eresma, the Tormes, and other smaller streams. Several of its mountain chains also are remarkable, particularly those which form a part of the Sierras, of Pico and Occa. It contains abundance of fine pastures, on which noble herds of cattle and flocks of sheep are found, and is fruitful in maize, oats, wheat, and flax. The mountains are covered with oak and other saleable timber; but the plains and valleys are remarkably destitute both of wood and fruit trees. On the south-east side of the province only is the wine an article of exportation. Nor has Leon any manufactures worth notice, though there are mines of iron and copper in the mountains. Mules are bred in large numbers. Madder finds its way from this province through Portugal to England. The kingdom of Leon was founded in the eighth century by Pelagius, but Ordonno II. was the first who assumed the title of king. In 1037 this state was united to that of Castile, by Ferdinand the Great, and both are now governed by the same laws.

Leon, a province of Spain, in the northern part of the above kingdom of Leon, is surrounded by the Asturias, Palencia, Toro, Valladolid, Zamora and Galicia. Its extent is about 6200 square miles: the soil is stony, and the surface divided between a large chain of mountains and extensive valleys. The climate is moist and cold in the winter months. The vegetable products are wheat, barley, pulse, fruit, flax, and a few vines; but the chief source of employment is the rearing of cattle. The manufactures are linen and hardware.

Leon (Lat. legio, from the seventh Roman legion being stationed here), the capital of the foregoing province, is situated at the confluence of the Torio and Bernesga. It is a compound of great and mean buildings of all kinds. A great part of the walls are of green marble, in a decayed state. It has thirteen churches, a number of convents, and noble mansions, but the streets are filled with beggars. The Plaza Mayor, opposite to the town-house, contains several good buildings. The cathedral surpasses in grandeur and beauty all the ecclesiastical edifices of Spain; and has a claim to be considered one of the finest monuments of Gothic architecture extant. It encloses the tombs of thirty-seven kings, and the shrines of several saints. Founded in the reign of the emperor Galba, Leon was the first town

of consequence recovered from the Moors; after which it continued for three centuries the residence of the Catholic kings of Spain. The ancient palace of the kings is now in a decayed state, and has been converted into a manufactory, The town has small manufactures of woollens, linen, stockings, and leather; but the inhabitants subsist chiefly on the expenditure of the clergy. The environs contain many fine avenues of ash, poplars, and elms; they are also productive in corn, fruit, and in flax. Population 6200; 174 miles N. N. W. of Madrid, and seventy-four N. N. W. of Valladolid.

LEON, ISLA DE, a tract of land on the south-west coast of Spain, containing the city of Cadiz, and another city of this name. It is separated from the main land by a canal and river, ten miles in length, and from twenty to thirty feet in depth. The defence thus afforded against an enemy in possession of the main land (as the French were in 1810) is strengthened by the salt marshes, which extend eastward, and are impassable, except along a causeway. This causeway leads to the Puente de Zuarzo, a bridge built over the river in the fifteenth century, and strongly fortified on the island side. The length of the island of Leon is ten miles; its breadth three. Cadiz is at one extremity, and the naval arsenal of La Caracca on the other. In 1811 or 1812 the French could not make themselves masters of this island, though enabled, by a projecting point of the main land, to bombard Cadiz from a distance of four miles, or at a point. Bay salt in vast quantities is made in the marshes we have mentioned.

The city of Leon, or of Isla de Leon, is situated at the distance of eleven miles south-east of Cadiz. Its population, including St. Carlos, is said by Mr. Jacob to amount to 40,000, and is supported by the works carried on at the neighbouring arsenal and dock-yard of Caraccas. It is chiefly a modern place; the streets are wide and many of the houses large; and there is much more animation here than in most Spanish towns. The principal street is two miles in length. In the great square is the Hotel de Ville, a handsome building. The principal church is remarkable for its repository for the dead, called the Pantheon, an open court of an oval form, with a corridor and walls, which are of sufficient thickness to contain receptacles for the clergy in the form of ovens.

'I counted 500 of these places,' says our traveller, 'all of which were filled; and I was told that, when a priest died, the bodies which had been longest deposited there were removed to make room for the new occupier.'

'There cannot be a more unfounded prejudice,' adds Mr. Jacob, 'than the idea of the superiority of Spanish over English salt, if the process of evaporation goes on slowly, as it must necessarily do when performed by the power of the sun alone: the crystals are formed very large, and the size depends more on the slowness of the operation than on the strength of the brine; and the bay salt made in Cheshire, by applying a small portion of heat to the brine, falls in crystals equally large with those formed by nature in the pits in this vicinity. The quantity of salt collected here, however, is prodigious. It is piled in large heaps, of a pyramidical form; and, when the rain has fallen upon them once, the heat of the sun again crystallises that portion which the rain had melted, and the top becomes a solid cake of salt, from which the rain that may afterwards fall, is carried off without penetrating or damaging the heap. Bay salt is permitted to be exported on the payment of a very trifling duty; but that which is used for the consumption of the interior becomes the subject of a royal monopoly, and is charged with a very heavy tax. The heaps of salt, at a distance, give the morass on which it is collected the appearance of a plain covered with stone buildings, in the form generally of pyramids, but mixed with others of a cubical shape, with slanting roofs.'

LEON, NEW, a mountainous province of Mexico, is bounded on the north by Coaguila, on the west by Coaguila and New Biscay, on the east by New Santander, on the south by Zacatecas and St. Luis Potosi, or Guastica. It is thinly inhabited, possessing few other mines than those of lead. The chief town is Monterey. There are also several villages and small stations; but, although it has been sometimes designated by the high sounding title of the New Kingdom of Leon, it is only a small tract, and little known.

LEON, or LEON DE NICARAGUA, the capital of the province of Nicaragua, South America, and a bishop's see, is situated on a fresh water lake of this name, abounding with fish. It has also a mountain near it, with a volcano, which has often caused it to suffer by earthquakes. It contains about 1200 houses, four churches, and many convents. Its port is Realejo, situated near it, and a fortified town, with a good harbour. The river Realejo is so deep here and commodious as to be capable of containing 200 sail of vessels. Long. 87° 20′ W., lat. 12° 24′ N.

LEONCLAVIUS (John), one of the most learned men of the sixteenth century, was a native of Westphalia. He travelled into Turkey, and collected excellent materials for composing The Ottoman History; and it is to him the public is indebted for one of the best accounts we have of that empire. To his knowledge in the learned languages, he had added that of the civil law; whereby he was well qualified to translate the Basilica. His other versions were esteemed. He died in 1593, aged sixty.

LEONICENUS (Nicolas), an eminent Italian physician, born in 1428. He was professor of medicine at Ferrara, for above sixty years. He was the first who translated Galen's works, which he illustrated with commentaries. He also translated Hippocrates's Aphorisms, and the works of Lucian and Dion Cassius, into Italian; and wrote De Plinii et plurium medicorum aliorum in medicina erroribus. He died in 1524, aged ninety-six.

LEONIDAS I., king of Sparta, a renowned warrior, slain in defending the straits of Thermopylæ against Xerxes, 480 B.C. See SPARTA. There were other two Spartan kings of this name.

LEONFORTE, a large town in the interior of Sicily, in the Val di Noto, seven miles west of San Filippo d' Argiro. It has an annual

fair, much frequented; but it is a place little visited by travellers. Population 8000.

LE'ONINE, *adj.* Lat. *leoninus.* Having the nature of, or belonging to, a lion.

Save wine and women, nothing might assuage
His high entente in armes and labour,
So was he ful of *leonin* corage.
Chaucer. Cant. Tales.

LEONINE VERSES are those of which the end rhimes to the middle, as,

Gloria factorum temere conceditur horum.

They were much used in ancient hymns, epigrams, prophecies, &c. The origin of the word is uncertain; Pasquier derives it from one Leoninus or Leonius, who excelled in this way; and dedicated several pieces to pope Alexander III.; others derive it from pope Leo; and others from leo, the lion, esteeming it the loftiest of verses, as the lion is styled the king of beasts.

LEONTICA, feasts or sacrifices celebrated among the ancients in honor of the sun. They were called Leontica, and the priests who officiated at them Leones, because they represented the sun under the figure of a lion radiant, bearing a tiara, and griping in his two fore-paws the horns of a bull, who struggled with him in vain to disengage himself. The critics are extremely divided about this feast. Some will have it anniversary, and to have made its return not in a solar but in a lunar year; but others hold its return more frequent, and give instances where the period was not above 220 days. The ceremony was sometimes also called Mithraica; Mithras being the name of the sun among the ancient Persians. See MITHRAS. A man was always sacrificed at these feasts, till the time of Adrian, who prohibited it by a law. Commodus introduced the custom afresh, after whose time it was again exploded.

LEONTICE, lion's leaf, a genus of the monogynia order, and hexandria class of plants; natural order twenty-fourth, corydales: COR. hexapetalous; nectarium hexaphyllous, standing on the heels of the corolla, with its limb patent: CAL. hexaphyllous, and deciduous. There are five species, natives of the southern part of Europe, two of which are sometimes cultivated in this country. These are,

L. chrysogonum, with winged leaves; and

L. leontopetalum, with decompounded leaves. Both are natives of the Archipelago islands, and also grow in the corn fields about Aleppo, in Syria, where they flower soon after Christmas. They have large tuberous roots, like those of the cyclamen, covered with a dark-brown bark. The flowers sit upon naked foot-stalks: those of the first sort sustain many yellow flowers, but the flowers of the second are of a paler color. Both are propagated by seeds, which must be sown soon after they are ripe, otherwise they seldom succeed. When sent to distant countries they must be preserved in sand. The plants are, however, very difficult to be preserved in this country: for they will not thrive in pots; and, when planted in the full ground, frost frequently destroys them. The best way is to sow the seed as soon as it comes from abroad, covering it with glasses in the winter to protect [...] frost; and in the spring, when the plants [...] to appear, they must have free air admitted [...] them at all times when the weather is [...] otherwise they will be weak.

LEONTINI, or LEONTIUM, in ancient geography, a town of Sicily on the south side [...] Terias, twenty miles north-west of Syr[...]. The territory called Campi Leontini, was [ex]tremely fertile; anciently called Campi Le[stry]gonii, the seat of the Læstrigons, accord[ing to] the commentators on the poets: the name [Leon]tini is from Leo, the impression on their [coins] being a lion. It is now called Lentini.

LEONTIUM, one of the twelve towns [of] Achaia, whether on, or at some distant fro[m the] bay of Corinth, is uncertain.

LEONTIUM, a celebrated courtezan of Ath[ens,] who studied philosophy under Epicurus. [She] was either the wife or concubine of Metrod[orus] the philosopher, by whom she had a son, [to] whom Epicurus left a legacy. She had [a] daughter named Danae, who married [...] Sophron. She wrote a book in defence of [the] doctrines of Epicurus, against Theophrastus, [...] which Cicero praises for purity of style.

LEONTODON, dandelion, a genus of [the] polygamia æqualis order, and syngenesia cl[ass of] plants; natural order forty-ninth, comp[ositæ]. The receptacle naked: CAL. imbricated, w[ith] scales somewhat loose; the pappus fe[athery]. There are nine species, of which the most re[mark]able one is,

L. taraxacum, the common dandelion, [found] on the road sides, in pastures, and on the b[anks] of ditches. Early in spring, the leaves, [while] yet white and hardly unfolded, are an exce[llent] ingredient in salads. The French eat the r[oots] and tender leaves with bread and butter. W[hen] a swarm of locusts had destroyed the harvest [in] the island of Minorca, many of the inhabi[tants] subsisted upon this plant. The expressed [juice] has been given to the quantity of 4 ozs. [three] or four times a-day; and Boerhaave had [a] great opinion of the utility of this and [other] lactescent plants in visceral obstructions. G[oats] eat it; swine devour it greedily; sheep [and] cows are not fond of it, and horses refuse [it]. Small birds are fond of the seeds.

LEONURUS, lion's tail, a genus of [the] gymnospermia order, and didynamia class [of] plants; natural order forty-second, vertic[illatæ]. The antheræ are powdered with shining p[oints] or small elevated globular particles. There [are] six species.

1. L. Africana, with spear-shaped leaves, [a] native of Ethiopia. It rises with a shr[ubby] stalk seven or eight feet high, sending out [se]veral four-cornered branches, garnished with [long] narrow leaves, acutely indented on their e[dges,] hairy on their upper side, standing opp[osite]. The flowers are produced in whirls, each br[anch] having two or three of these whirls towards [the] end. They are of the lip kind, shaped some[what] like those of the dead nettle, but much lon[ger] and covered with short hairs. They are of [a] golden scarlet color, and make a fine appearan[ce]. The flowers commonly appear in October [and] November, and sometimes continue till [...]

middle of December, but are not succeeded by seeds in this country. There is a variety with variegated leaves which is admired, but the whorls are smaller than those of the plain sort.

2. L. nepetæfolia, with oval leaves, is a native of the Cape of Good Hope. It rises with a square shrubby stalk about three feet high, sending out several four-cornered branches, garnished with oval crenated leaves, rough on their under side like the dead nettle, but veined on the upper side, and placed opposite. The flowers come out in whirls like those of the former sort, but are not so long nor so deep colored. They appear at the same season with the first, and continue as long in beauty. Both these species are propagated by cuttings, which should be exposed to the air long enough to harden the shoots, and planted in the beginning of July, after which they will take root very freely. They should be planted in a loamy border to an eastern aspect; covered closely with a bell or hand glass to exclude the air, and shaded from the sun. As soon as they have taken good root they should be taken up, and planted in separate pots, filled with soft loamy earth, and placed in the shade till they have taken new root. In October they must be removed into the green-house.

LEOP'ARD, *n. s.* Lat. *leo*, and *pardus*, a panther. A spotted beast of prey. See FELIS.

Look from the lion's dens, from the mountains of the *leopards*. *Cant.* iv. 8.

About this king ther ran on every part
Ful many a tame leon and *leopart*.
Chaucer. Cant. Tales.

Sheep run not half so timorous from the wolf,
Or horse or oxen from the *leopard*,
As you fly from your oft-subdued slaves. *Shakspeare.*

Before the king tame *leopards* led the way,
And troops of lions innocently play. *Dryden.*

A *leopard* is every way, in shape and actions, like a cat; his head, teeth, tongue, feet, claws, tail, all like a cat's: he boxes with his fore feet, as a cat doth her kittens; leaps at the prey, as a cat at a mouse; and will also spit much after the same manner: so that they seem to differ, just as a kite doth from an eagle. *Grew.*

LEOPARD. See FELIS.

LEOPARDALIS. See FELIS.

LEOTAUD (Vincent), a French Jesuit and mathematician, who published a work entitled Examen Quadraturæ, in 4to. 1654; in which he asserts, the impossibility of demonstrating the quadrature of the circle.

LEOTYCHIDES, king of Sparta, a celebrated general of the Greeks, who by his courage and conduct put an end to the Persian war, at the famous battle of Mycale. He afterwards fell a sacrifice to the intrigues of the Ephori, after reigning twenty-two years; A. A. C. 469.

LEOVITUS, or LEOWICQU (Cyprian), a Bohemian astronomer and astrologer, born in 1504, and descended from a noble family. He published Ephemerides, and some other works, in which he inserted predictions that alarmed great numbers in Germany; particularly that the world would come to an end in 1584. But he did not live to see his prediction falsified, as he died in 1574.

LEPANTO, GULF AND TOWN OF, are situated on the south coast of Romania, in the Morea. The former was known to the ancients as the gulf of Corinth. It extends from Patras on the west to the isthmus of Corinth east; its entrance is defended by two old castles; and it is seventy miles long. The town is of inferior consideration, surrounded by old fortifications. It was the ancient Naupactus, and is 360 miles W. S. W. of Constantinople.

LEPAS, the acorn, in zoology, a genus belonging to the order of vermes testaceæ. The animal is the triton; the shell is multivalve, unequal, fixed by a stem or sessile. There are several species, of which the most remarkable is, the

L. anatifera, consisting of five shells depressed affixed to a pedicle, and in clusters. It adheres to the bottom of ships by its pedicles. The tentacula are feathered; and gave the old English historians and naturalists the idea of a bird. They ascribed the origin of the barnacle goose to these shells.

LEPAS, the limpet. See PATELLA.

LEP'ER, *n. s.*, LEP'EROUS, or LEP'ROUS, *adj.*, LEPROS'ITY, *n. s.*, LEP'ROSY. } Fr. *lepre*; Span. and Port. *lepra*; Lat. *lepra*, *leprosus*; Greek λεπρα. A loathsome disease. A leper is a person infected with this disease. Leprosity, scaly disease. For leprosy see MEDICINE.

And whanne he had seid this, anoon the *lepre* partide awey fro him and he was clensid.
Wiclif, Mark 1.

The *leper* in whom the plague is, his cloaths shall be rent. *Lev.* xiii. 45.

It is a plague of *leprosy*. *Id.* 3.

I am no loathsome *leper*; look on me.
Shakspeare.

Upon my secure hour thy uncle stole,
With juice of cursed hebenon in a vial,
And in the porches of mine ears did pour
The *leperous* distilment. *Id. Hamlet.*

Itches, blains,
Sow all the Athenian bosoms, and their crop
Be general *leprosy*. *Id. Timon of Athens.*

If the crudities, impurities, and *leprosities* of metals were cured, they would become gold.
Bacon's Natural History.

The silly amorous sucks his death,
By drawing in a *leprous* harlot's breath.
Donne.

Our mere-learned mē; and modern wise
Taste not poor poesies ingenuities,
Being crusted with their couetous *leprosies*.
Chapman. Homer. The Battaile of Frogs and Mice. Epistle Dedicatorie.

Between the malice of my enemies and other men's mistakes, I put as great a difference as between the itch of novelty and *leprosy* of disloyalty.
King Charles.

Since she would acknowledge no difference betwixt herself and her brother Moses, every Israelite now sees his face glorious, hers *leprous*. *Bp. Hall.*

These and many more do not intend that any one grace alone is sufficient, much less any one act of one grace, proceeding from the Spirit of God, can be sufficient to wipe off our *leprosies*. *Bp. Taylor.*

Authors, upon the first entrance of the pox, looked upon it as so highly infectious, that they ran away from it as much as the Jews did from the *leprosy*. *Wiseman's Surgery*

LEPIDIUM, dittander, or pepper-wort, a genus of the siliculosæ order, and tetradynamia class of plants; natural order thirty-ninth, siliquosæ: siliculæ emarginated, cordated, and polyspermous, with the valves carinated contrary or broader than the partition. There are twenty-nine species, of which the most remarkable is,

L. latifolium, or the common dittander. It is a native of both Scotland and England. It has small, white, creeping roots, by which it multiplies very fast, and is difficult to be eradicated after it has long grown in any place. The stalks are smooth, rise two feet high, and send out many side branches. The flowers grow in close bunches towards the top of the branches, coming out from the side; they are small, and composed of four small white petals. The seeds ripen in autumn. The whole plant has a hot biting taste like pepper; and the leaves have been often used by the country people to give a relish to their viands instead of that spice, whence the plant has got the appellation of poor man's pepper. It is reckoned an antiscorbutic.

LEPIDOLITE is a mineral of a light red color, sometimes gray. Massive, and in small concretions. Lustre glistening, pearly. Cleavage single. Fracture coarse splintery. Feebly translucent. Soft. Rather sectile. Rather easily frangible. Specific gravity 2·6 to 2·8. It intumesces before the blow-pipe, and melts easily into a milk-white translucent globule. Its constituents are, according to Vauquelin, 54 silica, 0 alumina, 18 potassa, 4 fluate of lime, 3 manganese, and 1 iron. It occurs in limestone at Dalmally, and on the north side of Lochfine; on the east side of Lochleven, nearly opposite the Inn at Balachulish. It is found in many places on the Continent. On account of its beautiful color, it has been cut into snuff-boxes, but it is rather soft and greasy to the aspect.

LEPIDOPTERA, in zoology, an order of insects with four wings, covered with imbricated squamulæ. See ENTOMOLOGY.

LEPIDUS (M. Æmilius), one of the triumvirs with Anthony and Octavius. (See ROME.) He was compelled to resign by Augustus, and died in obscurity at Cerceli; A. A. C. 13.

LEPISMA, in zoology, a genus of apterous insects, the characters of which are: they have six feet formed for running; the mouth is furnished with four palpi, two of which are cetaceous and two capitated; the tail is terminated by extended bristles, and the body imbricated with scales. There are several species.

L. saccharina is an American species, so called because mostly found among sugar; but is now common in Europe. It is of a leaden color, rather inclining to that of silver, by the small silvery scales with which it is covered; in which circumstance it resembles the silver fish, especially in its under part. It is found in gardens, under boxes, and in the crevices of window-sashes in houses, where it is very common. It runs with great swiftness, and is difficult to catch. When touched, it looses part of its scales and its softness makes it easy to crush.

LEPIUM, in natural history, a genus of fossils of the harder gypsum, composed of very small particles, and of a less glittering hue. There is only one species of this genus, being one of the least valuable and most impure of the class of gypsums. It is of an extremely rude, irregular, coarse, and unequal structure; a little soft to the touch, of a very dull appearance, and of different degrees of a grayish-white. It is burnt in plaster for the coarser works; it calcines very slowly and unequally, and makes but a very coarse plaster.

LEPROSY is a foul cutaneous disease, appearing in dry, white, thin, scurvy scabs, either on the whole body, or part of it, and usually attended with a violent itching and other pains. See MEDICINE. The leprosy is of various kinds, but the Jews were particularly subject to that called elephantiasis. The Jewish law excluded all lepers from communion with mankind, without excepting even kings. And various ceremonies were ordained to be performed by them after they were cleansed, previously to their re-admission into society. See Levit. xiii. 42—59; xiv. 1—57.

LEPTODECORHOMBES, in natural history, a genus of fossils of the order of the selenitæ; consisting of ten planes, each so nearly equal to that opposite to it as very much to approach to a decahedral parallelopiped, though never truly or regularly so. There are only five known species, viz. 1. A thin, fine, pellucid, and slender-streaked kind, with transverse striæ, found in considerable quantities in the strata of clay in most parts of England, particularly near Haddington in Oxfordshire. 2. A thin, dull-looking, opaque, and slender-streaked sort, more scarce, found principally in Leicestershire and Staffordshire. 3. A thin fine-streaked species, with longitudinal striæ, found in the clay pits at Richmond, generally at great depths. This has often on its top and bottom a very elegant smaller rhomboid, described by four regular lines. 4. A rough kind, with thick transverse striæ, and a scabrous surface, very common in Leicestershire and Yorkshire. And, 5. A very short kind, with thick plates, common in the clay-pits of Northamptonshire and Yorkshire.

LEPTURA, in zoology, a genus of insects belonging to the order of coleoptera, the characters of which are these. The feelers are bristly; the elytra are attenuated towards the apex: and the thorax is somewhat cylindrical. There are several species, principally distinguished by their colors. See ENTOMOLOGY.

LEPUS, the hare, in astromony, a constellation of the southern hemisphere. See ASTRONOMY.

LEPUS, the hare, in zoology, a genus of the mammalia class of quadrupeds, and order of glires. The characters are these: they have two fore teeth in each jaw; those in the upper jaw are double, the interior ones being smallest. The fore feet have five toes each, and the hind feet four.

L. Alpinus, the mountain hare, or Alpine rabbit, has short, broad, rounded, ears; no tail; a long head, and very long whiskers, with two very long hairs above each eye: the color of the fur at the bottom is dusky, towards the ends of a bright ferruginous color; the tips white, and

intermixed are several long dusky hairs, though on first inspection the whole seems of a bright bay. The length of the animal is nine inches. This species is first seen on the Altaic chain; extends to Lake Baikal; thence to Kamtschatka; and is found in the Fox Islands: inhabiting always the middle region of the snowy mountains in the rudest places, which abound with herbs and moisture. They sometimes form burrows between the rocks, and often lodge in the crevices. They are generally found in pairs; but in cloudy weather they collect together, and lie on the rocks, and give a keen whistle, very like that of a sparrow. On the report of a gun they run into their holes, but soon come out again. A company of them, towards autumn, collect together vast heaps of herbs and grasses, nicely dried, which they place either beneath the over-hanging rocks, or between the chasms, or round the trunks of trees. In many places the herbs appear scattered, as if to be dried in the sun. The heaps are formed of round or conoid ricks; and are of various sizes, according to the number of the society employed in forming them. They are sometimes of a man's height, and many feet in diameter. Without this provision of winter's stock they would perish during the storms of snow. These ricks occasion fertility amidst the rocks; for the reliques, mixed with the dung of the animal, rot in the barren chasms, and form a soil productive of vegetables. These ricks are also of great service to those people who hunt sables; for their horses would often perish if they had not the provisions of these little industrious animals to support them; which are easily to be discovered. The people of Jakutz feed both their horses and cattle with the reliques of the winter stock of these hares. These animals are neglected as a food by mankind; but are the prey of sables and the Siberian weasels. They are likewise greatly infested with a sort of gadfly, which lodges its egg in their skin in August and September, and thus often proves destructive to them.

L. Americanus, the American hare, or hedge coney, has the ears tipt with gray: the upper part of the tail is black, the lower white; the neck and body are mixed with cinereous, rust color, and black; the legs are of a pale ferruginous color, and the belly is white; the fore legs are shorter, and the hind legs longer, in proportion, than those of the common hare. It is eighteen inches long, and weighs from 3lbs. to 4½lbs. This species inhabits all parts of North America. In New Jersey, and the states south of it, it retains its color the whole year. In New England, Canada, and about Hudson's Bay, at the approach of winter, it changes its short summer's fur for one very long, silky, and silvery, even to the roots of the hairs; the edges of the ears only preserving their color. These hares are then in the highest season for the table; and are of vast use to those who winter in Hudson's Bay, where they are taken in great abundance in springes made of brass wire, to which they are led by a hedge made for that purpose, with holes left before the snares for the hares to pass through. They breed once or twice a year, and have from five to seven at a time. They do not migrate, but always haunt the same places; neither do they burrow, but lodge under fallen timber, and in hollow trees. They breed in the grass; but in spring shelter their young in the trees, to which they also run when pursued; from which, in the southern states, the hunters force them by a hooked stick, or by making a fire, and driving them out by the smoke.

L. Capensis, the Cape hare, has long ears dilated in the middle; the outsides naked, and of a rose color, the insides and edges covered with short gray hairs: the crown and back are of a dusky color, mixed with tawny; the cheeks and sides cinereous, the breast, belly, and legs, rust-colored; the tail is bushy, carried upwards, and of a pale ferruginous color. This species is about the size of a rabbit. It inhabits the country three days' journey north of the Cape of Good Hope; where it is called the mountain hare, for it lives only in the rocky mountains, and does not burrow. It is difficult to shoot it, as on the sight of any one it instantly runs into the fissures of the rocks.

L. cuniculus, the common rabbit, has a very short tail, and naked ears. The color of the fur, in a wild state, is brown; the tail black above, white beneath: in a tame state the general color varies, and the eyes are of a fine red. The original native country of this species is Spain, where they were formerly taken with ferrets, as is now practised here. They love a temperate or warm climate, and are incapable of bearing great cold: In Sweden they are kept in houses. They abound in Britain. Their furs make a considerable article in the hat manufactories; and of late such part of the fur as is unfit for that purpose has been found as good as feathers for stuffing beds and bolsters. Numbers of the skins are annually exported to China. The English counties most noted for rabbits are Lincolnshire, Norfolk, and Cambridgeshire. Methwold is famous for the best kind for the table; the soil there is sandy, and full of mosses and carex grass. Rabbits swarm in the Orkneys, where their skins form a considerable article of commerce. They are in general gray, those which inhabit the hills grow hoary in winter. Kerr enumerates five varieties, viz. the wild rabbit; the black, the white, the pied, and the silvery tame rabbit. The last was formerly in grea esteem, and their skins were sold at 3*s*. a piece, for lining clothes; but since the introduction of more elegant furs their price has fallen to 6*d*. The Sunk Island in the Humber was once famous for a mouse-colored sort, which has since been extirpated on account of the injury they did to the banks by burrowing. The fecundity of the rabbit is greater than that of the hare They breed seven times in the year, and the female sometimes brings eight young ones at a time. Supposing this to happen regularly for four years, the number of rabbits from a single pair will amount to 1,274,840. From this we might apprehend being overstocked with these animals, but a great number of enemies prevent their increase; not only men, but birds and beasts of prey making dreadful havoc among them. Notwithstanding all these enemies, we are told by Pliny and Strabo that they once proved such a nuisance to the inhabitants of the

Balearic Islands that they were obliged to implore the assistance of a military force from Augustus to exterminate them. They devour herbs of all kinds, roots, grain, fruits, &c. They are in a condition for generating at the end of six months; the female is almost constantly in season; goes with young about thirty days, and brings forth from four to eight at a litter. A few days before littering she digs a hole in the earth in a zig-zag form: the bottom of this hole she enlarges every way, and then pulls off a great quantity of hair from her belly, of which she makes a kind of bed for her young. During the two first days after birth she never leaves them but when pressed with hunger, and then she eats quickly and returns; and in this manner she suckles and attends her young for six weeks. All this time both the hole and the young are concealed from the male, sometimes, when the female goes out, she, to deceive the male, fills up the mouth of the hole with earth mixed with her own urine. But when the young ones begin to come to the mouth of the hole, and to eat such herbs as the mother brings to them, the father seems to know them; he takes them betwixt his paws, smooths their hair, and caresses them with great fondness.

L. niger, the black hare, has a very short tail; the fur is entirely black, or very dark tawny, all the year. It is much larger than the common hare. Mr. Muller says he once saw two black hares in Siberia, of a wonderfully fine gloss, and full as black as jet. Near Cason was taken another, in the middle of winter 1768. In the south and west provinces of Russia is a mixed breed of hares, between this and the common species. It sustains, during winter only, a partial loss of color; the sides and more exposed parts of the ears and legs in that season becoming white, the other parts retaining their colors. This variety is unknown beyond the Uralian chain. They are called by the Russians russacks; they take them in great numbers in snares, and export their skins to England and other places. The Russians and Tartars, like the ancient Britons, esteem the flesh of hares impure.

L. Ogotona, the Ogotona hare, has oblong oval ears, a little pointed, with short whiskers, and hairs long and smooth: the color of those on the body is brown at the roots, light gray in the middle, and white at the ends, intermixed with a few dusky hairs; there is a yellowish spot on the nose, and a space about the rump of the same color: the outside of the limbs is yellowish; the belly is white. The length is about six inches: weight of the male from 6½ to 7½ ozs.; of the female, from 4 to 4¾ozs. This species inhabits only the country beyond lake Baikal, and thence is common in all parts of the Mongolian desert, and the vast desert of Gobee, which extends on the back of China and Thibet, even to India. They frequent the valleys and rocky mountains in vast abundance. They live under heaps of stones, or burrow in the sandy soil, leaving two or three entrances, which all run obliquely. They make a nest of soft grass; and the old females make for security a number of burrows near each other, that they may retreat from one to the other. They wander out chiefly in the night. Their voice is excessively shrill, and they emit a note like that of a sparrow, twice or thrice repeated, but very easily to be distinguished from that of the Alpine rabbit. They live principally on the tender bark of a sort of service, and the dwarf elm; in spring on various herbs. Before the approach of severe cold they collect great quantities of herbs, and fill their holes with them, which the inhabitants consider as a sure sign of change of weather. Like the Alpine hares they form in autumn ricks of hay of a hemispherical shape, about a foot high and wide; in spring these disappear, and nothing but the relics are seen. They copulate in spring, and about the end of June their young are full grown. They are the prey of hawks, magpies, and owls; but the ermine and fitchet make most havock among them.

L. pusillus, the calling hare, with a long head, thickly covered with fur even to the tip of the nose; numerous hairs in the whiskers; ears large and triangular; legs very short, and the soles furred beneath; its whole coat is very soft long, and smooth, with a thick, long, fine, down beneath, of a brownish lead color; the hairs are of the same color, towards the ends of a light gray, and tipt with black; the lower part of the body is hoary; the sides and ends of the fur are yellowish. The length of the animal is about six inches; weighs from 3½ to 4½ozs.; but in winter scarcely 2½ozs. This species inhabits the south-east parts of Russia, and about all the ridges of hills extending south from the Uralian chain; also about the Irtish, and in the west part of the Altaic chain; but no where in the east beyond the Oby. They delight in sunny valleys and green hills, especially near woods, to which they run on any alarm. They live so concealed as rarely to be seen: but are often taken in winter in the snares laid for the ermines. About the Volga they are called semlanoi Saetshik, or ground hares: the Tartars, from their voice, style them tschotschot, or ittsitskan, or the barking mouse: the Kalmucs call them rusla. They choose for their habitation a dry spot, amidst bushes covered with a firm sod, prefering the western sides of the hills. In these they burrow, leaving a very small hole for the entrance, and forming long galleries for their nests. Those of the old ones are numerous and intricate; so that their places would be scarcely known but for their excrements; and even these they drop, by instinct, under some bush, lest their dwelling should be discovered. Their voice alone betrays their abode; it is like the piping of a quail, but deeper, and so loud as to be heard at the distance of half a German mile. It is repeated at just intervals, three, four, and often six times. The voice is emitted at night and morning; never in winter or bad weather. It is common to both sexes; but the female is silent for some time after parturition, which is about the beginning of May N. S. She brings forth six at a time, blind and naked; which she suckles often, and covers carefully with the materials of her nest. These harmless animals never go from their holes. They feed and make their excursions by night: they are easily tamed, and scarcely bite when handled. The males in con-

finement attack one another, and express their anger by a grunting noise.

L. timidus, the common hare, has a short tail; the points of the ears are black; the upper lip is divided up to the nostrils; the length of the body is generally about a foot and a half; and the hair is reddish, interspersed with white. It is naturally a timid animal. It sleeps during the day, and feeds, copulates, &c. in the night. In a moon-light evening a number of them are sometimes seen sporting together, leaping, and pursuing each other: but the least motion, the falling of a leaf, alarms them; and then they all run off separately, each taking a different route. They are extremely swift; their motion is a kind of gallop, or a succession of quick leaps. When pursued, they always take to the higher grounds: as their fore feet are much shorter than the hind ones, they run with more ease up hill than down hill. The hare is endowed with all those instincts which are necessary for its preservation. In winter he chooses a form exposed to the south, and in summer to the north. He conceals himself among vegetables of his own color. Mr. Fouilloux says, that he observed a hare, as soon as she heard the sound of the horn, or the noise of the dogs, although a mile distant, rise from her seat, swim across a rivulet, then lie down among the bushes, and thus evade the scent of the dogs. After being chased for two hours, a hare will sometimes push another from its form, and lie down in it himself. When hard pressed, the hare will mingle with a flock of sheep, run up an old wall and conceal himself among the grass on the top of it, or cross a river several times at small distances. He never runs against the wind, or straight forward; but constantly doubles, to make the dogs lose their scent. A hare, although ever so often pursued by the dogs, seldom leaves the place where she was brought forth, or even the form in which she usually sits. It is common to find them in the same place next day, after being long and keenly chased the day before. The females are more gross than the males, and have less strength and agility; they are likewise more timid, and never allow the dogs to approach so near their form before rising as the males. They likewise practise more arts, and double more frequently than the males. Hares are found almost over every climate; and, notwithstanding they are every where hunted, the species never diminishes. They propagate in their first year; the females go with young about thirty days, and produce four or five at a time; as soon as they have brought forth they again admit the embraces of the male; so that they may be said to be always pregnant. The eyes of the young are open at birth; the mother suckles them about twenty days, after which they separate from her and procure their own food. The young live solitary, and make forms about thirty paces distant from each other. On finding a young hare, therefore, one may almost be certain of finding several others within a small distance. The hare is not so savage as his manners would indicate. He is gentle, and is susceptible of a kind of education. He is pretty easily tamed, and will even show a kind of attachment to his benefactors; but it is not so strong as to engage him to become altogether domestic; for although taken very young, and brought up in the house, he no sooner arrives at a certain age than he takes the first opportunity of recovering his liberty, and flying to the fields. He lives about seven or eight years; and feeds upon grass and other vegetables. His flesh is excellent food. Hares are very subject to fleas. Linnæus informs us, that the Dalecarlians make a sort of cloth, called felt, of the fur; which, by attracting these insects, preserves the wearer from their troublesome attacks. The hair makes a great article in the hat manufacture; and a great deal is annually imported from Russia and Siberia. The hare was reckoned a great delicacy among the Romans; but the Britons thought it impious even to taste it; yet they bred them, either for the chase, or for the purposes of superstition. Boadicea, immediately before her last conflict with the Romans, let loose a hare she had concealed in her bosom, which, taking what was deemed a fortunate course, animated the soldiers by the omen of an easy victory over a timid enemy. Mr. Kerr mentions two varieties, viz. the cornutus, or horned hare; and the melinus, or yellow hare. The former he suspects to be fabulous.

L. variabilis, the varying hare of Pallas, has soft hair, which in summer is gray, with a slight mixture of black and tawny; the ears are shorter, and the legs more slender than those of the common hare; the tail is entirely white, even in summer; and the feet are most closely and warmly furred. In winter the whole hair changes to a snowy whiteness, except the tips and edges of the ears, which remain black, as well as the soles of the feet, on which, in Siberia, the fur is doubly thick, and of a yellow color. It is less than the common species. These animals inhabit the highest Scottish Alps, Norway, Lapland, Russia, Siberia, Kamtschatka, the banks of the Wolga, and Hudson's Bay. In Scotland they keep on the tops of the highest hills, and never descend into the vales; nor do they ever mix with the common hare, though these abound in the neighbourhood. They do not run fast; and are apt to take shelter in clefts of rocks. They are easily tamed, and are very frolicsome. They are fond of honey and caraway comfits. They change their color in September; resume their gray coat in April; and in the extreme cold of Greenland are always white. Both these and the common hares abound in Siberia, on the Wolga, and in the Orenburg government. The one never changes color: the other, a native of the same place, constantly assumes the whiteness of the snow during winter, not only in the open air and in a state of liberty, but, as experiment has proved, even when kept tame, and preserved in houses in the stove-warmed apartments, in which it experiences the same changes of color as if it had dwelt on the snowy plains. —They collect together, and are seen in troops of 500 or 600, migrating in spring, and returning in autumn, in search of subsistence. In winter they quit the lofty hills, the south boundaries of Siberia, and seek the plains and wooded parts, where vegetables abound; and in spring seek again the mountainous quarters. The flesh

of the variable hare, in its white state, is excessively insipid. There have been several instances of what may be called monsters in this species, horned hares, having excrescences growing out of their heads, like the horns of the roe-buck. These instances have occurred in Saxony, in Denmark, and near Astracan.

L. viscacia, the Peruvian hare; the viscachos, or vizcacha, mentioned by Acosta and Feuille, in their accounts of Peru, is reckoned by Mr. Pennant nearly allied to the Cape hare. Feuille says, they inhabit the colder parts of Peru. Their hair is very soft, and of a mouse color; the tail is pretty long, and turns up; and the ears and whiskers are like those of the common rabbit. In the time of the Incas the hair was spun, and woven into cloth, which was so fine as to be used only by the nobility.

LERCHEA, in botany, a genus of the pentandria order, and monadelphia class of plants: CAL. five-toothed: COR. funnel-shaped and quinquefid; there are five antheræ sitting on the tube of the germ; there is one style: CAPS. trilocular and polyspermous.

LERE, *n.s.* & *v. a.* Sax. læpe; Belg. *leere;* Goth. *lær*. Doctrine; lesson; lore. As a verb, to learn a lesson. Obsolete.

But all ther horne harneis and other gere
Was in sute according everichone,
As ye have herd the forsaid trumpets were,
And by seming they were nothing to *lere*
And ther guiding they did so manirly. *Chaucer.*

The kid, pitying his heaviness,
Asked the cause of his great distress;
And also who, and whence, that he were,
Though he had well ycond his *lere,*
Thus melled his talk with many a teare.
Spenser.

LERIDA, the Ilerda of Lucan, a large town of Catalonia, Spain, on the right bank of the Segre, and a bishop's see. It forms a long triangle, and is situated on the slope of a hill, but the streets are crooked, narrow, and ill paved, except next the river, where there is a good quay. The university of Lerida was formerly in great repute, but was suppressed by Philip V. At present, however, here is a college supported by the bishop, and a school for young ladies, conducted by Franciscan nuns. On the top of the hill are the remains of a palace of the kings of Arragon. The modern cathedral has been erected in the town, but the original one stood on this spot. The trade of the place is confined to the exportation of the products of the neighbourhood, which is very fertile, and beautifully intersected with canals. Lerida was taken by the Goths and Moors, and was for some time the capital of a kingdom under the latter. Population 17,000. Sixty-nine miles east by south of Saragossa, and ninety west by north of Barcelona.

LERINS, THE, two small islands of the Mediterranean, on the south-east coast of France, and belonging to the department of the Var. The larger is called St. Marguerite, the other St. Honorat.

LERMA, an ancient town of Spain, having the title of a duchy, in the province of Burgos, and standing on the river Arlanza. It has a magnificent castle, built by the duke of Lerma, minister of Philip III. Twenty-three miles south of Burgos.

LERNA, in ancient geography, a town, territory, or lake, of Argolis, situated on the confines of Laconica. Some suppose it to be a town of Laconica, on the borders of Argolis. Pausanias places it near Temenium, on the sea; without adding whether it is a town, river, or lake. According to Strabo it is a lake, situated between the territories of Argos and Mycene. If there was a town of this name it seems to have stood towards the sea, and the lake to have been more inland. Mela calls it a well known town on the Sinus Argolicus; and Statius, by Lerna, seems to mean something more than a lake. The lake, however, is that in which, according to Strabo, was the fabled Hydra of Hercules, and therefore called Lerna Anguifera. Statius. Mr. Lempriere calls it 'a country of Argolis celebrated for a grove and a lake, into which the Danaides threw the heads of their husbands.'

LERNÆA, a festival celebrated at Lerna, in honor of Proserpina, Ceres, and Bacchus.

LERNEA, in zoology, a genus of insects of the order of vermes mollusca, the characters of which are, that the body fixes itself by its tentacula, is oblong, and rather tapering; there are two ovaries like tails, and the tentacula are shaped like arms.

1. L. asellina has a lunated body and cordated thorax, and inhabits the gills of the codfish and ling of the northern ocean.

2. L. cyprinacea has four tentacula, two of which are lunulated at the top. It is about half an inch long, and of the thickness of a small straw: the body is rounded, of a pale grayish white, glossy on the surface, and somewhat pellucid: it is thrust out of a kind of coat or sheath, as it were at the base, which is of a white color and a thick skin: towards the other extremity of the body there are three obtuse tubercles, one of which is much larger than the rest; the mouth is situated in the anterior part, and near it there are two soft and fleshy processes; and near these there is also on each side another soft process, which is lunated at the extremity. It is found on the sides of the bream, carp, and roach, in many of our ponds and rivers, in great abundance.

3. L. salmonea, the salmon louse, has an ovated body, cordated thorax, and two linear arms approaching nearly to each other.

LERNICA, in ancient geography, a city of Cyprus, as appears from its ruins; but now only a large village, seated on the south coast, where there is a good road, and a small fort for its defence.

LERNUTIUS (John), a Latin poet of the sixteenth century, born at Bruges. His works were published by Elzevir, under this title: Jani Lernutii Basia, Ocelli, et alia Poemata. He died in 1619.

LERO, in ancient geography, one of the two small islands in the Mediterranean opposite to Antipolis, and half a mile distant from it on the south. Now called St. Margaret, over against Antibes.

LERWICK, a celebrated sea-port town of Shetland, situated in the island called Mainland.

At the north end there is a regular fort, which was built in the reign of Charles II., who, during his first war with the Dutch, sent over a garrison of 300 men under colonel William Sinclair, a native of Shetland; with Milne, an architect, to build the fort, and twenty-five or thirty cannons to plant upon it for protection of the country. A house was built within the fort to lodge 00 men. When the garrison removed they carried off the cannon; and in the Dutch war, which followed soon after, a Dutch frigate came into Bressay Sound, and burnt the house in the fort, and several others of the best in the town. It is usually garrisoned by a party of invalids, and serves to protect the north entry of the harbour. About a mile and a half from the town are the remains of two ancient Danish castles. The parish extends about six miles along the coast, but at no point is more than one in breadth. The surface of the ground is for the most part rocky and mountainous. Immediately upon the shore, however, there are many very fine arable fields, the soil of which, though light and sandy, possesses considerable fertility. Lerwick is governed by a bailie.

LESBIANS, the ancient people of Lesbos. They were so debauched and dissipated that Lesbian was often used to signify debauchery and extravagance.

LESBONAX, a philosopher of Mytilene, who flourished in the first century. Two of his orations are inserted in Aldus's edition of Ancient Orators; and his treatise De Figuris Grammaticis was printed at Leyden in 1739.

LESBOS, or Mytilené, an island in the Archipelago, to the south-west of the gulf of Adramyttium, now called Adramiti, in lat. 39° 12′ N., and long. 23° 50′ E. The Turks are the masters of it, and, as usual, the monuments of antiquity are fast crumbling to the dust, the original inhabitants disappearing, and even vegetation itself seeming to wither. When Lesbos was free it inspired Alceus and Sappho, and the genius of music and lyric poetry was peculiar to the Lesbians, who had so refined upon the pleasures of the body and the mind, that they had fallen into effeminate softness. That fine climate, to the influence of which Hippocrates attributed the genius of the inhabitants, must have been altered through want of the cultivation of the soil; for we are told that there are now whole villages inhabited by leprous persons.

The native richness of the land, however, still struggles with some success against the stupid indifference of its masters. Woods of olive trees overshadow part of the island, without requiring any cultivation: they surround the bay, which from these woods has taken the name of the bay or port of the Olive trees, and is capable of containing a whole fleet. It lies on the south-eastern side of the island. There is also another extensive bay or lake in the centre of the island. Lesbos still produces excellent figs, and, if we cannot now find the wine once celebrated in the songs of Horace and Catullus, it is because they know not, or do not care, how to prepare it; the grapes are still delicious; as are also some other fruits. There are fine pasturages, forests abounding in wood for building, and fertile plains. The fisheries, would be sufficient for the revival of industry, commerce, and prosperity, if there were a free and active people to take advantage of such resources.

Although destitute of rivers, the soil of Mytilené is watered by too many springs to be dry; and agriculture is so easy here, that it is still almost the only occupation and means of subsistence for the inhabitants. Their dock-yards, which derive their materials for building from the forests in the neighbourhood, were of late very nearly abandoned.

Travellers differ as to the population of this island. According to Olivier there are still 20,000 Greeks, and as many Turks; but others do not reckon them so many. Every Greek, from the age of seven years, is condemned to the caratch, or capitation tax, imposed by the Turks upon Christians. The island is divided into two dioceses; that of Methymné extends over the southern part, and derives its appellation from the ancient city of that name, now a poor village called Molivo. The diocese of Mytilené has for its chief place the capital of the island, Castro, which takes its name from the strong fort built near it; it occupies the site of the ancient Mytilené, of which there are no remains, except a few fragments of sculpture and architecture, which are said to be very fine, but travellers have given us no particular account of them. The capital contains about 6000 inhabitants, two-thirds of whom are Turks, besides about forty Jewish families.

The ancient custom of this island bestows the family inheritance with the paternal mansion upon the eldest son; the bishop of Mytilené has, however, recently modified in his diocese this usage, more singular than it is useful, and which originated in the time when the men were devoted to maritime occupations.

LESCAILLE (Katharine), surnamed the Sappho of Holland, and the tenth muse, died in 1711. A collection of her poems has been printed, in which are the tragedies of Genseric, Wenceslaus, Herod and Mariamne, Hercules and Dejanira, Nicomedes, Ariadne, Cassandra, &c.

LESGHISTAN, a narrow but long slip of territory in the Caucasus, forming the north-eastern frontier of Georgia. To the north it has Circassia, and to the east Daghestan. It is chiefly composed of the loftiest mountains in the great range of the Caucasus, on the top of which many of the houses of the inhabitants are built, and along the edge of some of the most tremendous precipices. The Lesghis consist almost entirely of hordes of robbers of the most desperate character. Secure in their inaccessible abodes, they set all laws and all attack at defiance, and carry off at pleasure the flocks, and even the inhabitants of the neighbouring regions on their swift coursers. Shah Nadir failed to subdue them; and it is a Persian proverb, that no prince who is not mad will make war against them. They wear a light Tartar dress, and go armed with a gun, pistols, dagger, and sabre. They carry in their expeditions nothing but a small quantity of provisions in bottles of goat skins; when reduced to the last extremity they have been known to

cast lots, and sacrifice one of their company to satisfy the hunger of the rest. It is also common for them to hire themselves out to fight the battles of their neighbours, at the rate of twelve roubles for a campaign of three months. Their women are said to be of superior beauty, and to bring a higher price in the market of Constantinople than those belonging to any other of these tribes. The Mahommedan is the prevailing religion; but some of them are still Pagans, and adore the sun, moon, trees, and rivers. There is a remarkable diversity in their language, which is said to have eight very distinct dialects.

LESIGNAU, a small town in the south of France, department of the Aude. Population 1500. Eleven miles west of Narbonne.

LESINA, or LEZINA, the ancient Pharos or Pharia, an island in the Adriatic, on the south coást of Austrian Dalmatia, lying between the islands of Brazzola, Durzola, and Sabioncello. It is about sixty-five miles long, and fourteen broad, and is fruitful in wine, olives, and rosemary, of which a distilled liquor is produced. Population 14,000.

LESKEARD, a large and well built town of Cornwall, which has sent two members to parliament since the 23d of Edward I. It had formerly a castle, now in ruins. It has the greatest market in Cornwall. It was first incorporated by Edward earl of Cornwall; afterwards by Richard king of the Romans, and had privileges from Edward the Black Prince. Queen Elizabeth granted it a charter; by which it was to have a mayor and burgesses, with power to purchase lands, &c. It has a handsome town-hall built on stone pillars, with a turret on it, and a clock with four dials that cost nearly £200. It has a large church, three meeting-houses, an eminent free-school, and a curious conduit. The adjacent commons feed multitudes of sheep. It has a market on Saturday, and a very great trade in the various branches of the leather manufacture. Spinning has been of late encouraged by the clothiers of Devonshire. On the hills of Leskeard are many tin-mines; the metal obtained from which is cast into blocks at the blowing-houses, and, this being one of the stannary towns, it is sent hither to be coined.

LESLIE (Charles), an Irish divine, and a zealous protestant; who, being attached to the house of Stuart, left Ireland, and went to the pretender at Bar le Duc, and resided with him till near the time of his death; endeavouring to convert him, but without effect. He died in 1722. His principal works are, 1. A Short and Easy Method with the Deists. 2. A Short and Easy Method with the Jews. 3. The Snake in the Grass. 4. Hereditary Right to the Crown of England asserted. 5. The Socinian controversy discussed. 6. The Rehearsals, a periodical paper in 6 vols. large 12mo. 7. The Charge of Socinianism against Dr. Tillotson considered; and many others. All his theological pieces, except the last, were collected and published by himself, in 2 vols. folio.

LESLIE (John), bishop of Ross in Scotland, the son of Gavin Leslie, an eminent lawyer, was born in 1526, and educated at the university of Aberdeen; of which diocese he was made official, when but a youth. He was soon after created LL. D.; but, being peculiarly attached to the study of divinity, he entered into orders, and became priest of Une. When the reformation began to spread in Scotland, Dr. Leslie, in 1560, distinguished himself at Edinburgh as a principal advocate for the Romish church, and was afterwards deputed by the chief nobility of that religion, to condole with Mary queen of Scots on the death of her husband the king of France, and to invite her to return to her native dominions. Accordingly, they embarked together at Calais, in 1561, and landed at Leith. She immediately made him one of her privy council, and a senator of the college of justice. In 1564 he was made abbot of Lindores; and, on the death of Sinclair, was promoted to the bishopric of Ross. The influence derived from these accumulated honors he exerted for the good of his country. To him Scotland is indebted for the publication of its laws, commonly called The Black Acts of Parliament, from the Saxon character in which they were printed. At his desire the revision and collection of them were committed to the great officers of the crown. In 1568 queen Mary having fled to England for refuge, and being detained a prisoner, queen Elizabeth appointed commissioners at York to examine into the dispute between Mary and her subjects. These commissioners were met by others from the queen of Scots. The bishop of Ross was of the number, and pleaded the cause of his royal mistress with great energy, though without success. Mary, disappointed in her expectations from the conference at York, sent the bishop ambassador to Elizabeth, who paid little attention to his complaints. He then began to negociate a marriage between his royal mistress and the duke of Norfolk; which negociation proved fatal to the duke, and was the cause of Leslie's being sent to the Tower. In 1573 he was banished the kingdom, and retired to Holland. The two following years he spent in fruitless endeavours, to engage the powers of Europe to espouse the cause of his queen. His last application was to the pope; but the power of the heretic Elizabeth had no less weight with his holiness than with the other Roman Catholic princes of Europe. Finding all his personal applications ineffectual, he had recourse to his pen in queen Mary's vindication; but Elizabeth's ultima ratio regum was too potent for all his arguments. Bishop Leslie, during his exile, was made coadjutor to the archbishop of Rouen. He was at Brussels when he received the account of queen Mary's execution; and immediately entered the convent of Guirtemberg near that city, where he died in 1596. During the long captivity of Mary he wrote his History of Scotland, and other works. His knowledge and judgment as an historian are equally to be recommended. His other works are, 1. Afflicti Animi Consolationes, &c., composed for the consolation of the captive queen. 2. De Origine, Morbis, et Gestis Scotorum. 3. De Titulo et Jure serenissimæ Mariæ Scotorum reginæ, quo regni Angliæ successionem sibi justé vindicat. 4. Parænesis ad Anglos et Scotos. 5. De Illust. Fœminarum in republ. administranda, &c. 6. Oratio ad reginam Elizabetham pro Libertate

Impetranda. 7. Parænesis ad Nobilitatem Populumque Scoticum. 8. An Account of his Proceedings during his Embassy in England from 1568 to 1572; MS. Oxon. 9. Apology for the Bishop of Ross, concerning the Duke of Norfolk; MS. Oxon. 10. Several Letters, MSS.

LESLIE (sir John), a distinguished Scotch chemist, mathematician, and natural philosopher, professor of natural philosophy in the University of Edinburgh, author of numerous scientific works of great value. Among them are, An Inquiry into the Nature and Propagation of Heat; Elements of Geometry, Geometrical Analysis, and Plane Trigonometry; Account of Experiments and Instruments depending on the Relation of Air to Heat and Moisture; Philosophy of Arithmetic; and various papers in scientific journals. He has likewise invented several curious and valuable philosophical instruments. His differential thermometer is an important acquisition to physics. His election to the professorship, for which he was a candidate, did not succeed without a violent altercation between the members of the University, and some of the divines of the church of Scotland, who opposed Leslie on account, as they alleged, of his being a sceptic in religious matters. Leslie was one of the contributors to the Edinburgh Review, and the Supplement to the Encyclopædia Britannica. The author of Peter's Letters says: "He (Leslie) is a very fat, heavy figure of a man, without much more appearance of strength than of activity; and yet by no means a slothful looking person. His face is one which, at first sight, you would pronounce to be merely a coarse one, but in which, once informed to whom it belongs, you are at no loss to discover a thousand marks of vigorous intellect, and fancy too. Of this last quality, indeed, his eyes are, at times, full to overflowing. In the midst of the sombre gravity of his usual look, there are always little flashes of enthusiasm breaking through the cloud; and, in this respect, he forms a striking contrast to the calm, tranquil uniformity of Playfair's physiognomy and deportment." He died on the 3rd of November, 1833, in the sixty-sixth year of his age.

LESS, *adj.*, *n. s.* & *adv.*
LESS'EN, *v. a.* & *v. n.*
LESS'ER, *adj.* & *adv.*
Sax. leaſ. Comparative of little; not so much; in a lower or smaller degree: to lessen is to make smaller or less; diminish; degrade; deprive of dimensions, power, dignity, or esteem; to grow less; shrink: lesser, 'a barbarous corruption of less.'

Who seeks
To *lessen* thee, against his purpose serves
To manifest the more thy might. *Milton.*

All government may be esteemed to grow strong or weak, as the general opinion in those that govern is seen to *lessen* or increase. *Temple.*

Yet could he not his closing eyes withdraw,
Though *less* and *less* of Emily he saw. *Dryden.*

The mountains, and higher parts of the earth, grow *lesser* and *lesser* from age to age: sometimes the roots of them are weakened by subterraneous fires, and sometimes tumbled by earthquakes into caverns that are under them. *Burnet.*

'Tis *less* to conquer, than to make wars cease,
And, without fighting, awe the world to peace. *Halifax.*

Company *lessens* the shame of vice by sharing it, and abates the torrent of a common odium by driving it into many channels. *South.*

This thirst after fame betrays him into such indecencies as are *lessening* to his reputation, and is looked upon as a weakness in the greatest characters. *Addison's Spectator.*

The *less* they themselves want from others, they will be *less* careful to supply the necessities of the indigent. *Smalridge.*

Their learning lay chiefly in flourish; they were not much wiser than the *less* pretending multitude. *Collier on Pride.*

Any heat promotes the ascent of mineral matter, but more especially of that which is subtile, and is consequently moveable more easily, and with a *lesser* power. *Woodward.*

St. Paul chose to magnify his office, when ill men conspired to *lessen* it. *Atterbury's Sermons.*

Though charity alone will not make one happy in the other world, yet it shall *lessen* his punishment. *Calamy's Sermons.*

The larger here, and there the *lesser* lambs,
The new-fallen young herd bleating for their dams. *Pope.*

Happy, and happy still, she might have proved,
Were she *less* beautiful, or *less* beloved. *Id.*

Who builds on *less* than an immortal base,
Fond as he seems, condemns his joys to death. *Young.*

The poor, inured to drudgery and distress,
Act without aim, think little, and feel *less*,
And no where, but in feigned Arcadian scenes,
Taste happiness, or know what pleasure means. *Cowper.*

An unnatural parent is a character that raises not only disapprobation but horror; nor *less* odious is an undutiful child: indeed it is not easy to determine which of the two is the more detestable. *Beattie.*

Prepared and spread his slender stock;
And to the monarch and his men
The whole or portion offered then,
With far *less* of inquietude
Than courtiers at a banquet would. *Byron.*

LES'SON, *n. s.* & *v. n.* Belg. *lesse*; Fr. *leçon*; Lat. *lectio*. See LECTION. Any thing read or pronounced before a teacher; precepts; lecture; opinion inculcated; a portion of Scripture read in divine service: as a verb, to teach; instruct.

Be not jealous over the wife of thy bosom, and teach her not an evil *lesson* against thyself. *Ecclus.* ix. 1.

This day's ensample hath this *lesson* dear
Deep written in my heart with iron pen,
That bliss may not abide in state of mortal men. *Faerie Queene.*

Notwithstanding so eminent properties, whereof *lessons* are happily destitute; yet, *lessons* being free from some inconveniencies whereunto sermons are most subject, they may, in this respect, no less take, than in other they must give the hand which betokeneth pre-eminence. *Hooker.*

Even in kind love, I do conjure thee
To *lesson* me.
Shakspeare. Two Gentlemen of Verona.

Well hast thou *lessoned* us, this shall we do. *Shakspeare.*

Those good laws were like good *lessons* set for a

flute out of tune; of which *lessons* little use can be made, till the flute be made fit to be played on.
Davies on Ireland.

The pleasance of numbers is, that rudeness and barbarism might the better taste and digest the *lessons* of civility. *Peacham.*

I but repeat that *lesson*
Which I have learned from thee.
Denham's Sophy.

She would give her a *lesson* for walking so late, that should make her keep within doors for one fortnight. *Sidney.*

Children should be seasoned betimes, and *lessoned* into a contempt and detestation of this vice.
L'Estrange's Fables.

Meditation here
May think down hours to moments. Here the heart
May give a useful *lesson* to the head,
And Learning wiser grow without his books.
Cowper.

What were we,
If Brutus had not lived? He died in giving
Rome liberty, but left a deathless *lesson*—
A name which is a virtue, and a soul
Which multiplies itself throughout all time,
When wicked men wax mighty, and a state
Turns servile. *Byron.*

LESSONS, among ecclesiastical writers. In the ancient church reading the Scriptures was part of the service of the catechumens; at which all persons were allowed to be present, to obtain instruction. The church of England, in the choice of lessons, proceeds as follows: for the first lesson, on ordinary days, she directs to begin at the beginning of the year with Genesis, and so continue on, till the books of the Old Testament are read over; only omitting the Chronicles, which are for the most part the same with the books of Samuel and Kings, and other particular chapters in other books, because they contain either names of persons, or places, or other matters less profitable to ordinary readers. The course of the first lessons for Sundays is regulated after a different manner. From Advent to Septuagesima Sunday some particular chapters of Isaiah are appointed to be read, because that book contains the clearest prophecies concerning Christ. Upon Septuagesima Sunday Genesis is begun, because that book, which treats of the fall of man, and the severe judgment of God inflicted on the world for sin, best suits with a time of repentance and mortification. After Genesis, follow chapters out of the books of the Old Testament, as they lie in order; only on festival Sundays, such as Easter, Whitsunday, &c., the particular history relating to these days is appointed to be read; and on the saints' days the church appoints lessons out of the Proverbs, Ecclesiastes, Ecclesiasticus, &c., as containing excellent instructions for the conduct of life. As to the second lessons, the church observes the same course both on Sundays and week days; reading the gospels and Acts of the Apostles in the morning, and the Epistles in the evening, in the order they stand in the New Testament: excepting on saints' days and holy days, when such lessons are appointed as either explain the mystery, relate the history, or enforce the example.

LES'SOR, *n. s.* From lease. He who disposes of land or other property by lease.

Lords of the world have but for life their lease.
And that too, if the *lessor* please, must cease.
Denham.

If he demises the glebe to a layman, the tenant must pay the small tithes to the vicar, and the great tithes to the *lessor*. *Ayliffe's Parergon.*

A lease which is only voidable, and not absolutely void, must be made void by the *lessor* by re-entry.
Tomlin.

LEST, *conj.* Sax. lœꞅ, leꞅ, (corresponding with the Lat. *minus*), that not; for fear that: expressing care to prevent a thing or event happening.

But I drede, *lest* as the serpent disseyuyde eue with his sutil fraude, so ghoure wittis ben corupt and fallen doun fro the symplenesse that is in Crist.
Wiclif, 2 *Cor.* 11.

Forty stripes he may give him, and not exceed, *lest* if he should exceed, then thy brother should seem vile. *Deut.* xxv.

Lest they faint,
At the sad sentence rigorously urged,
All terror hide. *Milton.*

One doubt
Pursues me still, *lest* all I cannot die,
Lest that pure breath of life, the spirit of man,
Which God inspired, cannot together perish
With this corporeal clod. *Id.*

King Luitprand brought hither the corps, *lest* it might be abused by the barbarous nations.
Addison.

L'ESTRANGE (Sir Roger), a noted writer in the seventeenth century, descended from an ancient family in Norfolk, where he was born in 1616. Having in 1644 obtained a commission from king Charles I. for reducing Lynn in Norfolk, then in possession of the parliament, his design was discovered, and his person seized. He was tried by a court martial at Guildhall in London, and condemned to die as a spy; but was reprieved, and continued in Newgate for some time. He afterwards went beyond sea; and in August 1653 returned to England, where he applied to Oliver Cromwell, and, having once played before him on the bass-viol, he was by some nicknamed Oliver's fiddler. Being a man of talent, but in narrow circumstances, he set up a newspaper, entitled The Public Intelligencer, in 1663; but gave it up upon the publication of the first London gazette in 1665, having been allowed, however, a sum of money by government. Some time after the Popish plot, when the Tories began to gain the ascendant, he, in a paper called the Observator, became a zealous champion for them. He was afterwards knighted, and served in the parliament called by James II. in 1685. He continued licenseer of the press till king William's accession, in whose reign he met with some trouble as a disaffected person. He published many political tracts, and translated several works from the Greek, Latin, and Spanish; viz. Josephus's works, Cicero's Offices, Seneca's Morals, Erasmus's Colloquies, Æsop's Fables, and Bonas's Guide to Eternity. His style has been variously represented; his language being esteemed by some easy and humorous, while others reckon it low and grovelling.

LET. Sax. lætan; Goth. *leta*; Swed. *latu*; Belg. *laatan*. To permit; admit; allow; suffer; leave; relinquish; drop: used as a sign of entreating, exhorting, and commanding, as 'let me

go;' 'let us go;' 'let him go:' also to lend or put out on hire; grant to a tenant; free from obstruction or confinement; discharge (taking *off* intensively).

The seventh year thou shalt *let* it rest, and lie still. *Exodus.*

Let me die with the Philistines. *Judges.*

She *let* them *down* by a cord through the window. *Joshua.*

The beginning of strife is as when one *letteth out* water. *Proverbs* xvii. 14.

Solomon had a vineyard at Baal Hamon; he *let* the vineyard unto keepers. *Canticles* viii. 11.

And curteis, as a man of your estat,
In compagnie we wiln have no debat:
Telleth your tale, and *let* the Sompnour be.
Nay, quod the Sompnour, *let* him say by me
What so him list. *Chaucer. Cant. Tales.*

Let reason teach impossibility in any thing, and the will of man doth *let* it go. *Hooker.*

Roscetes presented his army before the gates of the city, in hopes that the citizens would raise some tumult, and *let* him *in*. *Knolles.*

Let us seek *out* some desolate shade. *Shakspeare.*

They did me too much injury,
That ever said I hearkened for your death.
If it were so, I might have *let alone*
The' insulting hand of Douglas over you. *Id.*

His ancient knot of dangerous adversaries
To-morrow are *let blood* at Pomfret castle. *Id.*

Let in your king, whose laboured spirits
Crave harbourage within your city walls. *Id.*

As terebration doth meliorate fruits, so doth *letting* plants blood, as pricking vines, thereby *letting* forth tears. *Bacon.*

Let Indians, and the gay, like Indians, fond
Of feather'd fopperies, the sun adorn;
Darkness has more divinity for me;
It strikes thought inward;— *Young.*

Nay, nay, quoth he, *let* be your strife and doubt. *Fairfax.*

Where there is a certainty and an uncertainty, *let* the uncertainty go, and hold to that which is certain. *Bishop Sanderson.*

The more tender our spirits are made by religion, the more easy we are to *let in* grief, if the cause be innocent. *Taylor.*

To give a period to my life, and to his fears, you're welcome; here's a throat, a heart or any other part, ready to *let in* death, and receive his commands. *Denham.*

What boots it at one gate to make defence,
And at another to *let in* the foe,
Effeminately vanquished? *Milton's Agonistes.*

Let Euclid rest, and Archimedes pause. *Milton.*

(Persons) who have a conscience, but are shy of disclosing it, or *letting* it take air, and walk in open day-light, confining it as a criminal to close restraint or obscure retirement. *Barrow.*

And if I knew which way to do't,
Your honour safe, I'd *let* you *out*. *Hudibras.*

Finding an ease in not understanding, he *let* loose his thoughts wholly to pleasure. *Sidney.*

The *letting out* our love to mutable objects doth but enlarge our hearts, and make them the wider marks for fortune to be wounded. *Boyle.*

Let me *alone* to accuse him afterwards. *Dryden.*

On the crowd he cast a furious look,
And withered all their strength before he spoke;
Back on your lives, *let* be, said he, my prey,
And *let* my vengeance take the destined way. *Id.*

But one submissive word which you *let* fall,
Will make him in good humour with us all. *Id.*

Nothing deadens so much the composition of a picture, as figures which appertain not to the subject: we may call them figures to be *let*. *Id.*

This is of no use, and had been better *let alone*: he is fain to resolve all into present possession. *Locke.*

One who fixes his thoughts intently on one thing, so as to take but little notice of the succession of ideas in his mind, *lets* slip *out* of his account a good part of that duration. *Id.*

They should speak properly and correctly, whereby they may *let* their thoughts *into* other men's minds the more easily. *Id.*

You must *let* it *down*, that is, make it softer by tempering it. *Moxon's Mechanical Exercises.*

She *let* her second floor to a very genteel man. *Tatler.*

It is the key that *lets* them *into* their very heart, and enables them to command all that is there. *South's Sermons.*

Nestor, do not *let* us *alone* till you have shortened our necks, and reduced them to their antient standard. *Addison.*

He was *let* loose among the woods as soon as he was able to ride on horseback, or carry a gun. *Id. Spectator.*

There are pictures of such as have been distinguished by their birth or miracles, with inscriptions, that *let* you *into* the name and history of the person represented. *Addison.*

As soon as they have hewn down any quantity of the rocks, they *let in* their springs and reservoirs among their works. *Id.*

We must not *let* go manifest truths, because we cannot answer all questions about them. *Collier.*

A solution of mercury in aqua fortis being poured upon iron, copper, tin, or lead, dissolves the metal, and *lets* go the mercury. *Newton's Opticks.*

This notion might be *let alone* and despised, as a piece of harmless unintelligible enthusiasm. *Rogers.*

Hippocrates *let* great quantities of *blood*, and opened several veins at a time. *Arbuthnot on Coins.*

O'er golden sands *let* rich Pactolus flow,
Or trees weep amber on the banks of Po,
While by our oaks the precious loads are born,
And realms commanded which those trees adorn. *Pope.*

From this point of the story, the poet is *let down* to his traditional poverty. *Id.*

A law was enacted, prohibiting all bishops, and other ecclesiastical corporations, from *letting* their lands for above the term of twenty years. *Swift.*

Charging my pistol with powder, I cautioned the emperor not to be afraid, and then *let* it *off* in the air. *Id.*

Here *let* me sit,
And hold high converse with the mighty dead. *Thomson.*

Life's a debtor to the grave;
Dark lattice! *letting* in eternal day. *Young.*

Let, *v. a.*, *v. n.* & *n. s.* Sax. lettan: Goth. *letta*; Belg. *letten*. To hinder; obstruct; oppose: as a verb neuter, to forbear; desist; withhold one's self. 'To let, when it signifies to permit or leave, has let in the preterite and part. passive; but, when it signifies to hinder, it has letted; as, 'many things have letted me.' As a noun, it signifies hindrance; obstacle; impediment.

Wherefore do ye *let* the people from their works? go you unto your burdens. *Exodus* v. 4.

I will work, and who will *let* it? *Isa.* xliii. 11.

The mystery of iniquity doth already work; only he who now *letteth* will *let*, until he be taken out of the way. 2 *Thess.*

And in she goth withouten lenger *lette*,
And to the markis she hire fader sette.
Chaucer. Cant. Tales.

Just judge, two *lets* remove; that, free from dread,
I may before thy high tribunal plead. *Sandys.*

Leave, ah, leave off, whatever wight thou be,
To *let* a weary wretch from her due rest,
And trouble dying soul's tranquillity!
Faerie Queene.

To glorify him in all things is to do nothing whereby the name of God may be blasphemed; nothing whereby the salvation of Jew or Grecian, or any in the church of Christ, may be *let* or hindered. *Hooker.*

The secret *lets* and difficulties in public proceedings are innumerable and inevitable. *Id.*

After king Ferdinando had taken upon him the person of a fraternal ally to the king, he would not *let* to counsel the king. *Bacon.*

Solyman without *let* presented his army before the city of Belgrade. *Knolles's History of the Turks.*

It had been done ere this, had I been consul;
We had had no stop, no *let*. *Ben Jonson's Catiline.*

Whosoever seeks the land of promise, shall find many *lets*. *Bp. Hall.*

Their senses are not *letted* from enjoying their objects: we have the impediments of honour, and the torments of conscience. *Sidney.*

And now, no longer *letted* of his prey,
He leaps up at it with enraged desire.
Dryden.

To these internal dispositions to sin, add the external opportunities and occasions concurring with them, and removing all *lets* and rubs out of the way, and making the path of destruction plain before the sinner's face, so that he may run his course freely. *South.*

LETHAR'GIC, *adj.* ⎫ Fr. *lethargic, letar-*
LETHAR'GICNESS, *n. s.* ⎬ *gic*; Ital. *lethargio, le-*
LETH'ARGY, *n. s.* ⎬ *targo*; Span. and Port.
LE'THE. ⎭ *letargia*; Lat. *lethargia, lethargus*; Gr. ληθαργος, ληθη, as Parkhurst and Minsheu suggest, from the Heb. לאט, to hide. Drowsy; morbid; sleepy through disease, or unnaturally: lethargicness, and lethargy, both signify morbid drowsiness: lethe, oblivion; an oblivious draught. See below.

I wold make invocacion,
With devoute speciall devocion,
Unto the god of Slepe anone,
That dwellith in a cave of stone,
Upon a streme that cometh fro *Lete*.
Chaucer. House of Fame.

The conquering wine hath steept our sense
In soft and delicate *lethe*. *Shakspeare.*

The *lethargy* must have his quiet course;
If not, he foams at mouth, and by and by
Breaks out to savage madness. *Id.*

His motion weakens, or his discernings
Are *lethargied*. *Id. King Lear.*

A grain of glory mixt with humbleness,
Cures both a fever, and *lethargickness*. *Herbert.*

Though his eye is open, as the morning's,
Towards lusts and pleasures; yet, so fast a *lethargy*
Has seized his powers towards public cares and dangers,
He sleeps like death. *Denham's Sophy.*

Lethe, the river of oblivion, rolls
His watery labyrinth, which whoso drinks
Forgets both joy and grief. *Milton.*

As sharp physic to cure public or private distempers; as an instrument of rousing us out of our sinful *lethargies*. *Barrow.*

When I behold a fashionable set out in all its magnificence, I fancy that I see gouts and dropsies, fevers and *lethargies*, with other innumerable distempers, lying in ambuscade among the dishes.
Addison.

Europe lay then under a deep *lethargy*; and was no otherwise to be rescued from it, but by one that would cry mightily. *Atterbury.*

A *lethargy* demands the same cure and diet as an apoplexy from a phlegmatick case, such being the constitution of the *lethargick*. *Arbuthnot on Diet.*

Vengeance is as if minutely proclaimed in thunder from heaven, to give men no rest in their sins, till they awake from the *lethargick* sleep, and arise from so dead, so mortiferous a state.
Hammond's Fundamentals.

And therefore all fools, and distracted persons, and children, and *lethargical* and apoplectical people, or that are any ways senseless and incapable of human and reasonable acts, are to be assisted only by prayers. *Paley.*

Away! away! my early dream
Remembrance never must awake:
Oh! where is *Lethe's* fabled stream?
My foolish heart be still, or break. *Byron.*

LETHE, in ancient mythology, one of the rivers of hell, signifying oblivion or forgetfulness; its waters having, according to the poetic fictions of the priests, the power of making those who drank of them to forget every thing past.

LETI (Gregory), an eminent Italian writer, born in Milan in 1630, and who studied under the Jesuits at Cosenza, and was afterward sent by an uncle to Rome, who wished him to enter into the church; but he, being averse to it, went to Geneva. Thence he went to Lausanne; and contracting an acquaintance with John Anthony Guerin, an eminent physician, lodged at his house, professed the Calvinist religion, and married his daughter. He settled at Geneva; where he spent almost twenty years, carrying on a correspondence with learned men, especially those of Italy. Some contests obliged him to leave that city in 1679; upon which he went to France, and then into England, where he was received with great civility by Charles II., who, after his first audience, made him a present of 1000 crowns, and promised him the place of historiographer. He wrote there the History of England; but, that work not pleasing the court, he was ordered to leave the kingdom. He went to Amsterdam in 1682, and was honored with the place of historiographer to that city. He died suddenly in 1701. He was a man of indefatigable application, as the multiplicity of his works show. The principal of these are, 1. The Universal Monarchy of Louis XIV. 2. The life of Pope Sixtus V. 3. The Life of Philip II. King of Spain. 4. The Life of the Emperor Charles V. 5. The Life of Elizabeth, Queen of England. 6. The History of Oliver Cromwell. 7. The History of Great Britain, 5 vols. 12mo 8. The History of Geneva, &c.

LET'TER, *n. s.* & *v. a.* ⎫ Fr. *lettre*; Italian
LET'TERS, *n. s.* ⎬ *lettera*; Lat. *litera*.
LET'TERED, *adj.* ⎭ An alphabetical character; one of the elements of a syllable; verbal expression; written message or communication;

an epistle; printers' type. Letters (only used in the plural in this sense), signify learning; scholastic knowledge. To letter is to inscribe or stamp with letters. Lettered, learned; literary.

For if ye bileueden to Moyses perauenture ye schulden bileue also to me; for he wroot of me. But if ye bileuen not hise *lettris*, how schulen ye bileue to my wordis? *Wiclif, Jon* 5.

Need we, as some others, epistles of commendation to you, or *letters* of commendation from you. 2 *Cor.* iii. 1.

A superscription was written over him in *letters* of Greek, Latin, and Hebrew. *Luke* xxiii. 38.

The Jews marvelled, saying, How knoweth this man *letters*, having never learned? *John* vii. 15.

Touching translations of holy scripture, we may not disallow of their painful travels herein, who strictly have tied themselves to the very original *letter*. *Hooker.*

I have a *letter* from her
Of such contents as you will wonder at.
Shaks.

When a Spaniard would write a *letter* by him, the Indian would marvel how it should be possible that he, to whom he came, should be able to know all things. *Abbot.*

In obedience to human laws, we must observe the *letter* of the law, without doing violence to the reason of the law, and the intention of the lawgiver. *Taylor's Holy Living.*

Having once surveyed the true and proper natural alphabet, we may easily discover the deviations from it, in all the alphabets in use, either by defect of single characters, of *letters*, or by confusion of them. *Holder.*

What! since the pretor did my fetters loose,
And left me freely at my own dispose,
May I not live without controul and awe,
Excepting still the *letter* of the law? *Dryden.*

The asses will do very well for trumpeters, and the hares will make excellent *letter* carriers. *L'Estrange.*

The iron ladles that *letter* founders use to the casting of printing *letters*, are kept constantly in melting metal. *Moxon.*

The stile of *letters* ought to be free, easy, and natural; as near approaching to familiar conversation as possible: the two best qualities in conversation are, good humour and good breeding; those *letters* are therefore certainly the best that shew the most of these qualities. *Walsh.*

Those words of his must be understood not according to the bare rigour of the *letter*, but according to the allowances of expression. *South.*

Good laws are at best but a dead *letter*. *Addison.*

I observed one weight *lettered* on both sides; and I found on one side, written in the dialect of men, and underneath it, Calamities; on the other side was written, in the language of the gods, and underneath, Blessings. *Id.*

A martial man, not sweetened by a *lettered* education, is apt to have a tincture of sourness. *Collier on Pride.*

There is no rule in the world to be made for writing *letters*, but that of being as near what you speak face to face as you can; which is so great a truth, that I am of opinion, writing has lost more mistresses than any one mistake in the legend of love. *Steele.*

The flowers of eloquence, profusely poured
O'er spotted vice, fill half the *lettered* world.
Young.

Whatever absurdities men of *letters* have indulged, and how fantastical soever the modes of science have been, their anger is still more subject to ridicule. *Goldsmith.*

'There's ither poets much your betters,
Far seen in Greek, deep men o' *letters*,
Hae thought they had insured their debtors,
A' future ages. *Burns.*

The volume of Christian Scriptures contains thirteen *letters*, purporting to be written by St. Paul. *Paley.*

Julia was sent into a convent: she
Grieved, but, perhaps, her feelings may be better
Shown in the following copy of her *letter*. *Byron.*

Letter is a character used to express one of the simple sounds of the voice; and, as the different simple sounds are expressed by different letters, these, by being differently compounded, become the visible signs or characters of all the modulations and mixtures of sounds used to express our ideas in a regular language. See Language. Thus, as by the help of speech we render our ideas audible, by the assistance of letters we render them visible, and by their help we can preserve our thoughts, and send them to the most distant parts of the earth and read the transactions of different ages. Philo attributes the invention of letters to Abraham; Josephus, St. Irenæus, and others, to Enoch; Bibliander, to Adam; Eusebius, Clemens Alexandrinus, Cornelius Agrippa, and others, to Moses; Pomponius Mela, Herodian, Rufus, Festus, Pliny, Lucan, &c., to the Phœnicians; St. Cyprian, to Saturn; Tacitus, to the Egyptians; some, to the Ethiopians. There have been also various conjectures about the different kinds of letters used in different languages: thus, according to Crinitus, Moses invented the Hebrew letters; Abraham, the Syriac and Chaldee; The Phœnicians, those of Attica, brought into Greece by Cadmus, thence into Italy by the Pelasgians; Nicostrata, the Roman; Isis, the Egyptian; and Vulsilas, those of the Goths. It is probable that hieroglyphics were the first writings; but whether Cadmus and the Phœnicians learned the use of letters from the Egyptians, or from their neighbours of Judea or Samaria, is a question that cannot be determined. But, wheresoever the Phœnicians learned this art, it is generally agreed, that Cadmus the son of Agenor first brought letters into Greece; whence, in following ages, they spread over the rest of Europe. The alphabet of every language consists of a number of letters, which ought each to have a different sound, figure, and use. As the difference of articulate sounds was intended to express the different ideas of the mind, so one letter was originally intended to signify only one sound, and not, as at present, to express sometimes one sound and sometimes another; which practice has brought confusion into the languages, and rendered the acquisition of modern tongues a more difficult task than it would otherwise have been. This consideration, together with the deficiency of all the known alphabets, from their wanting some letters to express certain sounds, has occasioned several attempts towards a universal alphabet, to contain an enumeration of all such single sounds or letters as are used in any language. Grammarians distinguish letters into vowels, consonants

mutes, liquids, diphthongs, and characteristics.

LETTER, or type, among printers, is not only used to signify the CAPITALS, SMALL CAPITALS, and small letters, but all the points, figures, and other marks cast and used in printing. They are also denominated from the shape and turn of the letters; and are distinguished into different hands, German text, Roman, Italic, black letter, &c. The letters used in printing are cast at the ends of small pieces of metal, about three quarters of an inch in length; and the letter being not indented, but raised, easily gives the impression, when, after being blacked with a glutinous ink, paper is closely pressed upon it. See the article PRINTING. A font of letters includes small letters, capitals, small capitals, points, figures, spaces, &c.; but besides, they have different kinds of two-line letters, only used for titles, and the beginning of books, chapters, &c.

LETTER OF ATTORNEY, in law, is a writing by which one person authorises another to do some lawful act in his stead; as to give seisin of lands, to receive debts, sue a third person, &c. The nature of this instrument is to transfer to the person to whom it is given the power of the maker, to enable him to accomplish the act intended to be performed. It is either general or special; and sometimes it is made recoverable, which is when a bare authority only is given; and sometimes it is irrecoverable, as where debts, &c., are assigned from one person to another. It is generally held, that the power granted to the attorney must be strictly pursued; and that where it is made to three persons two cannot execute it. In most cases the power given by a letter of attorney determines upon the death of the person who gave it. No letter of attorney made by any seamen, &c., in any ship of war, or having letters of marque, or by their executors, &c., in order to empower any person to receive any share of prizes or bounty money, shall be valid, unless the same be made revocably, and for the use of such seamen, and be signed and executed before, and attested by, the captain and one other of the signing officers of the ship, or the mayor or chief magistrate of some corporation.

LETTER OF MARQUE. See MARQUE.

LETTERS, PATENT, or overt, are writings sealed with the great seal of England, whereby a man is authorised to do, or enjoy any thing, which of himself he could not do. See PATENT. They are so called, by reason of their form; as being open with the seal affixed, ready to be shown for the confirmation of the authority given by them.

LETTSOM (John Coakley), M. D., an ingenious medical and miscellaneous writer, was born in the Island of Little Vandyke, near Tortola, in the West Indies, of a Quaker family. He was sent to England at an early age, and placed under the tuition of a Mr. Thompson, near Warrington, where Dr. Fothergill had a summer residence, and also superintended his studies. He was then apprenticed to an apothecary at Settle, and attended for two years at St. Thomas's Hospital, London. His father having now died, he returned to the West Indies, to take possession of some property which devolved on him, and settled as a medical practitioner at Tortola. The slaves of his paternal estate he at this time nobly liberated. Shortly after he re-crossed the Atlantic, and visited the medical schools of Edinburgh, Paris, and Leyden, at the last of which he took his degree of M. D. Having married a lady of considerable fortune, he settled in London as a physician, and obtained a lucrative practice. In 1769 he was admitted a member of the college of physicians, the next year F. S. A., and the year succeeding F. R. S. Besides papers in the Philosophical Transactions, and medical periodical works, he published The Natural History of the Tea-tree; 1772, 4to. The Naturalist's and Traveller's Companion; 1774, 8vo., third edition 1800. Medical Memoirs of the General Dispensary, 1774, 8vo. Hints on Beneficence, Temperance, and Medical Science, 1801, 3 vols. 8vo. Memoirs of Dr. Fothergill; &c. He died in Sambrook Court, London, November 1st, 1815, aged seventy-one. His life, and a collection of his works, were published by Mr. Pettigrew.

LETTUCE, *n. s.* Teut. *lattu'h*; Ital. *lattuca*; Span. *lechuga*; Lat. LACTUCA, which see. A herb.

Fat colworts, and comforting purseline,
Cold *lettuce*, and refreshing rosemerine. *Spenser.*

Lettuce is thought to be poisonous, when it is so old as to have milk. *Bacon's Natural History.*

The medicaments proper to diminish milk, are *lettuce*, purslane, endive. *Wiseman's Surgery.*

The species are, common or garden *lettuce*; cabbage *lettuce*; Silesia *lettuce*; white and black cos; white cos; red capuchin *lettuce*. *Miller.*

His diet was of wheaten bread,
And milk, and oats, and straw;
Thistles, or *lettuces* instead,
With sand to scour his maw. *Cowper.*

LETTUCE, in botany. See LACTUCA.

LETTUCE, HARES. See SONCHUS.

LETTUCE, WILD. See PRENANTHES.

LEVANT, *adj.* & *n. s.* Fr. *levant*; Lat. *levo*. Eastern; the quarter of sun-rise; the Mediterranean coasts east of Italy.

Thwart of those, as fierce
Forth rush the *levant*, and the potent winds.
Eurus and Zephyr. *Milton's Paradise Lost.*

LEVANT, or Titan, one of the Hieres.

LEVANT SEA, the eastern part of the Mediterranean, bounded by Lesser Asia on the north; by Syria and Palestine on the east; by Egypt and Barca on the south; and by Candia and the other ports of the Mediterranean on the west.

LEVATOR, *n. s.* Lat. *levator* (*levis*). A surgical instrument, whereby depressed parts of the skull are lifted up: now more commonly called an elevator.

Some surgeons bring out the bone in the bore; but it will be safer to raise it up with your *levator*, when it is but lightly retained in some part. *Wiseman's Surgery.*

LEUCA, in antiquity, a geographical measure of length, in use among the later Gauls; which according to Jornandes, who calls it leuga, contained 1500 paces, or one mile and a half. Hence the word league, now reckoned at three miles; in the lower age called leuva.

LEUCADIA, formerly called Neritis, a peninsula of Acarnania (Homer); but afterwards,

by cutting through the peninsula, made an island, as it is at this day, called St. Maura.

LEUCAS, in ancient geography, a city of Leucadia, formerly called Neritos and Neritum, situated near a narrow neck of land, or isthmus, on a hill facing the east and Acarnania: the foot or lower part of the town was a plain lying on the sea, by which Leucadia was divided from Acarnania (Livy); though Thucydides places Leucas more inward in the island, which was joined to the continent by a bridge. It was an illustrious city, the capital of Acarnania, and the place of general assembly.

LEUCAS, in zoology. See DELPHINUS.

LEUCATA, or LEUCATE, in ancient geography, a promontory of Leucadia, according to Strabo, a white rock projecting into the sea towards Cephalenia, on which stood a temple of Apollo, surnamed Leucadius. At his festival, which was annually celebrated here, the people offered an expiatory sacrifice, to avert on the head of the victim all the calamities with which they might be threatened. For this purpose they made choice of a criminal condemned to die; and, leading him to the brink of the promontory, precipitated him into the sea amidst the loud shouts of the spectators. The criminal, however, seldom perished in the water: for it was the custom to cover him with feathers, and fasten birds to his body, which by spreading their wings might serve to break his fall. No sooner did he touch the sea, than a number of boats, stationed for that purpose, flew to his assistance, and drew him out; and, after being thus saved, he was banished for ever from the territory of Leucadia. Strabo, lib. 10, p. 452. According to ancient authors, a strange opinion concerning this promontory prevailed for some time among the Greeks. They imagined that the leap of Leucata was a certain remedy for excessive love. Hence disappointed or despairing lovers often came to Leucadia; and, having ascended the promontory, offered sacrifices in the temple, and, engaging by a formal vow to perform the desperate act, they voluntarily precipitated themselves into the sea. Some are reported to have recovered from the effects of the fall; and, among others, mention is made of a citizen of Buthroton, in Epirus, whose passions always taking fire at new objects, he four times had recourse to the same remedy, and always with the same success. As those who made the trial, however, seldom took any precaution to render their fall less rapid, they were generally destroyed; and women often fell victims to this act of desperation. At Leucata was shown the tomb of Artemisia, that celebrated queen of Caria, who gave so many proofs of courage at the battle of Salamis. Inflamed with a violent passion for a young man who inflexibly refused her love, she surprised him in his sleep and put out his eyes. Regret and despair soon brought her to Leucata, where she perished in the waves, notwithstanding every effort to save her. Such, likewise, was the end of the unhappy Sappho. Forsaken by her lover Phaon, she came hither to seek relief from her sufferings, and found her death.

LEUCE, a triangular island, in the Euxine Sea, between the mouths of the Borysthenes and the Danube. The poets fabled it to be a kind of Elysian receptacle for departed heroes, and hence styled it the Island of the Blessed.

LEUCIPPUS, a celebrated Greek philosopher and mathematician; first author of the famous system of atoms and vacuums, and of the hypothesis of storms; since attributed to the moderns. He flourished about A. A. C. 428.

LEUCOGÆUS, in ancient geography, a hill of Italy, between Puteoli and Neapolis, in Campania, abounding in sulphur; now l'Alumera. It had springs called Lecogæi fontes; the waters of which, according to Pliny, gave a firmness to the teeth, clearness to the eyes, and proved a cure to wounds.

LEUCOJUM, great snow-drop, a genus of the monogynia order, and hexandria class of plants; natural order ninth, spathaceæ: cor. campanulated, sexpartite; the segments increased at the points; the stigma simple. There are four species, viz.

1. L. æstivum, the summer leucojum, has a large, oblong bulbous root, crowned with several long, flat, broad leaves; and amidst them an upright, thick, hollow stalk, fifteen or eighteen inches high; terminated by a spatha protruding many white flowers, on slender foot-stalks, drooping downwards; flowering in May.

2. L. autumnale, the autumnal leucojum, has a large, oblong, bulbous root, crowned with many narrow leaves; an upright, naked, hollow stalk, terminated by a spatha protruding many white flowers on long weak foot-stalks, hanging downwards, and flowering in autumn.

3. L. vernum, the spring leucojum, has an oblong, bulbous root, sending up several flat leaves, six or eight inches long; and amidst them an upright, channelled, hollow, naked stalk, about a foot high, terminated by a spatha, protruding one or two white flowers on slender foot-stalks, drooping downwards, and appearing in March. All these species are very hardy, durable in the roots, and increase exceedingly by offsetts, which may be separated every two or three years.

LEUCOMA, in antiquity, a public register among the Athenians, in which were inserted the names of all the citizens, as soon as they were of age to enter upon their paternal inheritance.

LEUCOMA, in surgery, a distemper of the eye. See SURGERY.

LEUCOPETRA, in ancient geography, a promontory of Italy, so called from its white color (Strabo); in the country of the Bruttii, and territory of Rhegium; the termination of the Appenine, and the outmost extremity of the Bruttii, or the modern Calabria Ultra; as the Japygium is of the ancient Calabria, or the modern Calabria Citra.

LEUCOPETRIANS, in ecclesiastical history, a fanatical sect, which sprang up in the Greek and Eastern churches towards the close of the twelfth century: the fanatics of this denomination professed to believe in a double Trinity rejected wedlock, abstained from flesh, treated with the utmost contempt the sacraments of baptism and the Lord's supper, and all the vari-

ous branches of external worship; placed the essence of religion in internal prayer alone, and maintained, as it is said, that an evil being or genius dwelt in the breast of every mortal, and could be expelled thence by no other method than by perpetual supplication to the Supreme Being.

LEUCOPHLEG'MACY, *n. s.* } From λευκος, white,
LEUCOPHLEGMAT'IC, *adj.* } and φλεγμα, phlegm. Paleness, with viscid juices and cold sweatings.

Spirits produce debility, flatulency, fevers, *leucophlegmacy*, and dropsies. *Arbuthnot on Aliments.*

Asthmatick persons have voracious appetites, and for want of a right sanguification are *leucophlegmatick.* *Arbuthnot.*

LEUCOTHEA, or LEUCOTHOE, in mythology, the wife of Athamas, changed into a sea deity: see INO. She was called Matuta by the Romans. She had a temple at Rome, where all the people, particularly women, offered vows for their brother's children. They did not intreat the deity to protect their own children, because Ino had been unfortunate in hers. No female slaves were permitted to enter the temple; or, if their curiosity tempted them to transgress this rule, they were beaten with great severity.

LEUCTRA, in ancient geography, a town of Bœotia, west of Thebes, or between Plateæ and Thespia, where the Lacedemonians were completely defeated by Epaminondas and Pelopidas the Theban generals. The Theban army consisted at most but of 6000 men, whereas that of the enemy was at least 18,000; but Epaminondas trusted most in his horse, wherein he had much the advantage, both in their quality and good management; the rest he endeavoured to supply by the disposition of his men, and the vigor of the attack. He suffered none to serve under him in the engagement, but such as he knew to be fully resolved to conquer or die. He put himself at the head of the left wing, opposite to Cleombrotus, king of Sparta; concluding, that if he could break the body of the Spartans, which was but twelve men deep, while his own was fifty, the rest would be soon put to flight. He closed his own with the sacred band, which was commanded by Pelopidas; and placed his horse in the front. His right, from which he had drawn so many men, he ordered to fall back, in a slanting line, as if they declined to fight, that they might serve for a corps of reserve in case of need. This wise disposition of their few but resolute forces succeeded according to the wish of the Theban generals. Epaminondas advanced with his left wing, extending it obliquely, to draw the enemy's right from the main body; and Pelopidas charged them with such desperate speed and fury, at the head of his battalion, before they could reunite, that their horse were forced back upon their infantry, which threw the whole into the greatest confusion; so that though the Spartans were of all the Greeks the most expert in recovering from any surprise, yet their skill on this occasion failed them; for the Thebans, observing the impression they had made with their horse, pushed furiously upon the Spartan king, who fell with vast numbers of his troops. Upon the death of Cleombrotus, and several officers of note, the Spartans renewed the fight with double fury to recover his body. Epaminondas chose rather to gratify them in that point, than to hazard the success of a second onset: and, leaving them in possession of their king's corpse, marched straight against their other wing, commanded by Archidamus, and consisting chiefly of such auxiliaries as had not heartily engaged in the Spartan interest. These were so discouraged by the death of the king and the defeat of that wing, that they betook themselves to flight, and were presently after followed by the rest of the army. The Thebans, however, pursued them so closely, that they made a second dreadful slaughter among them; which completed Epaminondas's victory, who remained master of the field, and erected a trophy in memory of it. In this famed battle of Leuctra the Lacedemonians lost 4000 men, and the Thebans only 300.

LEV'EE, *n. s.* Fr. *lever*, from Lat. *levo*; *levee*. Strictly, the time of rising: hence the attendants or concourse round a man of power in the morning.

Would'st thou be first minister of state;
To have thy *levees* crouded with resort
Of a depending, gaping, servile court? *Dryden.*

Be *levees* ne'er so full, afford it room,
And give it audience in the cabinet. *Young.*

He chides the tardiness of every post,
Pants to be told of battles won or lost,
Blames his own indolence, observes, though late,
'Tis criminal to leave a sinking state,
Flies to the *levee*, and, received with grace,
Kneels, kisses hands, and shines again in place. *Cowper.*

LEV'EL, *adj.*, *n. s.*, *v. a.* & *v. n.* } Sax. læfel;
LEV'ELLER, *n. s.* } old Fr. *level*;
LEV'ELNESS. } Lat. *libella.*
Even; flat; plane; on a line with something else; and, metaphorically, without gradations of superiority: a level is a surface thus equal, even, or flat; it also signifies standard; line of general or average height; state of equality; line of right, or direction; rule; plan; and a mechanical instrument for ascertaining the truth or flatness of masons' and carpenters' work: a leveller is generally used in a bad sense, or for one who seeks to destroy the authority with the superiority of station: levelness, evenness; equality.

He will thy foes with silent shame confound,
And their proud structures *level* with the ground. *Sandys.*

Those bred in a mountainous country oversize those that dwell on low *levels.* *Id. Travels.*

The glory of God, and the good of his church, was the thing which the apostles aimed at, and therefore ought to be the mark whereat we also *level.* *Hooker.*

Dogged York, that reaches at the moon,
Whose over-weening arm I have plucked back,
By false accuse doth *level* at my life. *Shakspeare. Henry VI.*

Our navy is addressed, our power collected,
And every thing lies *level* to our wish. *Shakspeare.*

As if that name,
Shot from the deadly *level* of a gun,
Did murther her. *Id. Romeo and Juliet.*

I stood i' the' *level*
Of a full charged confederacy, and gave thanks
To you that choked it. *Id. Henry VIII.*

We know by experience, that all downright rains do evermore dissever the violence of outrageous winds, and beat down and *level* the swelling and mountainous billows of the sea. *Raleigh.*

The river Tiber is expressed lying along, for so you must remember to draw rivers, to express their *levelness* with the earth. *Peacham.*

Reason can never assent to the admission of those brutish appetites which would over-run the soul, and *level* its superior with its inferior faculties. *Decay of Piety.*

It might perhaps advance their minds so far
Above the *level* of subjection, as
T' assume to them the glory of that war. *Daniel.*

Now shaves with *level* wing the deep. *Milton.*

Less bright the moon,
But opposite in *levelled* west was set. *Id.*

Each at the head
Levelled his deadly aim. *Id.*

After draining of the *level* in Northamptonshire, innumerable mice did upon a sudden arise. *Hale's Origin of Mankind.*

It (Christianity) *levelleth* the rich and the poor, the prince and the peasant, the philosopher and idiot, in spiritual regards; yea far preferreth the meanest and simplest persons endued with true piety, above the mightiest and wealthiest who is devoid thereof. *Barrow.*

He to his engine flew,
Placed near at hand in open view,
And raised it till it *levelled* right
Against the glow-worm tail of kite. *Hudibras.*

Love of her made us raise up our thoughts above the ordinary *level* of the world, so as great clerks do not disdain our conference. *Sidney.*

Thrice happy is that humble pair,
Beneath the *level* of all care,
Over whose heads those arrows fly,
Of sad distrust and jealousy. *Waller.*

There is a knowledge which is very proper to man, and lies *level* to human understanding, the knowledge of our Creator, and of the duty we owe to him. *Tillotson.*

The garden, seated on the *level* floor
She left behind. *Dryden's Boccace.*

With unresisted might the monarch reigns;
He *levels* mountains, and he raises plains;
And, not regarding difference of degree,
Abased your daughter, and exalted me. *Dryden.*

One to the gunners on St. Jago's tower,
Bid 'em for shame *level* their cannon lower. *Id.*

. Behold the law
And rule of beings in your Maker's mind:
And thence, like limbecks, rich ideas draw,
To fit the *levelled* use of humankind. *Id.*

The *level* is from two to ten feet long, that it may reach over a considerable length of the work: if the plumb-line hang just upon the perpendicular, when the level is set flat down upon the work, the work is level; but if it hangs on either side the perpendicular, the floor or work must be raised on that side, till the plumb-line hang exactly on the perpendicular. *Moxon's Mechanical Exercises.*

Providence, for the most part, sets us upon a *level*, and observes proportion in its dispensations towards us. *Addison's Spectator.*

Be the fair *level* of thy actions laid,
As temperance wills, and prudence may persuade,
And try if life be worth the liver's care. *Prior.*

You are an everlasting *leveller*; you won't allow encouragement to extraordinary merit. *Collier.*

The time is not far off when we shall be upon the *level.*—I am resolved to anticipate the time, and be upon the *level* with them now: for he is so that neither seeks nor wants them. *Atterbury to Pope.*

Be *level* in preferments, and you will soon be as *level* in your learning. *Bentley.*

Fired at first sight with what the muse imparts,
In fearless youth we tempt the heights of arts;
While from the bounded *level* of our mind
Short views we take, nor see the lengths behind. *Pope.*

I suppose, by the stile of old friends, and the like, it must be somebody there of his own *level*; among whom his party have, indeed, more friends than I could wish. *Swift.*

It pleads exemption from the laws of sense,
Considers reason as a *leveller*,
And scorns to share a blessing with the crowd. *Young.*

A *level* plain of a vast extent on land is certainly no mean idea; the prospect of such a plain may be as extensive as a prospect of the ocean: but it can never fill the mind with any thing so great as the ocean itself. *Burke on the Sublime.*

Each sate him down, all sad and mute,
Beside his monarch and his steed,
For danger *levels* man and brute,
And all are fellows in their need. *Byron.*

Level, in the arts, is an instrument with which to draw a line parallel to the horizon, and thus to find the true level, or the difference of ascent or descent between several places, for conveying water, draining fens, &c. There are several instruments of different contrivance and matter, invented for the perfection of levelling; the principles of all which, however, may be found in the following:—

Level, Air.—The air-level is that which shows the line of level, by means of a bubble of air enclosed with some liquor in a glass tube of an indeterminate length and thickness, whose two ends are hermetically sealed. When the bubble fixes itself at a certain mark, made exactly in the middle of the tube, the plane or ruler wherein it is fixed is level. When it is not level, the bubble will rise to one end. This glass tube may be set in another of brass, having an aperture in the middle, whence the bubble of air may be observed. The liquor wherewith the tube is filled is oil of Tartar, or aqua secunda; these not being liable to freeze as common water, nor to rarify and condense, as spirit of wine is. This application of a bubble of air was the invention of Dr. Hooke. There is one of these instruments, which, by the addition of sights, becomes much more exact. It consists of an air-level (fig. 1. plate Levels), about eight inches long, and seven or eight lines in diameter, set in a brass tube 2, with an aperture in the middle, C. The tubes are carried in a strong straight ruler, a foot long; at whose ends are fixed two sights, 3, 3, exactly perpendicular to the tubes, and of an equal height, having a square hole, formed by two fillets of brass crossing each other at right angles, in the middle whereof is drilled a very small hole, through which the point on a level with the instrument is observed. The brass tube is fastened on the ruler by means of two screws. The top of the ball and socket is rivetted to a little ruler that springs, one end whereof is fastened with screws to the great ruler, and at the

other end has a screw, serving to raise and depress the instrument when nearly level. The following instrument, however, is still more commodious, because, though the holes be ever so small, yet they will still take in too great a space to determine the point of level precisely. It consists of an air-level, with telescope sights. This level, fig. 2, is like the last; with this difference, that, instead of plain sights, it carries a telescope to determine exactly the point of level at a distance. The telescope is a little brass tube about fifteen inches long, fastened on the same ruler as the level. At the end of the tube of the telescope, marked 1, enters the little tube, 1, carrying the eye-glass and a hair horizontally placed in the focus of the object-glass, 2; which little tube may be drawn out, or pushed into the great one, for adjusting the telescope to different sights; at the other end of the telescope is placed the object-glass. The screw, 3, is for raising or lowering the little fork, carrying the hair, and making it agree with the bubble of air when the instrument is level; and the screw, 4, is for making the bubble of air E agree with the telescope: the whole is fitted to a ball and socket. M. Huygens is said to be the first inventor of this level; which has this advantage, that it may be inverted by turning the rules and telescope half round; and if then the hair cut the same point that it did before, the operation is just. A telescope may be added to any kind of level, by applying it upon, or parallel to, the base or ruler, when there is occasion to take the level of remote objects.

Level, Artillery Foot, is in form like a carpenter's square, having its two legs or branches of an equal length; at their juncture is a little hole, whence hangs a thread and plummet playing on a perpendicular line in the middle of a quadrant. It is divided into twice forty-five degrees from the middle. This instrument may be used on other occasions, by placing the ends of its two branches on a plane; for, when the thread plays perpendicularly over the middle division of the quadrant, that plane is assuredly level. To use it in gunnery, place the two ends on the piece of artillery, which you may raise to any proposed height, by means of the plummet, whose thread will give the degree above the level. See fig. 3, plate Levels.

Level, Carpenter's and Pavior's, consists of a long rule, to which is fitted, at right angles, another rule at the top of which is fastened a line, which, when it hangs over a fiducial line at right angles with the base, shows that the said base is horizontal. Sometimes this level is all of one board. See figs. 4 and 5.

Level, Dr. Desaguliers's. Dr. Desaguliers contrived an instrument, by which the difference of level of two places, which could not be taken in less than four or five days with the best telescope levels, may be taken in as few hours.—To the ball C (fig. 6, plate Levels), is joined a recurve tube BA, with a very fine bore, and a small bubble at top A, whose upper part is open. If the air at C be so expanded with heat, as to drive the liquor to the top of the tube, the cavity A will receive the liquor, which will come down again and settle at D, or near it, according to the level of the place where the instrument is, as soon as the air at C returns to the same temperament as to heat and cold. To preserve the same degree of heat, when the different observations are made, the machine is fixed in a tin vessel EF, filled with water up to $g\ h$, above the ball, and a very sensible thermometer has also its ball under water, that the height of the liquor at D, in each experiment may be noticed, when the thermometer stands at the same height as before. The instrument is carried by means of the wooden frame, which is set upright by the three screws, S, S, fig. 7, and a line and plummet P P, fig. 8. At the back part of the wooden frame, from the piece at top K, hangs the plummet P, over a brass point at N; fig. 9 represents a front view of the machine, supposing the fore part of the tin vessel transparent; and here the brass socket of the recurve tube, into which the ball is screwed, has two wings at I, I, fixed to the bottom, that the ball may not break the tube by its endeavour to emerge when the water is poured in at $g\ h$. After the doctor had contrived this machine, he considered, that, as the tube is of a very small bore, if the liquor should rise into the ball at A, in carrying the instrument from one place to another, some of it would adhere to the sides of the ball A, and, upon his descent in making the experiment, so much might be left behind, that the liquor would not be high enough at D to show the difference of the level; therefore, to prevent that inconveniency, he contrived a blank screw, to shut up the hole at A, as soon as one experiment is made, that, in carrying the machine, the air in A may balance that in C, so that the liquor shall not run up and down the tube, whatever degree of heat and cold may act upon the instrument, in going from one place to another. Observe and set down the degree of the thermometer at which the spirit stands, and likewise the degree of the water in the barometer at D; then screw on the cap at A, pour out the water, and carry the instrument to the place whose level you would know; then pour in your water, and, when the thermometer is come to the same degree as before, open the screw at top, and observe the liquor in the barometer. The doctor's scale for the barometer is ten inches long, and divided into tenths; so that such an instrument will serve for any height not exceeding ten feet, each tenth of an inch answering to a foot in height. The doctor made no allowance for the decrease of density in the air, because he did not propose this machine for measuring mountains (though, with a proper allowance for the decreasing density of the air, it will do very well), but for heights that are wanted to be known in gardens, plantations, and the conveyance of water, where an experiment that answers two or three feet in a distance of twenty miles, will render this a very useful instrument.

Level, Gunner's, for levelling cannons and mortars, consists of a triangular brass plate, about four inches high, fig. 10, at the bottom of which is a portion of a circle, divided into 45°; which number is sufficient for the highest elevation of cannons and mortars, and for giving shot the greatest range: on the centre of this segment of a circle is screwed a piece of brass, by means of which it may be fixed or screwed off at pleasure: the end of this piece of brass is made so as to

LEVELS.

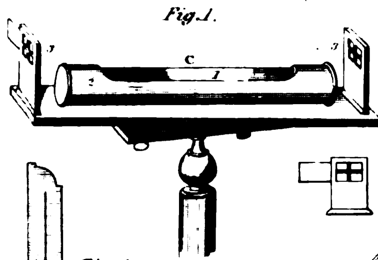


Fig. 1.

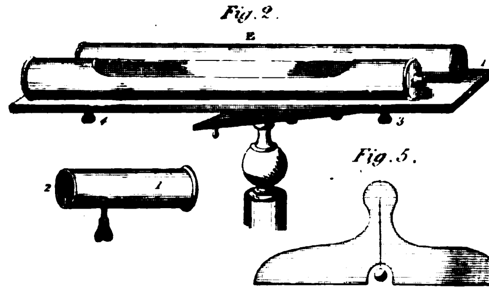


Fig. 2.

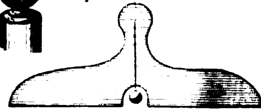


Fig. 5.

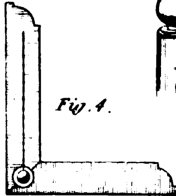


Fig. 4.

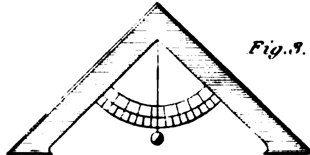


Fig. 3.

Fig. 14.

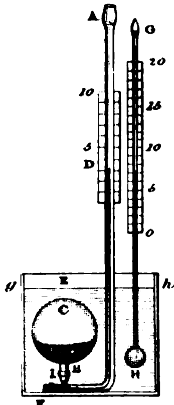


Fig. 6.

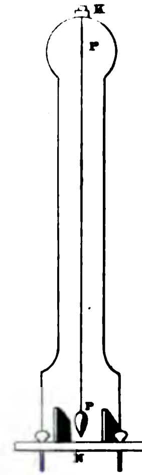


Fig. 8.

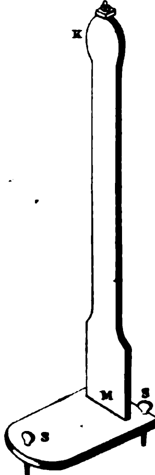


Fig. 7.

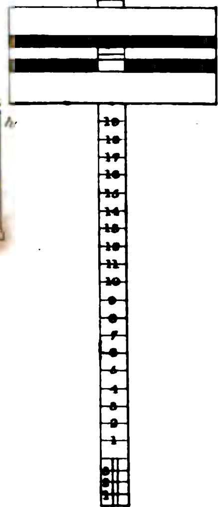


Fig. 9.

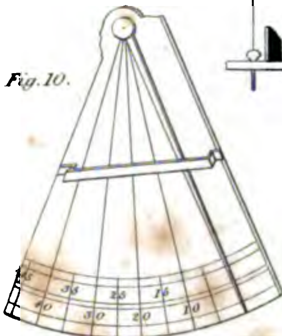


Fig. 10.

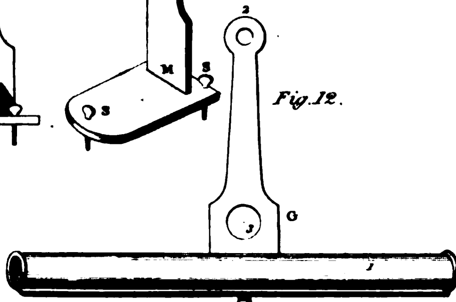


Fig. 12.

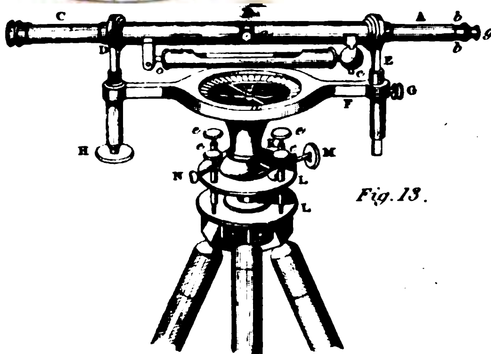


Fig. 13.

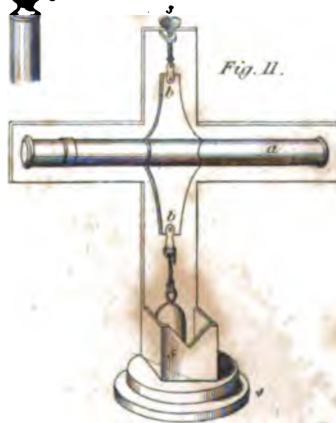
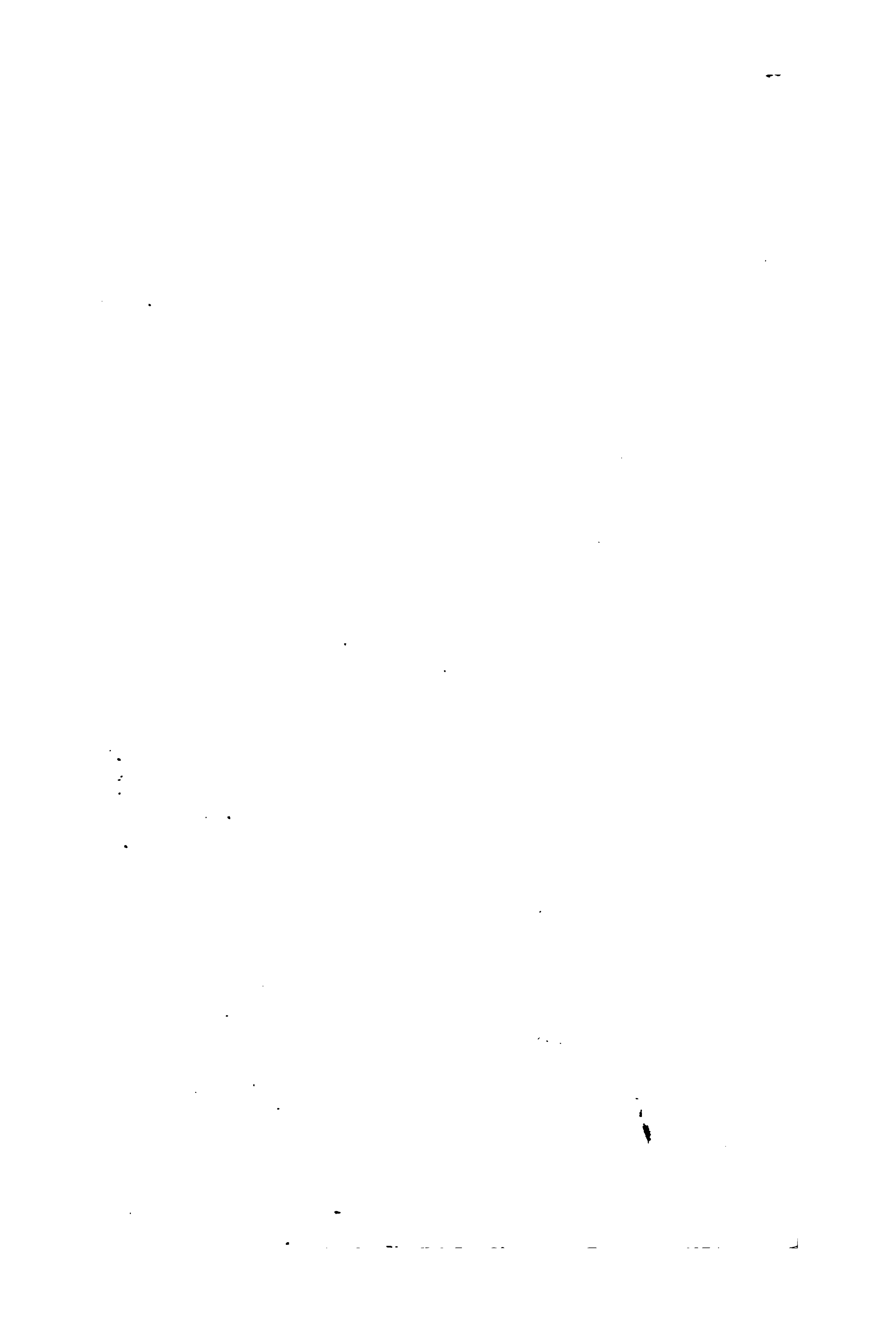


Fig. 11.

London, Published by Thomas Tegg, 73 Cheapside. J. Shury sculp.



serve for a plummet and index, in order to show the different degrees of elevation of pieces of artillery. This instrument has sometimes also a brass foot to set upon cannons or mortars, so as, when those pieces are horizontal, the instrument will be perpendicular. The foot of this instrument is to be placed on the piece to be elevated, in such a manner as that the point of the plummet may fall on the proper degree. The most curious instrument for the use of the artillerist has been invented by the ingenious colonel Congreve, of the royal artillery; having the following qualifications, viz.: 1. It will find the inclination of any plane, whether above or below the horizon. 2. By applying it either to the cylinder, or outside of any piece of ordnance, angles of elevation or depression may be given to the sixtieth part of a degree, with less trouble than the common gunners' quadrant, which only gives to the fourth part of a degree. 3. It will give the line of direction for laying either guns or mortars to an object above or below the horizon. 4. It will find the centre of metals of any piece of ordnance. 5. With it, a point may be found in the rear of a mortar-bed, in the vertical plane of the mortar's axis; consequently a longer line of sight is given for directing them to the object than the usual way. 6. It answers all the purposes of a pair of callipers, with the advantage of knowing (to the 100th part of an inch) diameters, whether concave or convex, without the trouble of laying the claws upon a diagonal scale. 7. On the sides of the instrument are the following lines, viz. equal parts, solids, planes, and polygons, logarithms, tangents, versed sines, sines and numbers, plotting scales, and diagonal scale of inches for cutting fuses by. 8. In the lid of the instrument-case is a pendulum to vibrate half seconds. It is likewise of singular use in surveying; as (1.) It takes horizontal angles to the sixtieth part of a degree. (2.) Vertical angles. (3.) Levels. (4.) Solves right-angled plane triangles. (5.) Oblique-angled plane triangles. (6.) Answers all the purposes of a protractor, with the advantage of laying down angles exactly as taken in the field.

Level, Mason's, is composed of three rules, so joined as to form an isosceles rectangle, somewhat like a Roman A; at the vertex of which is fastened a thread, from which hangs a plummet, that passes over a siducial line, marked in the middle of the base, when the surface to which the level is applied is horizontal; but declines from the mark when it is lower on the one side than on the other.

Level, Huygens'. Mr. Huygens' invention consists of a telescope *a*, fig. 11, in form of a cylinder, going through a ferule, in which it is fastened by the middle. This ferule has two flat branches *b*, *b*, one above, and the other below: at the ends whereof are fastened little moving pieces, which carry two rings, by one of which the telescope is suspended to a hook at the end of the screw 3, and by the other a heavy weight is suspended, to keep the telescope in equilibrio This weight hangs in the box 5, which is almost filled with linseed-oil, or other matter that will not easily coagulate, for more aptly settling the balance of the weight and telescope. The instrument carries two telescopes close and very parallel to each other; the eye-glass of the one being against the object-glass of the other, that one may see each way without turning the level. In the focus of the object-glass of each telescope a little hair must be stretched horizontally, to be raised and lowered as occasion requires, by a little screw. The hook on which the instrument is hung is fixed to a flat wooden cross, to which is applied another hollow one, that serves as a case for the instrument, that the telescope may be secured from the weather, and always in a condition to be used. The foot of this instrument is a round brass plate 4, to which are fastened three brass ferules, moveable by means of joints, whereon staves are put.

Level, Plumb, or Pendulum, that which shows the horizontal lines by another line perpendicular to that described by a plummet or pendulum. This instrument, fig. 12, consists of two legs or branches, joined together at right angles, whereof that which carries the thread and plummet is about a foot and a half long; the thread is hung towards the top of the branch, at the point 2. The middle of the branch where the thread passes is hollow, so that it may hang free every where; but towards the bottom, where there is a little blade of silver 3, whereon is drawn a line perpendicular to the telescope 1, the cavity is covered by two pieces of brass, making as it were a kind of case, lest the wind should agitate the thread; for which reason the silver blade is covered with a glass G, to the end that it may be seen when the thread and plummet are perpendicular: the telescope is fastened to the other branch of the instrument, and is about two feet long; having a hair placed horizontally across the focus of the object-glass, which determines the point of the level. The telescope must be fitted at right angles to the perpendicular. It has a ball and socket, by which it is fastened to the foot, and was invented by M. Picard.

Level, Reflecting, that made by means of a pretty long surface of water representing the same object inverted which we see erected by the eye, so that the point where these two objects appear to meet is level with the place where the surface of the water is found. This is the invention of M. Marriotte. There is another reflecting level, consisting of a mirror of steel or the like, well polished, and placed a little before the object-glass of a telescope, suspended perpendicularly. This mirror must make an angle of 45° with the telescope, in which case the perpendicular line of the telescope is converted into a horizontal line, which is the same with the line of level. This is the invention of M. Cassini.

Level, Spirit, the most accurate levelling instrument. The following is a description of one of the best of these levels. Fig. 13. is a representation of the instrument mounted on its complete staves. The telescope, A B C, is made from fifteen inches to two feet in length, as may be required. It is a chromatic, of the best kind and shows the objects erect. In the focus of the eye-glasses are exceedingly fine cross wires, the intersection of which is evidently shown to be perfectly in the axis of the tube; for, by turning

it round on its two supporters D E, and looking through the telescope, the intersection of the wires will constantly cut the same part of the object viewed. By turning the screw *a*, at the side of the telescope, the object-glass at *g* is moved; and thus the telescope is exactly adapted to the eye. If these cross wires are at any time out of their adjustment, which is discovered by their intersection not cutting the same part of the object during the revolution of the telescope on its axis, they are easily adjusted by means of the screws *b b*, placed on the telescope, about an inch from the end, for the eye. These screws act in perpendicular directions to one another, by unscrewing one and tightening the other opposite to the wire, so that, if connected with it, it may be moved either way at pleasure; and in this manner the other wire perpendicular to it may be moved, and thus the intersection of the wires brought exactly in the axis of the tube. To the telescope is fixed, by two small screws, *c c*, the level tube containing the spirits, with a small bubble of air: this bubble of air, when the instrument is well adjusted, will settle exactly in the same place, in or near the middle of its tube, whether the telescope be reversed or not on the supporters, which in this case are kept unmoved. It is evident that the axis of the telescope, or the intersection of the wires, must be in this case truly level. In this facile mode of adjustment consists the new improvement of the instrument; and it is hereby capable of being adjusted by only one station and one object, which will at the same time determine it to be in a true level. If by change of weather, accident, or otherwise, the instrument should have lost its level adjustment, it may thus be readily restored and re-adjusted at the first station; which is an advantage none of the other instruments formerly made have been capable of. The two supporters D E, on which the level rests and turns, are shaped like the letter Y. The telescope rests within the upper part of them; and the inner sides of each of these Y's are tangents to the cylindrical tube of the telescope, which is turned to a true cylinder. The lower end of these supporters is inserted into a strong brass plate, F, and so as to stand perpendicularly on it. One is kept fast by a tightening screw G, and to the other is applied a fine threaded screw H, to adjust the tube when on its supporters to a true level. To the supporter D is sometimes applied a line of tangents as far as 12°, in order to take an angle of depression or elevation to that extent. Between the supporters is also sometimes fixed a compass-box, I, divided into 360°, and again into four 90°; having a centre pin, and needle and trigger, at *d*, to throw off the needle from the centre when not used; so in this manner it constitutes a perfect circumferentor, connected with all the foregoing improvements. This plate is fixed on a conical brass ferule, K, which is adapted to the bell-metal frustum of a cone at top of the brass head of the staves, having a ball and socket, with three bell-metal joints, two strong brass parallel plates L, L, the four screws *e, e, e, e*, for adjusting the horizontal motion, a regulating screw, M, to this motion, and a fastening screw, N, to lighten it on the cone when necessary. The fastening screw N, and the regulating screw M, by which the whole instrument is moved with accuracy through a small space in an horizontal direction, was an addition of Mr. Ramsden's. To adjust it at the first station, the whole level being placed steadily on its staves, it must be rendered parallel to the axis of the telescope before adjusting the horizontal motion. To this end the telescope must be placed in a line with two of the screws *e, e*, and then levelled thereby till the bubble of air in the spirit-tube keeps its position in the middle, while turned about to three points, making nearly right angles at the centre to one another. The horizontal motion being thus adjusted, the rims of the Y's are to be opened, the telescope taken off, and laid the contrary way upon the supporters. If the bubble of air then rests exactly the same, the level and telescope are rightly adjusted to one another; but, if the bubble does not remain the same, the end to which the air-bubble goes must be noticed, and the distance of it from the telescope altered; correcting one-half the error by the screws *c, c*, and the other half by the screws *e, e*. Now the intersection of the wires being directed to any distant object: if they continue to be precisely against it while the telescope is turned round on its Y's, it proves, as before mentioned, that the axis of the telescope coincides with the intersection of the wires, and that the instrument will give the true level direction.

Level, Water, that which shows the horizontal line by means of a surface of water, founded on the principle that water always places itself level. The most simple is made of a long wooden trough or canal, whose sides are parallel to the base; so that, being equally filled with water, its surface shows the line of level. This is the chorobates of the ancients. It is also made with two cups fitted to the two ends of a pipe, three or four feet long, about an inch in diameter, by means of which the water communicates from the one to the other cup; and this pipe being moveable on its stand by means of a ball and socket, when the two cups become equally full of water, their two surfaces mark the line of level. This instrument, instead of cups, may also be made with two short cylinders of glass, three or four inches long, fastened to each extremity of the pipe with wax or mastic. Into the pipe is poured some common or colored water, which shows itself through the cylinders, and thus the line of level is determined; the height of the water, with respect to the centre of the earth, being always the same in both cylinders: this level, though very simple, is yet very commodious for levelling small distances.

Levelling may be defined, the art which instructs us in finding how much higher or lower any given point on the surface of the earth is than another; or, in other words, the difference in their distance from the centre of the earth. The practice of levelling, therefore, consists, 1. In finding and marking two or more points that shall be in the circumference of a circle whose centre is that of the earth 2. In comparing the points thus found with other points, to ascertain the difference in their distances from the earth's centre. With regard to

the theory of levelling, we must observe, that a plumb-line, hanging freely in the air, points directly towards the centre of the earth; and a line drawn at right angles, crossing the direction of the plumb-line, and touching the earth's surface, is a true level only in that particular spot; but if this line, which crosses the plumb, be continued for any considerable length, it will rise above the earth's surface, and the apparent level will be above the true one, because the earth is globular; and this rising will be as the square of the distance to which the said right line is produced; that is to say, however much it is raised above the earth's surface at one mile's distance, it will rise four times as much at the distance of two miles, nine times at the distance of three, &c. This is owing to the globular figure of the earth; and this rising is the difference between the true and apparent levels; the real curve of the earth being the true level, and the tangent to it the apparent level. Hence it appears, that the less distance we take betwixt any two stations, the truer will be our operations in levelling; and so soon does the difference betwixt the true and apparent levels become perceptible, that it is necessary to make an allowance for it, if the distance betwixt the two stations exceeds two chains in length. The following is an infallible rule for determining the allowance to be made: multiply the number of Gunter's decimal statute chains, that are contained in length between any two stations where the levels are to be taken, by itself, and the product arising therefrom again by 124; which is a common multiplier for all manner of distances for this purpose on account of the earth's curvature: then divide the second product arising therefrom by 100,000; or, which is also the same, with the dash of the pen cut off five figures on the right hand side of the product, and what remains on the left side is inches, and the five figures cut off decimal parts of an inch.

Table of Curvature of the Earth, showing the quantity below the apparent level, at the end of every number of chains to 100.

Chains.	Inches.	Chains.	Inches.	Chains.	Inches.	Chains.	Inches.
1	0·00125	14	0·24	27	0·91	40	2·00
2	0·005	15	0·28	28	0·98	45	2·28
3	0·01125	16	0·32	29	1·05	50	3·12
4	0·02	17	0 36	30	1·12	55	3·78
5	0·03	18	0·40	31	1·19	60	4 50
6	0·04	19	0·45	32	1·27	65	5·31
7	0·06	20	0·50	33	1·35	70	6·12
8	0·08	21	0·55	34	1·44	75	7.03
9	0·10	22	0·60	35	1·53	80	8·00
10	0·12	23	0·67	36	1·62	85	9·03
11	0·015	24	0·72	37	1·71	90	10·12
12	0·018	25	0 78	38	1·80	95	11·28
13	0·021	26	0·84	39	1·91	100	12·50

Levelling Staves, instruments used in levelling, serving to carry the marks to be observed, and at the same time to measure the heights of those marks from the ground. They usually consist of two mahogany staves, ten feet long, divided into 1000 equal parts, and numbered at every tenth division by ten, twenty, thirty, &c., to 1000; and on one side the feet and inches are also sometimes marked. See plate Levels, fig. 14. A vane, A, slides up and down upon each set of these staves, which by brass springs will stand at any part. These vanes are about ten inches long and four inches broad; the breadth is first divided into three equal parts, the two extremes painted white, the middle space divided again into three equal parts, which are less; the middle one of them is also painted white, and the two other parts black; and thus they are suited to all the common distances. These vanes have each a brass wire across a small square hole in the centre, which serves to point out the height corrected, by coinciding with the horizontal wire of the telescope of the level.

LEV'EN. See Leaven.

LEVENTIN, a considerable lake of Prussian Lithuania, which is joined to the lake of Angerburg by a small canal. Fifty-six miles south-east of Konigsberg.

LE'VER, *n. s.* Fr. *levier;* Lat. *levator.* An important mechanical power; a species of balance. See the extract from Harris.

Have you any *leavers* to lift me up again, being down? - *Shakspeare.*

Some draw with cords, and some the monster drive
With rolls and *levers.* *Denham.*

In a *lever*, the motion can be continued only for so short a space, as may be answerable to that little distance betwixt the fulciment and the weight: which is always by so much lesser, as the disproportion betwixt the weight and the power is greater, and the motion itself more easy.
Wilkin's Mathematical Magick.

Some hoisting *leavers*, some the wheels prepare.
Dryden.

The second mechanical power is a balance supported by a hypomochlion; only the centre is not in the middle, as in the common balance, but near one end; for which reason it is used to elevate or raise a great weight; whence comes the name *lever.* *Harris.*

The *lever* is the simplest of all machines, and is only a staight bar of iron, wood, or other material, supported on, and moveable round, a prop called the fulcrum. *Imison's Elements.*

Lever, in mechanics, is a bar of iron or wood, one part of which being supported by a prop, all other parts turn upon that fulcrum as their centre of motion. This instrument is of two kinds. First, that in which the weight we desire to raise rests at one end of it, our strength is applied at the other end, and the prop is between both. When we stir up the fire with a poker, we make use of this lever; the poker is the lever, it rests upon one of the bars of the grate as a fulcrum; the incumbent fire is the weight to be overcome, and the other end held in the hand is the strength or power. In this, as in all the rest, we have only to increase the distance between the strength and prop to give the man that works the instrument greater power. The lever of the second kind has the fulcrum at one end, the strength is applied to the other, and the weight to be raised rests between them. In this lever, also, the greater the distance of the ful-

crum from the power, the greater is the workman's ability. See MECHANICS.

LEVER (Sir Ashton), a celebrated collector of curiosities in natural history, was the son of Sir D'Arcy Lever, knight, of Alcame, gentleman commoner of Corpus Christi College. On leaving it, he soon rendered his family seat famous by the best aviary in the kingdom. He afterwards extended his plan to all branches of natural history, and thus rendered his museum one of the most complete in the world. He died in 1788, and his museum was sold by lottery.

LEV'ERET, *n. s.* Fr. *lievret*; Ital. *lepretta*; (Lat. *lepus*). A young hare.

Their travels o'er that silver field does show
Like track of *leverets* in morning snow. *Waller.*

Ye squirrels, rabbits, *leverets*, rejoice,
Your haunts no longer echo to his voice;
This record of his fate exulting view,
He died worn out with vain pursuit of you.
Cowper.

LE'VET, *n. s.* Fr. *lever*. A blast on the trumpet; probably that by which the soldiers are roused in the morning.

He that led the cavalcade
Wore a sowgelder's flagellet,
On which he blew as strong a *levet*
As well-fee'd lawyer on his breviate.
Hudibras.

LEVE'ROOK, *n. s.* Sax. lapepc. An old name for the lark, retained in Scotland.

The smaller birds have their particular seasons; as, the *leverook*. *Walton's Angler.*

If the lufft fa' 'twill smoore aw the *leverooks*.
Scotch Proverbs.

LEVI, Heb. לוי, i. e. joined, the third son of Jacob by Leah, and the progenitor of the priests and Levites, was born about A. M. 2254. His treacherous and bloody combination with Simeon, to murder the Schechemites, is recorded in Gen. xxxiv.: as well as Jacob's detestation of it, and his curse denounced against them for it, on his death-bed.

LEVI (David), an English Jew and mechanic, was born in London in 1740. Though of humble rank, he became possessed of considerable information with regard to the antiquities of his own people; and, in 1787, entered into a polemical controversy with Dr. Priestley, whose Letters to the Jews he answered in two collections of essays, in the same epistolary form. He also wrote a Hebrew and English Lexicon, in 3 vols.; a Translation of the Pentateuch, another of the Hebrew Liturgy, in 6 vols.; and Dissertations on the Mosaic Rites and Ceremonies; On the Prophecies, &c. His death took place in 1799.

LEVI'ATHAN, *n. s.* Heb. לויתן. A water or amphibious animal mentioned in the book of Job. Not inaptly applied by lord Byron to our men of war.

Canst thou draw out *leviathan* with an hook?
Job.

We may, as bootless, spend our vain command
Upon the' enraged soldiers in their spoil,
As send our precepts to the *leviathan*,
To come ashore. *Shakspeare. Henry V.*

More to embroil the deep, *leviathan*,
And his unwieldy train, in dreadful sport
Tempest the loosened brine.
Thomson's Winter.

The magnificent description of the unicorn and of *leviathan*, in the same book, is full of the same heightening circumstances. *Burke on the Sublime.*

The armaments which thunder-strike the walls
Of rock-built cities, bidding nations quake,
And monarchs tremble in their capitals;
The oak *leviathans*, whose huge ribs make
Their clay creator the vain title take
Of lord of thee, and arbiter of war. *Byron.*

LEVIATHAN. Zoologists and commentators have been much puzzled to determine to what genus of animals the leviathan belongs. Some suppose it to be the whale; others a species of land dragon, said to frequent the banks of the Red Sea; others the crocodile; while a fourth class do not reckon it an animal at all, but a whirlpool. This last opinion is too absurd to refutation, as the whole description, in Job xli., of his parts, passions, motions, strength, invulnerability, &c., evidently refer to an animated being, and not to a collection of dead matter, such as a whirlpool. Of the dragon nothing yet certainly known suits the description of the leviathan. See DRACO. As to the whale, many parts of the description, particularly verses sixth and seventh, cannot, by any construction of language, be made to apply to it; for it is well known that the whale's 'skin' is often 'filled with barbed irons,' and 'his head with fish-spears;' and that those engaged in the whale-fishery 'part him' (his blubber, bones, spermaceti, &c.) 'among the merchants.' In a word, no animal, that we have any certain knowledge of, comes any thing near the grand and majestic description given of the leviathan, by his Creator, except the crocodile, who, it is well ascertained, cannot be 'drawn out' or taken 'with a hook,' or his 'jaw bored through with a thorn.' whose teeth are indeed 'terrible round about,' whose scales may be said to be 'his pride,' shut up together as with a close seal; one so near to another, that no air can come between them; so joined one to another, and sticking together, 'that they cannot be sundered,' &c. See LACERTA.

LEV'IGATE, *v. a.* } Lat. *lævigo*. To grind
LEVIGA'TION, *n. s.* } to an impalpabie powder.

Levigation is the reducing of hard bodies, as coral, tutty, and precious stones, into a subtile powder, by grinding upon marble with a muller; but, unless the instruments are extremely hard, they will so wear as to double the weight of the medicine. *Quincy.*

The chyle is white, as consisting of salt, oil, and water, much *levigated* or smooth. *Arbuthnot.*

Levigation (is) the grinding down hard substances to an impalpable powder on a stone with a muller, or in a mill adapted to the purpose.
Parke's Chemical Dictionary.

LEVIGATION, in pharmacy and chemistry. The mechanical process of grinding the parts of bodies to a fine paste, by rubbing the flat face of a stone called the muller, upon a table or slab called the stone. Some fluid is always added in this process. The advantage of levigation with a stone and muller, beyond that of triturating in a mortar, is, that the materials can more easily be scraped together, and subjected to the action of the muller, than in the other case to that of the pestle; and, from the flatness of the two surfaces, they cannot elude the pressure.

LE'VITE, *n. s.* } Lat. *levita*, from Heb.
LEVIT'ICAL, *adj.* } לוי, a son of Jacob, the father of the tribe set apart as priests by Moses; a Jewish priest; any priest: levitical, pertaining to the Levites or priesthood, or to the Jewish dispensation.

If therefore perfection were by the *levitical* priesthood, what further need was there that another priest should rise? *Heb.* vii. 11.

Love procures truer servitude than necessity: mercy becomes well the heart of any man, but most of a *Levite*. *Bp. Hall.*

In the Christian church, the office of deacons succeeded in the place of the *levites* among the Jews, who were as ministers and servants to the priests. *Ayliffe's Parergon.*

By the *levitical* law, both the man and the woman were stoned to death; so heinous a crime was adultery. *Id.*

LEVITES, in a general sense, include all the descendants of Levi, among whom were the Jewish priests. In a more particular sense, the Levites were an order of officers in the Jewish church, who were employed in performing the manual service of the temple. They were obedient to the priests, the descendants of Aaron, in their ministration, and brought them wood, water, and other necessaries for the sacrifice. They sung and played upon instruments in the temple and other places. They applied themselves to the study of the law, and were the ordinary judges of the country, but always subordinate to the priests. Their subsistence was the tithes of corn, fruit, and cattle, throughout Israel: but the priests were entitled to a tenth of their tithes, by way of first-fruits to the Lord: forty-eight cities were assigned for the residence of the Levites, of which the priests claimed thirteen, six of which were appointed cities of refuge. They were consecrated, before they entered upon their ministry, by shaving their flesh, washing their clothes, and sprinkling with the water of expiation. Imposition of hands was used in consecration, and two bullocks were offered at the door of the tabernacle. They waited weekly, and by turns, in the temple, beginning their attendance on one sabbath and ending the next: during this time they were maintained out of the offerings, &c. In the time of Solomon the number of Levites, above the age of twenty, capable of serving, was 38,000.

LEVITICUS, a canonical book of the Old Testament, so called from its containing the laws and regulations relating to the priests, Levites, and sacrifices.

LEV'ITY. Lat. *levitas*, *levo*. Lightness; applied to physical weight; to tempers of the mind; to manners; and to character.

They every day broached some new thing; which restless *levity* they did interpret to be their growing in spiritual perfection. *Hooker.*

Our graver business frowns at this *levity*. *Shakspeare.*

He gave the form of *levity* to that which ascended; to that which descended, the form of gravity. *Raleigh.*

It is more than probable that in Egypt it was very ordinary to admit lapsed persons, and even idolators, to repentance, because of the strange *levity* of the nation. *Jeremy Taylor.*

Hopton abhorred the licence, and the *levities* with which he saw too many corrupted. *Clarendon.*

I unbosomed all my secrets to thee;
Not out of *levity*, but over-powered
By thy request. *Milton's Agonistes.*

As we may well stoop to friendly complaisance, so we should take heed of falling into contemptible *levity*. *Barrow.*

He never employed his omnipotence out of *levity* or ostentation, but as the necessities of men required. *Calamy.*

That spirit of religion and seriousness vanished, and a spirit of *levity* and libertinism, infidelity and profaneness, started up in the room of it. *Atterbury.*

This bubble, by reason of its comparative *levity* to the fluidity that encloses it, would ascend to the top. *Bentley.*

Where wigs with wigs, with sword-knots sword-knots strive,
Beaus banish beaus, and coaches coaches drive,
This erring mortals *levity* may call. *Pope.*

Why spur the speedy? why with *levities*
New-wing thy short, short, day's too rapid flight? *Young.*

His cheerfulness is without *levity*, and his pensiveness without asperity. *Johnson.*

He was the only man I ever saw who was a greater fool than myself, where woman was the presiding star; but he spoke of illicit love with the *levity* of a sailor, which hitherto I had regarded with horror. *Burns.*

Such a regulation and right management of your thoughts and rational powers will be of great and general advantage to you in the pursuit of youthful knowledge, and a good guard against the *levities* and frantic sallies of the imagination. *Mason.*

Besides that ignorance, inattention, prejudice, rashness, *levity*, obstinacy, in short all those passions, and all those vices, which pervert the judgment in other matters, prejudice it no less in its more refined and elegant province. *Burke on the Sublime.*

LEVIZAC (John Pons Victor Lacoutz de), a French author, descended of a noble family in Languedoc, became an ecclesiastic when young, and obtained a canonry at Vabres. In 1776 he commenced his literary career, by a poem called Le Bienfait rendu, which gained the prize at the Floral games of Toulouse. He quitted France for Holland at the revolution, and afterwards settled in England as a teacher. Here he died in 1813. Levizac is advantageously known as the author of Bibliotheque portative des écrivains Français, ou Choix des meilleurs morceaux Extraits de leurs Ouvrages; Dictionnaire des Synonymes; and other works designed to facilitate an acquaintance with the language and literature of France.

LEUNCLAVIUS (John), a learned German, descended of a noble family, and born at Amelbrun in Westphalia in 1533. He travelled through most countries in Europe. While he was in Turkey he collected materials for a History of the Ottoman Empire; which he published, and several other pieces concerning it, in Latin. He also translated Xenophon, Zosimus, &c., into Latin. To a knowledge of the learned languages he added that of the civil law. He died at Vienna in 1593, aged sixty.

LEUSDEN (John), a celebrated philologer, born in 1624. He studied the learned languages and mathematics at Utrecht; and then visited

Amsterdam, to converse with the rabbies and perfect himself in the Hebrew tongue. After which he became professor of Hebrew at Utrecht, where he acquired a great reputation, and died in 1699. He wrote many valuable works; the principal of which are, 1. Onomasticum Sacrum, 8vo. 2. Clavis Hebraica et Philologica Veteris Testamenti, 4to. 3. Novi Testamenti Clavis Græca, cum Annotationibus Philologicis, 8vo. 4. Compendium Biblicum Veteris Testamenti, 8vo. 5. Compendium Græcum Novi Testamenti; the best edition of which is that of London, in 1668, 12mo. 6. Philologus Hebræus, 4to. 7. Philologus Hebræo-mixtus. 4to. 8. Philologus Hebræo-Græcus, 4to. 9. Notes on Jonas, Joel, Hosea, &c.

LEUTMERITZ, a circle of Bohemia, lies in the north of that kingdom, and is bounded by Saxony and the circles of Rakonitz and Bunzlau. Its territorial extent is 1336 square miles: the Elbe traverses its whole length; receiving here the Eger, the Bila, and the Polzen. The most lofty mountains of the Erzgebirg chain also penetrate this circle, and it is consequently in many places barren and uncultivated; in others it is so fertile as to be called 'the Paradise of Bohemia.' In its mountains are occasionally found garnets, and other precious stones. Here are also several mineral springs, among which is that of Toplitz. Population 292,000.

LEUTMERITZ, a town of Bohemia, the capital of the preceding circle, is a neat well-built place, on the Elbe, over which is a wooden bridge, 1646 feet long, leading to the fortress of Theresienstadt. It has a cathedral, theological seminary, and an academy, together with a productive fishery in the Elbe. Population 3600: thirty-six miles N. N. E. of Prague.

LEUTOMISCHL, a manufacturing town of Bohemia, containing a public school, manufactures of cloth and dye-stuffs, with extensive distilleries. In 1758 this town was taken by the Prussians, and suffered severely from fire in 1775. Population 4650. It is eighty-six miles east by south of Prague, and twenty-two east of Chrudim.

LEUTSCHAU, an old town in the county of Zyps, Hungary, the place of meeting for the provincial assemblies, stands partly on the slope of a hill. It has a large square, in which is a handsome church; but is irregularly built. This town, formerly walled, was frequently taken and retaken during the commotions of the seventeenth century. It has also suffered considerably from fires. Population 4500: twenty-five miles west by south of Szeben.

LEUWENHOEK (Anthony de), F. R. S., a celebrated Dutch physician and naturalist, born at Delft in 1632. He was of an ancient family, and acquired great reputation throughout all Europe, by his experiments and discoveries. He particularly excelled in making glasses for microscopes and spectacles: he died in 1723. His letters to the Royal Society of London were printed at Leyden in 1722, in 4to.

LEV'Y, *v. a.* & *n. s.* } Fr. *levée*, *lever*; Lat.
LEV'IABLE, *adj.* } *levo*. To raise; applied to the raising men and money for public purposes; and hence to the making war: leviable, that which may be imposed or raised by law.

Levy a tribute unto the Lord of the men of war.
Numbers.

Treason has done his worst: nor steel, nor poison
Malice domestick, foreign *levy*, nothing
Can touch him further. *Shakspeare. Macbeth.*

The sums which any agreed to pay, and were not brought in, were to be *leviable* by course of law.
Bacon's Henry VII.

He resolved to finish the conquest of Ireland, and to that end *levied* a mighty army.
Davies on Ireland.

The ancient discipline of the church, in imposing penances, was made so loose that the indulgence was more than the imposition, and began not to be an act of mercy but remissness, and absolution without amends: it became a trumpet, and a *levy* for the Holy War. *Bp. Taylor.*

Instead of a ship, he should *levy* upon his county such a sum of money. *Clarendon.*

They live in hatred, enmity, and strife,
Among themselves, and *levy* cruel wars. *Milton.*

These were the misdemeanors of those in the late times, who, instead of praying for their sovereign, did raise tumults, and *levy* war against him, pretending by rude force to reduce him to his duty.
Barrow.

As none but kings have power to raise
A *levy* which the subject pays,
And though they call that tax a loan,
Yet when 'tis gathered 'tis their own. *Hudibras.*

They have already contributed all their superfluous hands, and every new *levy* they make must be at the expence of their farms and commerce.
Addison's State of the War.

LEWD, *adj.* } Sax. læpeðe, leoð; Goth.
LEWD'LY, *adv.* } *lyd*, the people. Lay, not
LEWD'NESS, *n. s.* } clerical; common; vulgar:
LEWD'STER. } hence, low; gross; sensual; wicked; dissolute; licentious; libidinous. (Few words have descended in their signification more singularly.) A lewdster is a lecher.

For *lewyd* men this boke I wrot. *Bp. Grosthead.*

He loved fair lady Eltred, *lewdly* loved,
Whose wanton pleasures him too much did please,
That quite his heart from Guendeline removed.
Spenser.

If some be admitted into the ministry, either void of learning, or *lewd* in life, are all the rest to be condemned? *Whitgifte.*

He is not lolling on a *lewd* love-bed;
But on his knees at meditation. *Shakspeare.*

A sort of naughty persons, *lewdly* bent,
Have practised dangerously against your state.
Id.

Against such *lewdsters*, and their lechery,
Those that betray them do no treachery. *Id.*

So these great clerks their little wisdom shew
To mock the *lewd*, as learned in this as they.
Davies.

Then *lewd* Anchemolus he laid in dust,
Who stained his step-dame's bed with impious lust.
Dryden.

Suffer no *lewdness*, nor indecent speech,
The' apartment of the tender youth to reach. *Id.*

There is no such slavery in the dear name of a sister, that it should bind us to give either aid or countenance to *lewdness*. *Bp. Hall.*

What do their prophetical writings contain beside pathetical comminations of judgment upon them, for their prodigious impieties, iniquities, and *lewdnesses*.
Barrow.

Damianus's letter to Nicholas is an authentick record of the *lewdnesses* committed under the reign of celibacy. *Atterbury.*

Then mark him weltering in his nasty sty,
Bare his *lewd* transports to the public eye.
Canning.

LEWDNESS. See FORNICATION. Lewdness is punishable by our law by fine, imprisonment, &c. Formerly, when any man granted a lease of his house, it was usual to insert an express covenant, that the tenant should not entertain any lewd women, &c.

LEWENZ, or LEVA, a large town of the palatinate of Barsch, in the interior of Hungary. It carries on a traffic in corn, cattle, wine, and tobacco; and manufactured leather. Here are several distilleries; and in the neighbourhood various mineral springs. Eight miles east of Barsch.

LEWES, an ancient, large, and well-built town of Sussex, seated on an eminence on the banks of the Ouse, fifty miles from London. A bloody battle was fought near it, wherein king Henry III. was defeated and taken prisoner by the barons. King Athelstan appointed two mint-houses here; and in the reign of Edward the Confessor it had 127 burgesses. The gate and two towers of its ancient castle, built in the eleventh century, still remain. Several religious houses appear to have been established here; viz. a priory of Cluniac monks, founded in 1078, and the first of that order in England; a priory of gray friars; a monastery dedicated to St. James, and an hospital to St. Nicholas. A borough by prescription. The constables are chosen yearly. It has handsome streets and suburbs, with six parish churches. It carries on a good trade; and the Ouse, which runs through it, brings goods in barges from the port of Newhaven, seven miles off. On this river are several iron works, where cannons, &c., are cast. A charity-school was opened in 1711, where twenty-eight boys are taught, clothed, and maintained. The market is on Saturday. Lewes is a handsome town, and one of the largest and most populous in the county, having two extensive suburbs, one on the west side of the town, and the other on the east bank of the river, called Cliffs. From a windmill in the neighbourhood is a fine view of the sea and the circumjacent towns, gentlemen's seats, &c., not to be exceeded in England. It sends two members to parliament, and lies thirty miles east of Chichester, and forty-eight south of London.

LEWIS. See LOUIS.

LEWIS (John), M. A., a learned English divine, born in Bristol in 1675, and educated at Exeter College, Oxford. Archbishop Tenison gave him the vicarage of Minster in the Isle of Thanet. He published, 1. The Life of John Wickliffe, D. D. 8vo. 1720; 2. The History and Antiquities of the Isle of Thanet, 4to. 1723; 3. History of the Abbey and Church of Feversham; 4to. 1727; 4. Life of William Caxton, the first printer in England, 8vo; 5. A complete History of the Translations of the Bible into English; 8vo. He also published Wickliffe's Translation; and died in 1746.

LEWIS, in geography, one of the largest of the Western Islands of Scotland, extending about sixty miles in length from north to south, and from thirteen to fourteen in breadth, consisting of a great number of isles and rocks, and connected by an isthmus of six miles with the isle of Harris. See HARRIS. Lewis belongs to the county of Ross; is divided by several channels, distinguished by several names, and portioned out among different proprietors; but Lewis, strictly so called, stretches about thirty-six miles in length, from the north point of Bowling-head to the south extremity of Hussiness in Harris. The air is moderately cold, moist, and healthy; great part of the low ground is flooded with lakes; the rest is arable in many places, and fruitful in oats, barley, rye, flax, and hemp. The soil in these parts is a light sand, which the inhabitants manure with soot and sea-ware. Of their corn they not only make malt for ale, but likewise a strong spirit called trestareg, which is whisky three times distilled. Lewis abounds with convenient bays and harbours, in which are caught, in great plenty, cod, ling, and herring: whales of different sizes are also often driven into the bays, and killed with harpoons. These bays afford great plenty of shell-fish, such as clams, oysters, cockles, muscles, limpets, welks. The cows, horses, sheep, goats, hogs, and deer, are all of a diminutive size; but the beef, mutton, and pork, are juicy and delicious: the horses are active and hardy: the deer, which are of the red kind, confine themselves to the chase of Oservaul, about fifteen miles in compass, which affords tolerable pasturage; but in winter, when the ground is covered with snow, these animals feed on sea-ware. There is likewise a small grove of birch and hazel on the south-west side of Loch-Stornaway. Along this coast are several natural mounts or forts, called duns; such as Dun-rowly, Dun-coradel, and Dun-eisten. There are also the remains of some old castles, and other monuments of antiquity. At Stornaway village are the ruins of a fortress destroyed by the English garrison sent thither by Oliver Cromwell. To the north of Brago there is a round tower built of large stones, three stories high, tapering to the top, with a double wall, and a circular staircase between, by which one may go quite round the building. On the summits of the hills there are several cairns. The most remarkable monument of this kind appears by the village of Classerniss. Here we find thirty-nine pyramidal stones standing upright, about six or seven feet high from the surface, each about two feet in breadth. They are placed in form of an avenue, eight feet wide; the distance between every stone being six feet, and a single piece stands at the entrance. This avenue leads to a circle of twelve stones of the same dimensions, with one in the centre, thirteen feet in length, and shaped like a rudder: on the east, south, and west, sides of this circle, are four stones, forming three lines, or as it were rays from the body of the circle. This is supposed to have been a Druid temple; and tradition reports, that the chief Druid stood by the large stone in the centre, and harangued the audience. At the distance of a quarter of a mile there is another circle of the same nature; but without the range and avenue. In all probability, these were places of worship erected by the Druids in time of Pagan superstition. The chief town is Stor-

naway. Lewis is divided into the two parishes of Barvas and Eye, and in each of these one minister is settled.

LEWISTOWN, the capital of Mifflin county, Pennsylvania, on the Juniatta; fifty-six miles north-west of Harrisburg, 162 W. N. W of Philadelphia. It is regularly laid out, and contains a court-house, a jail, a market-house, a bank, and has considerable trade. Large quantities of wheat are annually exported.

LEWISTOWN, a post town of Sussex county, Delaware, North America, on Lewes Creek, three miles from its entrance into Delaware Bay; three miles W. N. W. of Cape Henlopen Light House, and 112 south of Philadelphia. It has an elevated and pleasant situation, and contains an academy, a presbyterian and a methodist meeting-house, &c. It was formerly the seat of justice for the county: and the neighbourhood contains salt works 10,000 feet in extent, which are considered a great curiosity.

LEX, Law. The Roman laws were of three kinds: first, such as were made by their kings. Secondly, The laws of the XII tables, brought by the decemviri from Athens, &c. And, thirdly, Such as were proposed by the superior magistrates in the times of the republic. Romulus made laws by his sole authority; but his successors sought the approbation of the people. The laws of the third class were enacted in the following manner: No law could be proposed but by some of the following magistrates, viz. the prætor, consuls, dictator, interrex, decemviri, military tribunes, triumviri, tribunes of the people. If any of these proposed a law, it was first committed to writing, and privately examined as to its utility and probable consequences, by persons qualified for the task; sometimes it was referred to the whole senate for their sentiments. It was then hung up publicly for three market days, that all the people might have time to examine it, and consider its tendency: this was called legis promulgatio. If the person who framed the bill did not in the mean time drop it, the people were convened in comitia, and he addressed them in an oration, being also seconded by his friends setting forth the expediency and probable utility of such a law: this was called rogatio legis, because the address was always prefaced with this petitionary form of words, Velitis, jubeatisne, Quirites? 'Will you, O Romans, consent and order this law to pass?' This being done, those that disliked the motion delivered their sentiments in opposition to it. An urn was then brought to certain priests who attended upon the occasion, into which were cast the names of the tribes, centuries, or curia, as the comitia happened to be tributa, centuriata, or curiata. See COMITIA. The names were shaken together, and the first drawn tribe or century was called prærogativa, because their suffrages were first asked. The curia first drawn was called principium, for the same reason. The other tribes, centuries, &c., were called tribus jure vocatæ, centuriæ jure vocatæ, &c. In this situation, the veto or negative voice of the tribunes of the people might put an end to the proceedings, and dissolve the assembly. The tribune's interference was called intercessio. The consul also had it in his power to stop further proceedings, by commanding any of the holi days called feriæ imperativæ to be observed. The comitia would also be dissolved by any person being seized with the falling sickness, or upon the appearance of any unlucky omen. If the business met with no interruption of this sort each of the people were presented with two tablets, on one of which was written A, on the other U. R. Their disapprobation of the bill was expressed by throwing into an urn the tablet inscribed A. Their assent by throwing in the one marked U. R. According to the majority of these tablets, the law passed or not. If it passed, it was written upon record, and carried into the treasury; this was called legem ferre. Afterwards it was engraved upon plates of brass, and hung up in the most public and conspicuous places: this was termed legem figere, and a future repeal of this was legem refigere. If a law passed in the comitia curiata, it was called lex curiata; if in the comitia centuriata, it had the name of lex centuriata; but, if it passed in the comitia tributa, it was termed plebiscitum. The law, too, generally bore the names of the proposers, as lex Ælia, lex Fusia, &c.

LEXAWACSEIN, a river of Pennsylvania, which rises in Northampton county, on the east side of Mount Ararat, and falls into the Delaware, 174 miles above Philadelphia.

LEXIARCHI, at Athens, six officers, assisted by thirty inferior ones, whose business it was to fine such as came not to the public assemblies, and to make scrutiny among such as were present. They kept a register of the age, manners, and abilities of all the citizens, who were enrolled at the age of twenty.

LEX'ICON, *n. s.*, LEXICOG'RAPHER, LEXICOG'RAPHY. } Gr. λεξικον. A dictionary: a list of the words of a language, their etymology, and meaning. A lexicographer, Dr. Johnson defines, 'a writer of dictionaries,' andadds, with more spleen than accuracy, 'a harmless drudge that busies himself in tracing the original, and detailing the signification of words:' some lexicographers have been far from 'harmless;' and others aspire (circumspice!) to be something more than 'drudges:' lexicography is the act or art of making dictionaries.

Though a linguist should pride himself to have all the tongues that Babel cleft the world into, yet if he had not studied the solid things in them as well as the words and *lexicons*, he were nothing so much to be esteemed a learned man as any yeoman competently wise in his mother dialect only. *Milton.*

Commentators and *lexicographers*, acquainted with the Syriac language, have given these hints in their writings on scripture. *Watts.*

When Scaliger, whole years of labour past,
Beheld his *lexicon* complete at last,
And, weary of his task, with wondering eyes,
Saw from words piled on words a fabrick rise,
He cursed the industry, inertly strong,
In creeping toil that could persist so long.
Murphy.

With equal justice may the *lexicographer* be derided, who, being able to produce no example of a nation that has preserved their words and phrases from mutability, shall imagine that his dictionary can embalm his language, and secure it from corruption and decay. *Johnson.*

LEXINGTON, a post town of Middlesex county, Massachusetts, is eleven miles north-west of Boston. This town is famous for being the place where hostilities commenced between Great Britain and America, April 19th, 1775. A stone monument, with an inscription, is erected on the ground where the battle was fought.

LEXINGTON, a post town, the capital of Rockbridge county, Virginia, on the north branch of James River, is thirty miles S. S. W. of Staunton, and thirty-eight N. N. W. It is a handsome town, finely situated, and contains a court-house, a jail, a female academy, a presbyterian meeting-house, and a college. The surrounding country is fertile and well cultivated.

Washington College, at this place, was originally incorporated as an academy, in 1782, under the name of Liberty Hall Academy; and in 1813 it was erected into a college, called Washington College, from general Washington, who presented to the institution 100 shares in the James River Canal, amounting to 20,000 dollars. This stock for a number of years was unproductive, but since the late war it has produced 16 per cent. per annum. There are two college buildings of brick, sixty feet by twenty, of two stories, a steward's house, and a refectory. In addition to these buildings, the trustees contemplate erecting a large college edifice. The college has a philosophical apparatus, and a library of about 2000 volumes. The board of trustees consists of thirty members. The executive government is entrusted to a president, who is also professor of belles lettres and mathematics, a professor of natural philosophy and astronomy, a professor of languages, and one tutor. The number of students is usually from forty to fifty.

The studies of which a knowledge is necessary, in order to admission into the freshman class, are Virgil, Greek Testament, Minor Dialogues of Lucian, and the fundamental rules of arithmetic! The studies of the first year are the Latin and Greek languages; of the second year, mathematics, arithmetic, algebra, Euclid six books, surveying, navigation, and conic sections: of the third, natural philosophy, astronomy, and geography; and, of the fourth, belles lettres, logic, natural and political law.

LEXINGTON, a post town of Fayette county, Kentucky, twenty-two miles E. S. E. of Frankfort, and seventy-four east of Louisville. It is situated on Town Fork, a small stream which falls into the south branch of the Elkhorn. It is regularly laid out, and contains a court-house; a jail; a market-house; a theatre; a masonic hall; a museum; a public library; a female academy; a university; three banks, one of which is a branch of the United States bank; three printing offices, from each of which is issued a weekly newspaper; and seven houses of public worship, three for Presbyterians, one for Episcopalians, one for Baptists, one for Methodists, and one for Roman Catholics.

Lexington has had a very rapid growth. In 1797 it contained only about fifty houses. It is the largest town in Kentucky, and the most wealthy and best built town in the western states. The houses are mostly of brick, and the streets are paved and have side walks; the principal one is about eighty feet wide. Near the centre of the town is a public square, surrounded with brick buildings.

This town contains various and extensive manufacturing establishments, among which are four nail manufactories, two copper and tin manufactories, two steam paper-mills, a number of large rope-walks, cotton and woollen manufactories, distilleries, breweries, &c.—The site on which the town is built is in a gently descending valley, which is one of the most fertile tracts in the United States. The climate is healthy and delightful, and in the vicinity there are a number of handsome country seats. The surrounding country is greatly admired for its rich and beautiful scenery.

Transylvania University was incorporated here a number of years ago, and is now about to be reorganised, and it is intended to place it on a respectable foundation. There are two college edifices of brick, one erected several years since, the other an elegant edifice built in the year 1818, and calculated to accommodate about 100 students. The library contains between 1000 and 2000 volumes. Large additions are about to be made to it. The philosophical apparatus is now small, but is soon to be made complete. The funds consist of lands, houses, house lots, and bank stock. There are thirteen trustees, all elected biennially by the legislature The executive government is entrusted to a president, a professor of languages, one of mathematics and natural philosophy, one of chemistry and mineralogy, two tutors, a professor of law, and four professors in the medical department.

The institution, as a regular college, is not perfectly organised; all the votes, however, necessary for this purpose, have been passed by the trustees, and the officers are elected. The requisitions for admission, and the course of study, are to be the same as at the university in Cambridge, Massachusetts, and it is intended to make the standard of education as high as in any of the eastern colleges. Commencement to be held on the second Wednesday in July, and followed by a vacation of about eleven weeks. Instruction is already provided for in the departments of law and medicine. The course of medical lectures was commenced for the first time in November 1817.

LEYDEN (in Lat. Lugdunum Batavorum), one of the largest and finest cities of Holland, in the department of Delft, abounding with canals, along which are rows of lofty trees, that afford very pleasant walks. Its form is oblong; its length being about two miles from east to west. A small branch of the Rhine runs through it. Over the canals are, it is said, 145 bridges, chiefly of stone or brick, and the streets are remarkably clean. The street in which the stadthouse is situated, is accounted equal to almost any in Europe. The university is the oldest in the republic, and has a library rich in MSS.; a botanical garden well stocked with exotic plants; an anatomy-hall and observatory. The professors are generally eminent. Its buildings, however, have a humble appearance; but the government in 1819 began a more stately structure. The number of professors is twenty-

one; viz. four of theology, four of law, four of medicine, four of philosophy, and five of languages. Their lectures are delivered in Latin; and their salaries, independent of a house, and the small fees paid by the pupils, are rarely more than £250. The number of students is at present about 300. Of these about eighty study medicine, 100 philosophy and languages, and the others divinity and law. The session, as in other Dutch colleges, commences in September, and terminates at the end of June. Greek literary names are connected with the history of Leyden. We may instance those of Heinsius, Scaliger, and Salmasius. In the centre of the town is a very ancient and lofty castle or fort, considered traditionally as a work of the Romans. It rises above the tops of the highest houses, and affords an extensive view of the town and neighbourhood. The church of St. Peter, the finest of the seventeen that belong to the city, is a large and handsome building in the Gothic style. It contains the tombs of Boerhaave, P. Camper, and Meerman. The cloth manufacture formerly flourished to such a degree, that 100,000 pieces have sometimes been made in a year. At present this is in a low state; but soap and indigo are manufactured in large quantities. The city sustained a long and severe siege, in 1573, against the Spaniards. That illustrious magistrate, Adrian de Verf, when the citizens represented to him the havoc made by the famine during the siege, and insisted upon his surrendering, said, 'Friends, here is my body, divide it among you to satisfy your hunger, but banish all thoughts of surrendering to the cruel and perfidious Spaniards.' They took his advice, and told the Spaniards, they would hold out as long as they had one arm to eat and another to fight. In 1655 the city was greatly depopulated by the plague: in January 1795 the citizens opened their gates to the French under general Pichegru, and in 1809 there was a remarkably destructive explosion of gunpowder here. The neighbourhood is quite a flat country, too wet for tillage, but productive of pasturage, cheese, and butter. It is ten miles north-east of the Hague, and twenty-two south-west of Amsterdam.

LEYDEN PHIAL, a phial coated on the inside and outside with tinfoil, or other conducting substance, and furnished with a brass wire and knob, for giving the electrical shock. See ELECTRICITY.

LEYSERA, in botany, a genus of the polygamia superflua order, and syngenesia class of plants; natural order forty-ninth, compositæ: receptacle naked; pappus paleaceous; that of the disc plumy: CAL. scarious.

LEYTA, one of the southern Philippine Islands, ninety-five miles in length, by thirty-eight in average breadth. The soil is very fertile, and the mountains abound in deer, cows, wild hogs, and fowls; cocoas grow without culture. The air is pure and healthy. A chain of mountains runs north-west and south-east; and so materially do they influence the climate, that the seasons differ entirely on the different sides of them. The inhabitants are mild, peaceable, and hospitable. They are about 9000, and pay a tribute in wax, rice, and cloth Long. 124° 40′ E., lat. 10° 50′ N.

LEZAY-MARNESIA (Claude Francis Adrian, marquis de), was born at Metz in 1735, and early entered the French army. He soon, however, retired to his estate of St. Julian, near Lons-le-Saunier, and devoted himself to study. At the revolution he declared in favor of the abolition of the feudal impositions and privileges, and was chosen a deputy from the states-general and the constituent assembly: alarmed, however, at the prospect of affairs, he emigrated to North America in 1790, taking with him artists, laborers, &c., to form a colony on a tract of land which he had purchased of the Scioto company. This scheme failing, he returned to France in 1792. During the reign of terror he was confined in prison at Besançon, but, the fall of Robespierre liberating him, he returned home to his old pursuits. At length, after passing some time in Switzerland, he settled at Besançon, where he died November 9th, 1800. He was the author of Essai sur la Mineralogie du Bailliage d'Orgelet, en Franche-Compté, 1778, 8vo.; Le Bonheur dans les Campagnes, 1778, 8vo.; Les Paysages, ou Essais sur la Nature, a poem; Lettres écrites des Rives de l'Ohio, 1792, 8vo.; and other works.

LEZAY-MARESIA (Adrian, count de), son of the preceding, distinguished himself as a diplomatist. He also was for a short time in the army. He then studied diplomacy at the school of Brunswick, and at the revolution travelled in Germany and England. Returning to France he became a contributor to the Journal de Paris. Having too freely predicted the destruction of the directorial government, he was forced to leave Paris. He returned under the consulate, and was employed on various diplomatic missions. In 1806 he was made prefect of the department of the Rhine and Moselle, and in 1810 of that of the Lower Rhine, in which office he was continued on the restoration of the Bourbons. He died at Strasburgh in 1814, owing to a fall. He translated into French, Schiller's tragedy, Don Carlos, and wrote several popular political tracts.

LHOYD, LHUYD, or LHWYD (Humphrey), a learned antiquarian of the sixteenth century, born at Denbigh, who applied to the study of physic; and, living mostly in the walls of Denbigh Castle, practised there as a physician; and died in 1570. He wrote and translated several pieces relative to history and antiquities; in particular the history of Cambria, now called Wales, from Caradoc of Langcarvan, &c., but died before it was finished: however, Sir Henry Sidney, lord president of Wales, employed Dr. David Powel to finish it, who published it in 1584. A new and improved edition of this work was published in 1774.

LHUYD (Edward), keeper of the museum at Oxford, was a native of South Wales, and was educated at Jesus College, Oxford, where he was created M. A. July 21st, 1701. He succeeded Dr. Plot as keeper of the Ashmolean museum, and had the use of all Vaughan's collections. With incessant labor and great exact-

ness he searched into the Welsh antiquities; collected and perused a great deal of ancient and valuable matter from their MSS.; transcribed all the old charters of their monasteries that he could find; travelled several times over Wales, Cornwall, Scotland, Ireland, Armoric Bretagne; compared their antiquities, and made observations on the whole; but died in July 1709, before he had digested them, as he had intended, into the form of a treatise on the ancient inhabitants of this island. He communicated many observations to bishop Gibson, whose edition of the Britannia he revised; and published Archæologia Britannica, giving some additional account of the languages, histories, and customs of the original inhabitants of Great Britain, from collections and observations in travels through Wales, Cornwall, Bas Bretagne, Ireland, and Scotland.

LI'ABLE, *adj.* } Old Fr. *liable, lier.*
LIABIL'ITY, *n. s.* } Subject or obnoxious to; not exempt: taking *to* after it.

But what is strength without a double share
Of wisdom? vast, unwieldy, burthensome,
Proudly secure, yet *liable* to fall
By weakest subtleties. *Milton's Agonistes.*

Seeing they are so *liable* to sin, they must consequently stand often in need of God's mercy to bear with them, and to pardon them. *Barrow.*

The English boast of Spenser and Milton, who neither of them wanted genius or learning; and yet both of them are liable to many censures. *Dryden.*

They think, that whatever is called old must have the decay of time upon it, and truth too were *liable* to mould and rottenness. *Locke.*

This, or any other scheme, coming from a private hand, might be *liable* to many defects. *Swift.*

And that the apostle John should be *liable* to this censure, whose temper seemed to be all love and sweetness. *Mason.*

People are not *liable* to be mistaken in their feelings, but they are very frequently wrong in the names they give them, and their reasonings about them. *Burke on the Sublime.*

LI'AR. From LIE, which see. This word, as Dr. Johnson observes, would analogically be lier; but this orthography has prevailed, and the convenience of distinction from lier, he who lies down, is sufficient to confirm it.

He approves the common *liar*, fame,
Who speaks him thus at Rome. *Shakspeare.*

I do not reject his observation as untrue, much less condemn the person himself as a *liar*, whensoever it seems to be contradicted. *Boyle.*

Thy better soul abhors a *liar's* part,
Wise is thy voice, and noble is thy heart. *Pope.*

The maxim, in vino veritas—'a man who is well warmed with wine will speak truth,' may be an argument for drinking, if you suppose men in general to be *liars*: but, Sir, I would not keep company with a fellow who *lies* as long as he is sober, and whom you must make drunk before you can get a word of truth out of him. *Johnson.*

LIARD, *adj.* Fr. *liard*; It. *leardo*; Scot. *liart, liard.* Roan; gray; hoary.

That was wel twight, min owen *liard* boy. *Chaucer.*

LIBANIUS, a famous Greek rhetorician and sophist in the fourth century, born at Antioch. He had a great share in the friendship of Julian the Apostate, who offered him the dignity of Præfectus Prætorio; but Libanius refused it, thinking the title of sophist, or professor of eloquence, much more honorable. There are still extant several of his letters and Greek orations, by which he acquired great reputation; but his style is somewhat affected and obscure. He was a Pagan. Basil and Chrysostom were his disciples about A. D. 360. His letters were published at Amsterdam in 1738; his orations at Venice, in 1755.

LIBANOMANTIA, in antiquity, a species of divination performed with frankincense; which, if it presently caught fire, and sent forth a grateful odor, was esteemed a happy omen, and vice versâ.

LIBANUS, a chain of mountains of Turkey in Asia, which lie between Syria Proper and Palestine, extending from west to east from the Mediterranean Sea as far as Arabia. The summits are always covered with snow, but below there are very pleasant and fertile valleys. Dr. Clarke saw snow here in July. The basis of the range is limestone, which presents itself occasionally in the shape of towers, castles, and various grotesque forms; near Damascus there are immense caverns, one of which is capable of containing 4000 men. They were formerly famous for great numbers of cedar trees, but now there are very few remaining. Geographers distinguish this chain into Libanus and Antilibanus; the latter of which lies on the south side of the valley, rising near the ruins of Sidon, and terminates in Arabia, in N. lat. 34°. They are separated from each other at an equal distance throughout, by a country called by the ancients Cœlesyria.

LIBA'TION, *n. s.* Lat. *libatio*, à *libo*, to taste or drink, or to offer a drink-offering. The act of pouring wine on the ground in honor of some deity; the wine poured.

In digging new earth pour in some wine, that the vapour of the earth and wine may comfort the spirits, provided it be not taken for a heathen sacrifice, or *libation* to the earth. *Bacon's Natural History.*

They had no other crime to object against the Christians but that they did not offer up *libations*, and the smoke of sacrifices, to dead men. *Stillingfleet on Romish Idolatry.*

The goblet then she took, with nectar crowned,
Sprinkling the first *libations* on the ground. *Dryden's Æneid.*

The ancient Greeks and Romans used at their meals to make *libations*, pour out and even drink wine in honour of the gods. *Brand's Antiquities.*

In sighs he worships his supremely fair,
And weeps a sad *libation* in despair;
Adores a creature, and, devout in vain,
Wins in return an answer of disdain. *Cowper.*

LIBATION, amongst the ancient Greeks and Romans, was an essential part of solemn sacrifices. It was also performed alone, as a drink-offering, by way of procuring the protection and favor of the gods, in the ordinary affairs of life. Libations, according to the different attributes of the gods in honor of whom they were made, consisted of different liquids, but wine was the most usual. It was always unmixed with water. Libations of water, of honey, of milk, and of oil, were called νηφαλια Ιερα. They were all made

with a serious deportment and solemn prayer. At sacrifices, the libation, after it had been tasted by the priest, and handed to the bystanders, was poured upon the victim. At entertainments, a little wine was generally poured out of the cup, before the liquor began to circulate, to show their gratitude to the gods for the blessings they enjoyed. Libations were also in use among the Hebrews, who poured a hin of wine on the victim after it was killed, and the several pieces of the sacrifice were laid on the altar, ready to be burnt.

LIBAU, a sea-port of Russia, in the government of Courland, on the Baltic. It exports hemp, linseed, &c., the produce of the surrounding country. This town was a place of trade in the thirteenth century; but it afterwards suffered severely from the wars which the Swedes carried on here. It has a commodious harbour for small vessels. Population 5000. Sixty-six miles west of Mittau.

LIB'BARD, *n. s.* Teut. *liebard, leupard;* Lat. *leopardus.* See LEOPARD. A leopard. Obsolete.

> Make the *libbard* stern
> Leave roaring, when in rage he for revenge did yearn. *Spenser.*
>
> The *libbard* and the tiger, as the mole
> Rising, the crumbled earth above them threw. *Milton.*
>
> The torrid parts of Africk are by Piso resembled to a *libbard's* skin, the distance of whose spots represents the disperseness of habitations, or towns of Africk. *Brerewood.*

LI'BEL, *n. s., v. n.* & *v. a.* ⎫ Fr. *libelle;* Lat.
LI'BELLER, *n. s.* ⎬ *libellus,* a little
LI'BELLOUS, *adj.* ⎭ book. The civil law retains its primitive sense of a written charge; and hence it has been used to signify a defamatory writing, satire, or lampoon: as a neuter verb it formerly took *against* after it, see the extracts: as a verb active it means to defame; satirise: a libeller is the author of a libel: libellous, defamatory.

> And it hath ben seid, whoevere leveth his wyf, give he to hir a *libel* of forsaking. *Wiclif. Matt.* v.
>
> Sweet scrawls to fly about the streets of Rome:
> What's this but *libelling against* the senate! *Shakspeare.*
>
> He, like a privileged spy, whom nothing can
> Discredit, *libels* now '*gainst* each great man. *Donne.*
>
> It was the most malicious surmise that had ever been brewed, howsoever countenanced by a *libellous* pamphlet. *Wotton.*
>
> For the stopping of that deluge of *libellous* invectives, wherewith we are thus impetuously overflown. *Bp. Hall.*
>
> Though some make slight of *libels,* yet you may see by them how the wind sits: as take a straw and throw it up in the air, you shall see by that which way the wind is, which you shall not do by casting up a stone. More solid things do not show the complexion of the times so well as ballads and *libels.* *Selden.*
>
> Are we reproached for the name of Christ? that ignominy serves but to advance our future glory; every such *libel* here becomes a panegyrick there. *Decay of Piety.*
>
> Good heaven! that sots and knaves should be so vain,
> To wish their vile resemblance may remain!
> And stand recorded, at their own request,
> To future days, a *libel* or a jest. *Dryden.*
>
> The squibs are those who, in the common phrase, are called *libellers* and lampooners. *Tatler.*
>
> But what so pure which envious tongues will spare?
> Some wicked wits have *libelled* all the fair. *Pope.*
>
> The common *libellers,* in their invectives, tax the church with an insatiable desire of power and wealth, equally common to all bodies of men. *Swift.*

LIBEL, libellus famosus, taken in its largest and most extensive sense, signifies any writing, picture, or the like, of an immoral or illegal tendency; but, in a peculiar sense, is used to denote a malicious defamation of any person, and especially a magistrate, made public by either printing, writing, signs, or pictures, in order to provoke him to wrath, or expose him to public hatred, contempt, and ridicule. The direct tendency of these libels is the breach of the public peace, by stirring up the objects of them to revenge, and perhaps to bloodshed. The communication of a libel to any one person is a publication in the eye of the law: and therefore the sending an abusive private letter to a man is as much a libel as if it were openly printed, for it equally tends to a breach of the peace. With regard to libels, in general, there are two remedies; one by indictment, and another by action. The former for the public offence; for every libel has a tendency to break the peace, or provoke others to break it: which offence is the same, whether the matter contained be true or false; and therefore the defendant, on an indictment for publishing a libel, is not allowed to allege the truth of it by way of justification. But in the remedy by action on the case, which is to repair the party in damages for the injury done him, the defendant may, as for words spoken, justify the truth of the facts, and show that the plaintiff has received no injury at all. What was said with regard to words spoken, will also hold in every particular with regard to libels by writing or printing, and the civil actions consequent thereupon: but as to signs or pictures, it seems necessary always to show, by proper innuendos and averments of the defendant's meaning, the import and application of the scandal, and that some special damage has followed; otherwise it cannot appear that such libel by picture was understood to be levelled at the plaintiff, or that it was attended with any actionable consequences. In a civil action, then, a libel must appear to be false, as well as scandalous: for, if the charge be true, the plaintiff has received no private injury, and has no ground to demand a compensation for himself, whatever offence it may be against the public peace: and therefore, upon a civil action, the truth of the accusation may be pleaded in bar of the suit. But, in a criminal prosecution, the tendency which all libels have to create animosities, and to disturb the public peace, is the sole consideration of the law. And, therefore, in such prosecutions, the only points to be considered are, first, the making or publishing of the book or writing; and, secondly, whether the matter be criminal: and, if both these points are against the defendant, the offence against the

public is complete. The punishment of such libellers, for either making, repeating, printing, or publishing the libel, is a fine, and such corporal punishment as the court in its discretion shall inflict; regarding the quantity of the offence, and the quality of the offender. By the law of the XII. tables, at Rome, libels, which affected the reputation of another, were made a capital offence: but, before the reign of Augustus, the punishment became corporal only. Under Valentinian it was again made capital, not only to write, but to publish, or even to omit destroying them. Our law, in this and many other respects, corresponds rather with the middle age of Roman jurisprudence, when liberty, learning, and humanity, were in their full vigor, than with the cruel edicts that were established in the dark and tyrannical ages of he ancient decemviri, or the later emperors. In this and other instances, where blasphemous, immoral, treasonable, schismatical, seditious, or scandalous libels are punished by the English law, some with a greater, others with a less degree of severity, the liberty of the press, properly understood, is by no means infringed or violated. See LAW, part I.

LIBELLA, a piece of money amongst the Romans, being the tenth part of the denarius, and equal in value to the as. It was called libella, as being a little pound, because equal to a pound of brass. Its value in our money is 1 ob. 1 qu., or a halfpenny farthing. See MONEY.

LIBELLA, or LIBELLULA, in zoology, a genus of four-winged flies, called in English dragon-flies, or adder-flies. The characters are these: the mouth is furnished with jaws; the feelers are shorter than the breast: and the tail of the male terminates in a kind of hooked forceps. See ENTOMOLOGY.

LIBELLI was the name given to the bills which were put up amongst the Romans, giving notice of the time when a show of gladiators would be exhibited, with the number of combatants, and other circumstances. This was called munus pronunciare, or proponere. These bills were sometimes termed edicta. These public notices were given by the person who designed to oblige the people with the show, and were frequently attended with pictures representing the engagement of some celebrated gladiator. This custom is alluded to by Horace.

LIBELLI FAMOSI, defamatory libels. Seneca calls them contumeliosi libelli, defamatory rhymes which by a Roman ordinance were punishable with death.

LIBELLULA. See LIBELLA.

LIBENTINA, a surname of Venus, who had a temple at Rome, where young girls, arrived at puberty, dedicated their juvenile toys.

LIBER, in botany, the bark or rind, principally of trees. This is conceived to consist of a number of cylindric and concentric surfaces, whose texture is reticular, and in some trees plainly extrusible every way, as the fibres are soft and flexible. While in this condition, they are either hollow regular canals, or have interstitial spaces, which serve the office of canals. The nutritious juice which they are continually receiving, remains in part in them, makes them grow in length and thickness, and strengthens and brings them closer together; and thus the texture, which was before reticular, becomes an assemblage of straight fibres ranged vertically and parallel to each other; that is, as they are thus altered behind one another, they by degrees become a new substance, more woody, called blea.

LIBER, Lat. i. e. free, in mythology, a title conferred on Bacchus, in memory of the freedom which he granted to the people of Bœotia: or, perhaps, because wine, whereof he was the reputed deity, delivers men from care, and sets their mind at ease and freedom.

LIBERA, in mythology, a goddess whom Cicero, in his book De Nat. Deor., styles the daughter of Jupiter and Ceres. Ovid, in his Fasti, says that the name was given by Bacchus to Ariadne. Libera is exhibited on medals as a kind of female Bacchus, crowned with vine leaves.

LIB'ERAL, *adj.* & *n. s.*, LIBERALITY, *n. s.*, LIB'ERALLY, *adv.* } Fr. *liberal;* Lat. *liberalis.* Free; uncontrolled; bland; generous; munificent: hence not mean in any way; not of low origin or birth; genteel: it takes *of* before things and *to* before persons.

If any of you lack wisdom, let him ask of God, that giveth to all men *liberally*, and upbraideth not.
James i. 5.

Some are unwisely *liberal*, and more delight to give presents than to pay debts. *Sir P. Sidney.*

Her name was Mercy, well-known over all,
To be both gracious and eke *liberal*.
Faerie Queene.

Sparing would shew a worse sin than ill doctrine.
Men of his way should be most *liberal;*
They're set here for examples.
Shakspeare. Henry VIII.

Why should he despair, that knows to court
With words, fair looks, and *liberality*?
Shakspeare.

There is no art better than to be *liberal of* praise and commendation to others, in that wherein a man's self hath any perfection. *Bacon's Essays.*

Such moderation with thy bounty join,
That thou may'st nothing give that is not thine;
That *liberality* is but cast away,
Which makes us borrow what we cannot pay.
Denham.

Needs must the power
That made us, and for us this ample world,
Be infinitely good, and of his good
As *liberal* and free as infinite. *Milton.*

The painter is, as to the execution of his work, a mechanic; but as to his conception, his spirit, and design, he is hardly below even the poet, in *liberal* art. *Steele.*

The *liberal* are secure alone,
For what we frankly give, for ever is our own.
Granville.

Several clergymen, otherwise little fond of obscure terms, are, in their sermons, very *liberal of* all those which they find in ecclesiastical writers, as if it were our duty to understand them. *Swift.*

He seldom lives frugally, who lives by chance. Hope is always *liberal*, and they that trust her promises make little scruple of revelling to-day, on the profits of to-morrow. *Johnson.*

Virtue and vice are oftentimes so near neighbours that we pass into each other's borders without obser-

vation, and think we do justice when we are cruel; or call ourselves *liberal* when we are loose and foolish in our expenses. *Paley.*

Poets, and orators, and painters, and those who cultivate other branches of the *liberal* arts, have without this critical knowledge succeeded well in their several provinces. *Burke on the Sublime.*

LIBERALIA, feasts celebrated by the ancient Romans, in honor of Liber or Bacchus, the same with those which the Greeks called Dionysia, and Dionysiaca. Varro derives the name of this feast from liber, considered as a noun adjective, and signifying free; because the priests were free from their functions, and eased of all care, during the time of the liberalia, as the old women officiated in the ceremonies and sacrifices of these feasts.

LIBERIA, in Roman antiquity, a festival observed on the sixteenth of the kalends of April, at which time the youth laid aside their juvenile habit for the toga virilis, or habit peculiar to grown men. See TOGA.

LIB'ERTINE, *n. s.* & *adj.* } French *libertin*;
LIB'ERTINISM, *n. s.* } Latin *libertinus*
(*liber*, free). Uncontrolled by law or morals; legally, the son of a freedman.

And steuene, ful of grace and of the strengthe, made woundris and grete signes in the peple, but summe risen of the synagoge that was clepid of *libertyns*—disputiden with steuene. *Wiclif. Dedis* vi.

When he speaks,
The air, a chartered *libertine*, is still;
And the mute wonder lurketh in men's ears,
To steal his sweet and honied sentences.
Shakspeare. Henry V.

They say this town is full of couzenage,
Disguised cheaters, prating mountebanks,
And many such like *libertines* of sin.
Shakspeare.

There are men that marry not, but choose rather a *libertine* and impure single life, than to be yoked in marriage. *Bacon.*

Man, the lawless *libertine*, may rove,
Free and unquestioned. *Rowe's Jane Shore.*

Some persons are forbidden to be accusers on the score of their sex, as women; others on the score of their age, as pupils and infants; others on the score of their condition, as *libertines* against their patrons. *Ayliffe's Parergon.*

That word may be applied to some few *libertines* in the audience. *Collier's View of the Stage.*

That spirit of religion and seriousness vanished all at once, and a spirit of liberty and *libertinism*, of infidelity and profaneness, started up in the room of it. *Atterbury's Sermons.*

Might not the queen make diligent inquiry, if any person about her should happen to be of *libertine* principles or morals? *Swift's Project.*

Thus the atheists, *libertines*, and despisers of religion, usually pass under the name of free-thinkers. *Swift.*

Want of power is the only bound that a *libertine* puts to his views upon any of the sex. *Clarissa.*

LIBERTINES, LIBERTINI, in ecclesiastical history, a religious sect, which arose in 1525, whose principal tenets were, that the Deity was the sole operating cause in the mind of man, and the immediate author of all human actions; that, consequently, the distinctions of good and evil, which had been established with regard to those actions, were false and groundless, and that men could not, properly speaking, commit sin; that religion consisted in the union of the spirit or rational soul with the Supreme Being; that all those who had attained this happy union, by sublime contemplation and elevation of mind, were then allowed to indulge, without exception or restraint, their appetites or passions; that all their actions and pursuits were then perfectly innocent; and that, after the death of the body, they were to be united to the Deity. They likewise said that Jesus Christ was nothing but a mere je ne sai quoi, composed of the Spirit of God, and of the opinion of men.—These maxims occasioned their being called Libertines; and the word has been used in a bad sense ever since. They spread principally in Holland and Brabant. Their leaders were Quintin, Picard, Pockesius, Ruffus, and Chopin, who joined with Quintin, and became his disciple. This sect obtained a footing in France through the favor of Margaret, queen of Navarre, and sister to Francis I., and found patrons in several of the reformed churches.

LIBERTUS, or LIBERTINUS, among the Romans, a freed man, or a person set free from a legal servitude. These still retained some mark of their ancient state: he who made a slave free having a right of patronage over the libertus; so that, if the latter failed of showing due respect to his patron, he was restored to his servitude; and if the libertus died without children, his patron was his heir. See SLAVE. In the beginning of the republic, libertinus denoted the son of a libertus or freedman: but afterwards, before the time of Cicero, and under the emperors, the terms libertus and libertinus, as Suetonius remarks were used synonymously.

LIB'ERTY, *n. s.* Fr. *liberté*; Lat. *libertas*, *liber*. Freedom; state of being uncontrolled; hence opposed to necessity and restraint; exemption; privilege; leave; permission. See the fine exemplification and caution of Burke below.

Where the spirit of the Lord is there is *liberty*.
2 Cor. iii. 17.

My master knows of your being here, and hath threatened to put me into everlasting *liberty*, if I tell you of it; for he swears, he'll turn me away.
Shakspeare.

His majesty gave not an intire country to any, much less did he grant jura regalia, or any extraordinary *liberties*. *Davies.*

Justly thou abhorrest
The son, who, on the quiet state of man,
Such trouble brought, affecting to subdue
Rational *liberty*; yet know withal
Since thy original lapse, true *liberty*
Is lost, which always with right reason dwells.
Milton.

Not assuming the *liberty* to find fault with princes, we should practise the duty of seeking God for his blessing on their proceedings. *Barrow.*

Liberty is the power in any agent to do, or forbear, any particular action, according to the determination, or thought of the mind, whereby either of them is preferred to the other. *Locke.*

I shall take the *liberty* to consider a third ground which, with some men, has the same authority. *Id.*

O *Liberty!* thou goddess, heavenly bright!
Profuse of bliss, and pregnant with delight,
Eternal pleasures in thy presence reign. *Addison.*

It is some loss of *liberty* to resolve on schemes beforehand. *Shenstone.*

Show me the man, who knows what life is, who

dreads death; and I'll show thee a prisoner who dreads his *liberty*. *Sterne.*

News-writers by profession, are the rudest brawlers for *liberty*, a subject which they seem to have considered least of any. *Joineriana*, 1772.

The effect of *liberty* to individuals is, that they may do what they please: we ought to see what it will please them to do, before we risk congratulations which may be soon turned into complaints. *Burke.*

Now, Virtue, now thy powerful succour lend,
Shield them for *liberty* who dare to die—
Ah, *Liberty!* will none thy cause befriend?
Are these thy sons, thy generous sons, that fly? *Beattie.*

LIBERTY may be considered as either natural or civil.

LIBERTY, NATURAL. The absolute rights of man, considered as a free agent, endowed with discernment to know good from evil, and with power of choosing those measures which appear to him to be most desirable, are usually summed up in one general appellation, and denominated the natural liberty of mankind. This natural liberty consists properly in a power of acting as one thinks fit, without any restraint or control, unless by the law of nature; being a right inherent in us by birth, and one of the gifts of God to man at his creation, when he endued him with the faculty of free-will. But every man, when he enters into society, gives up a part of his natural liberty, and, in consideration of receiving the advantages of mutual commerce, obliges himself to conform to those laws which the community has thought proper to establish. And this species of legal obedience, and conformity, is infinitely more desirable than that wild and savage liberty which is sacrificed to obtain it. For no man, who considers a moment, would wish to retain the absolute and uncontrolled power of doing whatever he pleases: the consequence of which would be, that every other man would also have the same power; and then there would be no security to individuals in any of the enjoyments of life.

LIBERTY, POLITICAL, therefore, or civil liberty, which is that of a member of society, is no other than natural liberty, so far restrained by human laws (and no farther) as is necessary and expedient for the general advantage of the public. Hence we may collect, that the law, which restrains a man from doing mischief to his fellow-citizens, though it diminishes the natural, increases the civil liberty of mankind; but every wanton and causeless restraint of the will of the subject, whether practised by a monarch, a nobility, or a popular assembly, is a degree of tyranny. Nay, that even laws themselves, whether made with or without our consent, if they regulate and constrain our conduct in matters of mere indifference, without any good end in view, are laws destructive of liberty: whereas, if any public advantage can arise from observing such precepts, the control of our private inclinations, in one or two particular points, will conduce to preserve our general freedom in others of more importance, by supporting that state of society which alone can secure our independence. Thus the statute of Edward IV., which forbade the fine gentlemen of those times (under the degree of a lord) to wear pikes upon their shoes or boots of more than two inches in length, was a law that savored of oppression; because, however ridiculous the fashion then in use might appear, the restraining it by pecuniary penalties could serve no purpose of common utility. But the statute of Charles II. which prescribes a thing seemingly as indifferent, viz. a dress for the dead, who were all ordered to be buried in woollen, was a law consistent with public liberty; so far as it encouraged the staple trade in wool, on which in a great measure depended the universal good of the nation. So that laws, when prudently framed, are by no means subversive, but rather introductive, of liberty; for (as Mr. Locke has well observed) where there is no law there is no freedom. On the other hand, that constitution or frame of government, that system of laws, is alone calculated to maintain civil liberty, which leaves the subject entire master of his own conduct, except in those points wherein the public good requires some direction or restraint. But the reader will find this subject amply discussed in the introduction to our article LAW.

LIBERTY, in mythology, was a goddess both among the Greeks and Romans. Among the former she was invoked under the title Eleutheria, and by the latter she was called Libertas, and held in singular veneration; temples, altars, and statues, were erected in honor of her. A very magnificent temple was consecrated to her on mount Aventine by Tiberius Gracchus, before which was a spacious court, called atrium libertatis. The Romans also erected a new temple in honor of Liberty when Julius Cæsar established his empire over them, as if their liberty had been secured by an event which destroyed it.

LIBERTY OF THE PRESS. The art of printing, soon after its introduction, was looked upon in England, as well as in other countries, as merely a matter of state, and subject to the coercion of the crown. It was therefore regulated with us by the king's proclamations, prohibitions, charters of privilege and license, and finally by the decrees of the court of star-chamber, which limited the number of printers, and of presses which each should employ, and prohibited new publications unless previously approved by proper licensers. On the demolition of this odious jurisdiction in 1641, the long parliament of Charles I., after their rupture with that prince, assumed the same powers as the star-chamber had exercised with respect to the licensing of books: and in 1643, 1647, 1649, and 1652 (Scobell, i. 44, 134, ii. 88, 230), issued their ordinances for that purpose, founded principally on the star-chamber's decree of 1637. In 1662 was passed the statute 13 and 14 Car. II. c. 33, which, with some few alterations, was copied from the parliamentary ordinances. This act expired in 1679: but was revived by statute 1 Jac. II. c. 17, and continued till 1692. It was then continued for two years longer by statute 4 W. & M. c. 24; but though frequent attempts were made by the government to revive it in the subsequent part of that reign (Com. Journ. 12th of February 1694, 26th of November 1695, 22nd of October 1696, 9th of February 1697, 31st of

January 1698), yet the parliament resisted it so strongly, that it finally expired, and the press became properly free in 1694, and has continued so ever since. The liberty of the press, however, so essential to the existence of a free state, consists not in freedom from any criminal matter that may be published, but in laying no previous restraints upon publications. Every free man has undoubtedly a right to lay what sentiments he pleases before the public; to forbid this, is to destroy the freedom of the press: but if he publishes what is improper, mischievous, or illegal, he must take the consequences of his own temerity. See LIBEL and LAW. To subject the press to the restrictive power of a licenser, in the manner above mentioned, is to subject all freedom of sentiment to the prejudices of one man, and make him the arbitrary and infallible judge of all disputed points in learning, religion, and government. But to punish (as the law does at present) any dangerous or offensive writings which, when published, shall, on a fair and impartial trial, be adjudged of a pernicious tendency, is necessary for the preservation of peace and good order, of government and religion, the only solid foundations of civil liberty. Thus the will of individuals is still left free; the abuse only of that free-will is the object of legal punishment. Neither is any restraint hereby laid upon freedom of thought or inquiry; the disseminating or making public of bad sentiments, destructive of the ends of society, is the crime which society corrects. A man (says a fine writer on this subject) may be allowed to keep poisons in his closet, but not publicly to vend them as cordials. And to this we may add, that the only plausible argument heretofore used for restraining the just freedom of the press, 'that it was necessary to prevent the daily abuse of it,' will entirely lose its force, when it is shown (by a seasonable exertion of the laws) that the press cannot be abused to any bad purpose without incurring a suitable punishment: whereas, it can never be used to any good one when under the control of an inspector. So true will it be found, that to censure the licentiousness is to maintain the liberty of the press. It is curious and gratifying to observe how much the late experiment of an established censorship of the press in France confirms the above reasoning.

LIBETHRA, in ancient geography, a town and fountain of Thessaly. The latter was called the fountain of song, and was situated in Magnesia, a district of Macedonia annexed to Thessaly. The town stood on mount Olympus, where it verges towards Macedonia: hence the muses are called Libethrides. (Virgil). Strabo places on Helicon, not only Hippocrene, and the temple of the Muses, but also the caves of the nymphs Libethrides.

LIBETHRIUS MONS, LIBETHRUS, in ancient geography, a mountain of Bœotia, forty stadia from Coronea; where stood the statues of the Muses, and of the Libethrides. It was either conjoined with, or at least very near to, Helicon.

LIBID'INOUS, *adj.* Lat. *libidinosus, libido,* lust. Lustful; wanton.

None revolt from the faith because they must not look upon a woman to lust after her, but because they are much more restrained from the perpetration of their lusts. If wanton glances and *libidinous* thoughts had been permitted by the gospel, they would have apostatized nevertheless.
Bentley.

LIBITINA, in Roman mythology, a goddess who presided over funerals. She was the same with the Venus infera or Epithymbia of the Greeks. She had a temple at Rome, where was lodged a certain piece of money for every person who died, whose name was recorded in a register called Libitinæ ratio. This practice was established by Servius Tullius, in order to obtain an account of the number of annual deaths in the city of Rome, and consequently the increase or decrease of its inhabitants. All things requisite for funerals were sold in the temple of Libitina.

LIBITINARII, from Libitina, were undertakers whose office it was to take care of funerals, prepare all things necessary upon the solemn occasion, and furnish every article required. They kept a number of servants to perform the working part of the profession, such as the pollinctores, vespillones, &c. See FUNERAL.

LIBLILLA. See LIBELLA.

LIBNA, in ancient geography, a sacerdotal city in the tribe of Judah, a place of strength, as appears from Sennacherib's laying siege to it. In Jerome's time it was a village, called Lobna, in the territory of Eleutheropolis.

LIBRA, in astronomy, one of the twelve signs of the zodiac, exactly opposite to Aries; so called because when the sun is in this sign, at the autumnal equinox, the days and nights are equal, as if weighed in a balance. See ASTRONOMY.

LIBRA also denotes the ancient Roman pound, borrowed from the Sicilians, who called it *litra.* The libra was divided into twelve unciæ or ounces, and the ounce into twenty-four scruples. The divisions of the libra were, the uncia, one-twelfth; sextans, one-sixth; quadrans, one-fourth; triens, one-third; quincunx, five ounces; semis, the half pound or six ounces; septunx, seven; bes, eight; dodrans, nine; dextrans, ten; deunx, eleven; lastly, the as weighed twelve ounces or one libra. The Roman libra was used in France for the proportion of their coin, till the time of Charlemagne, or perhaps till that of Philip I. in 1093, their sols being so proportioned as that twenty of them were equal to the libra. By degrees it became a term of account; and every thing of the value of twenty sols was called a livre. Hence too £. stands for pound sterling, and lb. for a pound in weight.

LIBRA PENSA, in law books, denotes a pound of money in weight. It was anciently the custom not only to tell the money but to weigh it; because many cities, lords, and bishops, having their mints, coined money, and often too light; for which reason, though the pound consisted of 20s., they always weighed it.

LIBRARII, among the ancients, were a sort of copyists who transcribed, in beautiful or at least legible characters, what had been written by the notarii in notes and abbreviations.

LI'BRARY, *n. s.* } Fr. *librarie*, of Lat. *liber*,
LIBRA'RIAN. } a book. A collection of books; the librarian, the appointed keeper of them. It was also used formerly for a transcriber of books or MSS.

> Then as they 'gan his *library* to view,
> And antique registers for to avise,
> There chanced to the prince's hand to rise
> An ancient book, hight Briton's monument
> *Faerie Queene.*

I have given you the *library* of a painter, and a catalogue of such books as he ought to read.
Dryden's Dufresnoy.

Charybdis thrice swallows, and thrice refunds the waves: this must be understood of regular tides. There are indeed but two tides in a day, but this is the error of the *librarians.* *Broome.*

> There is a book, which we may call
> (Its excellence is such)
> Alone a *library*, though small:
> The ladies thumb it much. *Cowper.*

A *library*, pharmaceutically disposed, would have the appearance of a dispensatory, and might be properly enough so called. *Cumberland.*

LIBRARY. 'Books,' says lord Bacon, 'must follow sciences, not sciences books'; yet modern bibliographers, or bibliomaniacs, as they have most aptly been termed, have followed the mere impulse of collecting books, and especially those which are rare and costly, until bibliography itself has been called a science, and the time and taste to profit by what is collected have been alike sacrificed to this most unscientific mania. Mere costliness is with collectors of this description no small proof of value, and rareness an absolute demonstration.

We confess we would sooner employ the humblest man of *letters*, connected with the typographical composition of our work, to form for us a library, than the popular author of a late Library Companion, the high priest of these sacrificers of sovereigns and good sense to Roxburghe partialities, and title-page learning. The latter, for instance, can omit in this misnamed Young Man's Guide and Old Man's Comfort, Hooker's Polity, Dr. Lardner's, Dr. Leland's, and Hannah More's works; Reid and Stewart, and Hartley and Brown, on the Philosophy of the Mind: while he can recommend the purchase of the 'Universal History, Ancient and Modern, in the folio edition, and bound in white calf by C. Lewis, with marble edges and full chased gilt backs,' 'for the not unconscionable price of £52 10*s*.' 'To which work add,' he says, 'Calmet Histoire Universelle, 17 vols. 4to.'

Although, therefore, we had designed to afford the reader some hints toward the formation of a general library in the present article, we feel distanced, we confess, into absolute heresiarchs on the subject of bibliography, by the recent and most appalling contribution to it just named; and shall, under the article RARE AND SCARCE BOOKS, endeavour to furnish a brief view of the criteria of this important part of that science, according to this and other writers: while the article USEFUL BOOKS will contain our opinions on the selection and arrangement of a general library, as distinct from any professional one (respecting which a professional and exclusive catalogue can alone be consulted), within the means, and really uniting the cultivation of a moral feeling with the literary taste of our intelligent readers.

Some authors refer the origin of libraries to the Hebrews; and observe that the care they took to preserve their sacred books, and the memory and actions of their ancestors, became an example to other nations, particularly to the Egyptians. Osymandyas, king of Egypt, according to Diodorus, had a library built in his palace with this inscription over the door, ΨΥΧΗΣ ΙΑΤΡΕΙΟΝ. Nor were the Ptolemies, who reigned in the same country, less curious and magnificent in books. The first who erected a library at Athens was the tryant Pisistratus; though Strabo ascribes the honor to Aristotle. That of Pisistratus was transported by Xerxes into Persia, and was afterwards brought back by Seleucus Nicator to Athens. Some time after it was plundered by Sylla, and re-established by Adrian. Plutarch informs us, that under Eumenes there was a library at Pergamus, containing 200,000 books. Tyrannion, a celebrated grammarian, contemporary with Pompey, had a library of 30,000 volumes. That of Ptolemy Philadelphus contained, according to A. Gellius, 700,000 rolls, accidentally burnt by Cæsar's soldiers. The most celebrated libraries of ancient Rome were the Ulpian and the Palatine. Those of Paulus Æmilus (who conquered Perseus) of Lucilius, Lucullus, of Asinius Pollio, Atticus, Julius Severus, Domitius Serenus, Pamphilius Martyr, and the emperors Gordian and Trajan, are also much celebrated; and Constantine erected a magnificent one in his new capital. Pope Nicholas laid the foundation of the Vatican in 1450. It was destroyed by the constable Bourbon, in the sacking of Rome; restored by pope Sixtus V.; and considerably enriched with books from that of Heidelberg, plundered by count Tilly in 1622. One of the most complete libraries in Europe was said to be that erected at Florence by Cosmo de Medicis, over the gate of which is written, Labor absque labore. The emperor's library at Vienna, according to Lambecius, consists of 80,000 volumes: but the Bodleian at Oxford used to exceed that of any university in Europe. See OXFORD and CAMBRIDGE. The principal public libraries in London, besides that of the British Museum, are those of the college of Heralds, of the college of Physicians, of Doctors' Commons, Gray's Inn, Lincoln's Inn, Inner-Temple, and Middle Temple; that of Lambeth, founded by archbishop Bancroft in 1610, for the use of succeeding archbishops of Canterbury, and increased by the benefactions of archbishops Abbot, Sheldon, and Tennison, and said to consist of at least 15,000 printed books, and 617 volumes in MS.; that of Red-cross Street, founded by Dr. Daniel Williams, a Presbyterian divine, and since enriched by many private benefactions: that of the Royal Society; that of St. Paul's, and of Sion College. See LONDON and ROYAL SOCIETY.

LIBRARY, THE COTTONIAN, originally consisted of 958 volumes of original charters, grants, instruments, letters of sovereign princes, transactions between this and other kingdoms and

states, genealogies, histories, registers of monasteries, remains of Saxon laws, the book of Genesis, thought to be the most ancient Greek copy extant, and said to have been written by Origen in the second century, and the curious Alexandrian MS. copy, in Greek capitals. This library is kept in the British Museum, with the large and valuable library of Sir Hans Sloane, amounting to upwards of 42,000 volumes, &c.

LIBRARY, THE KING'S, at St. James's, was founded by Henry, eldest son of James I., and made up partly of books, and partly of MSS., with many other curiosities, for the advancement of learning. It has received many additions from the libraries of Isaac Casaubon and others.

LIBURNA, or LIBURNICA, denoted a kind of light and swift skiff, used by the Liburnians in their piracies, for which they were noted. Horace.

LIBRATION. Fr. *libration*; Lat. *libratio*, *libra*, a balance. The state of being balanced. Its astronomical use is well explained in the extract below.

This is what may be said of the balance, and the *libration* of the body. *Dryden's Dufresnoy.*

Those planets which move upon their axis, do not all make entire revolutions; for the moon maketh only a kind of *libration*, or a reciprocated motion on her own axis. *Grew.*

Their pinions still
In loose *librations* stretched, to trust the void
Trembling refuse. *Thomson's Spring.*

Libration is the balancing motion or trepidation in the firmament, whereby the declination of the sun, and the latitude of the stars, change from time to time. Astronomers likewise ascribe to the moon a *libratory* motion, or motion of trepidation, which they pretend is from east to west, and from north to south, beacause that at full moon they sometimes discover parts of her disk which are not discovered at other times. These kinds are called, the one a *libration* in longitude, and the other a *libration* in latitude. Besides this, there is a third kind, which they call an apparent *libration*, and which consists in this, that when the moon is at her greatest elongation from the south, her axis, being then almost perpendicular to the plane of the ecliptick, the sun must enlighten towards the north pole of the moon some parts which he did not before, and that, on the contrary, some parts of those which he enlightened towards the opposite pole are obscured: and this produces the same effect which the *libration* in latitude does. *Dict. Trev.*

LIBURNIA, in ancient geography, a district of Illyricum, extending towards the Adriatic, between Istria on the west, Dalmatia on the east, and mount Albius on the north.

LIBURNIANS, LIBURNII, or LIBURNI, the people of Liburnia. The apparitors, who at the command of the Roman magistrate summoned the people from the country, were called Liburnii, because generally from Liburnia.

LIBURNUM was a species of litter made in form of Liburnian skiffs, wherein the noblemen of Rome were carried, and where they sat at their ease, either reading or writing. Juvenal.

LIBURNUS, in ancient geography a mountain of Campania.

LIBYA, in a general sense, among the Greeks, denoted Africa, a name derived from lub, thirst, being a dry and thirsty country. AFRICA.

LIBYA, in a more restrained sense, was the middle part of Africa, extending north and west according to Pliny, between the Mediterranean on the north, and Ethiopia on the east; and was divided into the Hither or Exterior Libya, and the Farther or Interior. The former lay between the Mediterranean on the north, and the Farther Libya, and Ethiopia beyond Egypt, on the south. Ptolemy. The Farther or Interior Libya was a vast country, lying between the Hither Libya on the north, the Atlantic Ocean on the west, the Ethiopic on the south, and Ethiopia beyond Egypt on the east. Ptolemy.

LIBYA, in a still more restrained sense, called, for distinction's sake, Libya Propria, was a northern district of Africa, and a part of the Hither Lybia; situated between Egypt on the east, the Mediterranean on the north, the Syrtis Major and the Regio Tripolitana on the west, the Garamantes and Ethiopia beyond Egypt on the south: now the kingdom and desert of Barca.

LIBYCUM MARE, the Libyan Sea, a part of the Mediterranean, on the coast of Cyrene.

LIBYSSA, a town and river of Bithynia, where the tomb of Hannibal the Great was visible in Pliny's time.

LICE, plural of LOUSE, which see.

LI'CENSE, *v. a.* & *n. s.*
LI'CENSER, *n. s.*
LICEN'TIATE, *v. a.* & *n. s.*
LICEN'TIOUS, *adj.*
LICEN'TIOUSLY, *adv.*
LICEN'TIOUSNESS, *n. s.*

Fr. *licence*; Lat. *licentia*, *liceo*, to be lawful. To permit by law: liberty; permission; grant of freedom, or leave; freedom from restraint of any kind: hence extravagant liberty; contempt of restraint or authority: licentiate, probably from the Fr. *licentier*, seems an unnecessary synonyme of the verb license: as a noun it means one who uses or acts upon a license, rule, or law; hence it is a Spanish literary distinction or degree: licentious and its derivatives are always used in the sense of excessive freedom or liberty, or in 'a bad sense.'

It is not the manner of the Romans to deliver any man to die, before that he which is accused have the accusers face to face, and have *licence* to answer for himself. *Acts.*

They sent some to bring them a *licence* from the senate. *Judith* xi. 14.

Later ages pride, like corn-fed steed,
Abused her plenty, and fat swoln encrease,
To all *licentious* lust, and gan exceed
The measure of her mean, and natural first need. *Faerie Queene.*

Taunt my faults
With such full *licence*, as both truth and malice
Have power to utter.
Shakspeare. Antony and Cleopatra.

How would it touch thee to the quick,
Should'st thou but hear I were *licentious*?
And that this body, consecrate to thee,
With ruffian lust should be contaminate? *Shakspeare.*

One error is so fruitful, as it begetteth a thousand children, if the *licentiousness* thereof be not timely restrained. *Raleigh.*

The *licentiates* somewhat *licentiously*, lest they should prejudice poetical liberty, will pardon themselves for doubling or rejecting a letter, if the sense fall aptly. *Camden.*

They baul for freedom in their senseless moods,
And still revolt when truth would set them free;
Licence they mean, when they cry liberty. *Milton.*

We ought to have an especial care of perverting this excellent truth by mistakes and vain presumptions; that we do not turn the grace of God into wantonness, or occasion of *licentious* practice. *Barrow.*

Some of the wiser, seeing that a popular *licence* is indeed the many-headed tyranny, prevailed with the rest to make Musidorus their chief. *Sidney.*

The privilege that ancient poets claim,
Now turned to *licence* by too just a name. *Roscommon.*

The Tyber, whose *licentious* waves,
So often overflowed the neighbouring fields,
Now runs a smooth and inoffensive course. *Id.*

We may not hazard either the stifling of generous inclinations, or the *licentiating* of any thing that is coarse. *L'Estrange.*

Though this be a state of liberty, yet it is not a state of *licence*: though man, in that state, have an uncontroulable liberty to dispose of his person or possessions, yet he has not liberty to destroy himself. *Locke.*

A man might, after that time, sue for the degree of *licentiate* or master in this faculty. *Ayliffe.*

We procured a *licence* of the duke of Parma to enter the theatre and gallery. *Addison on Italy.*

It is not the increase of vices inseparable from humanity that alarms us, the riots of the *licentious*, or the outrages of the profligate; but it is the absence of that integrity, the neglect of that virtue, the contempt of that honour, which by connecting individuals formed society, and without which society can no longer subsist. *Adventurer.*

Wit's Titans braved the skies,
And the press groaned with *licensed* blasphemies. *Pope.*

This custom has been always looked upon, by the wisest men, as an effect of *licentiousness*, and not of liberty. *Swift.*

He would play well, and willingly at some games of greatest attention, which shewed, that when he listed he could *licence* his thoughts. *Wotton.*

While she seems, nodding o'er her charge, to drop
On headlong appetite the slackened rein,
And give us up to *licence* unrecalled,
Unmarked;—see from behind her secret stand,
The sly informer minutes every fault. *Young.*

On this history the *licenser* again fixed his claws, and before he could transmit it to the press tore out several parts. *Johnson.*

His interposition of a long paragraph of blank verses is unwarrantably *licentious*. *Id.*

Alternate follies take the sway;
Licentious passions burn;
Which tenfold force give nature's law,
That man was made to mourn. *Burns.*

The other part of our rule is the sacred scriptures, which we are to use as our guard against the *licentious* excursions of fancy, which is often imposing itself upon us for right reason. *Mason.*

His suit consisted of three servants, and
A tutor, the *licentiate* Pedrillo,
Who several languages did understand,
But now lay sick and speechless on his pillow. *Byron.*

LICENTIATE, in England, usually means a physician who has a license to practice, granted by the college of physicians. Licentiate also signifies a degree granted in the English universities in medicine to persons who are neither bachelors nor doctors in that faculty.

LICENTIATE. The greatest number of the officers of justice in Spain are distinguished by no other title than that of licentiate. To pass licentiate in common law, civil law, and physic, they must have studied seven years, and in divinity ten years.

LICETUS, a celebrated physician of Italy, born at Rappollo, in Genoa, in 1577. He came into the world before his mother had completed the seventh month of her pregnancy; but his father, an ingenious physician, nurtured him up in cotton, so that he lived to be seventy-seven years of age. He became a very distinguished man in his profession; and was the author of a great number of works: his treatise De Monstris is well known. He was professor of philosophy and physic at Padua, where he died in 1655.

LICHEN, liver wort, in botany, a genus of the natural order of algæ, and cryptogamia class of plants. The male receptacle is roundish, somewhat plain, and shining. In the female the leaves have a farina or mealy substance scattered over them. There are about 130 species, all found in Britain. The following are among the most remarkable:—

1. L. aphthosus, the green ground liver-wort, with black warts, grows upon the ground at the roots of trees in woods, and other stony and mossy places. It differs very little from the caninus, and, according to some, is only a variety of it. Linnæus informs us that the country people of Upland, in Sweden, give an infusion of this lichen in milk to children that are troubled with the thrush or aphtha, which induced that distinguished naturalist to bestow upon it the trivial name of aphthosus.

2. L. barbatus, the bearded lichen, grows upon the branches of old trees in thick woods and pine-forests. The stalks or strings are slightly branched and pendulous, from half a foot to two feet in length, little bigger than a thread; cylindrically jointed towards the base; but surrounded every where else with numerous, horizontal, capillary fibres, either simple or slightly branched. Their color is a whitish-green. This has an astringent quality. When steeped in water it acquires an orange color; and is used for dyeing that color.

3. L. calicaris, the beaked lichen, grows sometimes upon rocks, especially on the coasts; but is not very common. It is smooth, glossy, and whitish, producing flat or convex shields, of the same color as the leaves, very near the summits of the segments, which are acute and rigid, and, being often reflected from the perpendicular by the growth of the shields, appear from under their limbs like a hooked beak.

4. L. candelarius, or yellow farinaceous lichen, is common upon walls, rocks, boards, and old pales. There are two varieties. The first has a farinaceous crust of no regular figure, covered with numerous, small, greenish-yellow, or olive shields, and grows commonly upon old boards. The other has a smooth, hard, circular crust, wrinkled and lobed at the circumference which adheres closely to rocks and stones. In

the centre are numerous shields of a deeper yellow or orange color, which, as they grow old, swell in the middle, and assume the figure of tubercles. The inhabitants of Smaland, in Sweden, scrape this lichen from the rocks, and mix it with their tallow, to make candles to burn on festival days.

5. L. caninus, the ash-colored ground liverwort, grows upon the ground among moss, at the roots of trees in shady woods, and in heaths and stony places. The leaves are large, gradually dilated towards the extremities, and divided into roundish elevated lobes. Their upper side, in dry weather, is ash-colored; in rainy weather of a dull fuscous green color: the under side white and hoary, having many thick downy nerves, from which descend numerous, long, white, pencil-like radicles. The shields grow at the extremities of the elevated lobes, shaped like the human nail; of a roundish oval form, convex above, and concave beneath; of a chocolate color on the upper side, and the same color with the leaves on the under. There are two varieties, the one called reddish, and the other many-fingered ground liverwort. The former is most common. This species was recommended by the celebrated Dr. Mead as a preventive of the dreadful consequences attending the bite of a mad dog. He directed half an ounce of the leaves, dried and pulverised, to be mixed with two drachms of powdered black pepper; divided into four doses, one to be taken by the patient every morning fasting, for four mornings successively, in half a pint of warm cow's milk; after which, to use the cold bath every morning for a month. But the success has not answered the expectation.

6. L. cocciferus, the scarlet-tipped cup lichen, is frequent and moors and heaths. It has, in the first state, a granulated crust for its ground, which is afterwards turned into small laciniated leaves, green above, and hoary beneath. The plant assumes a very different aspect, according to the age, situation, and other accidents of its growth; but may be, in general, readily distinguished by its fructifications, which are fungous tubercles of a fine scarlet color, placed on the rim of the cup, or on the top of the stalk. These tubercles, steeped in an alkaline lixivium, are said to dye a fine durable red color.

7. L. Islandicus, the eatable Iceland lichen, or rock grass, grows on many mountains both of the Highlands and Lowlands of Scotland. It consists of nearly erect leaves about two inches high, of a stiff substance when dry, but soft and pliant when moist, variously divided without order into broad distant segments, bifid or trifid at the extremities. The upper or interior surface of the leaves is concave, chestnut color, smooth, and shining, but red at the base; the under or exterior surface is smooth and whitish, a little pitted, and sprinkled with very minute black warts. The margins of the leaves, and all the segments from bottom to top are ciliated with small, short, stiff, hair-like spinules, of a dark chestnut color, turning towards the upper side. The Icelanders use it as an esculent herb. Made into broth or gruel, it is said to be useful in coughs and consumptions.

8. L. juniperinus, the common yellow tree lichen, is common upon the trunks and branches of elms and many other trees. Linnæus says it is very common upon the juniper. The Gothland Swedes dye their yarn of a yellow color with it, and give it as a specific in the jaundice.

9. L. omphaloides, the dark-colored dyer's lichen, is frequent upon rocks. It forms a thick widely expanded crust of no regular figure, composed of numerous imbricated leaves of a brown or dark purple color, divided into small segments. The margins of the shields are a little crisped and turned inwards, and their outsides ash-colored. The lichen is much used by the Highlanders in dyeing a reddish-brown color. They steep it in urine for a considerable time, till it becomes soft and like a paste: then, forming the paste into cakes, they dry them in the sun, and preserve them for use as they do the tartarius.

10. L. parellus, the crawfish-eye lichen, grows upon walls and rocks, but is not very common. The crusts spread closely upon the place where they grow, and cover them to a considerable extent. They are rough, tartareous, and ash-colored, of a tough coriaceous substance. The shields are numerous and crowded, having white or ash-colored, shallow, plain discs, with obtuse margins. This is used by the French for dyeing a red color.

11. L. plicatus, the officinal stringy lichen, grows on the branches of old trees, but is not very common. The stalks are a foot or more in length, cylindrical, rigid, and string-shaped, very irregularly branched, the branches entangled together, of a cinereous or ash-color; brittle and stringy if doubled short, otherwise tough and pliant; and hang pendent from the trees on which they grow. The shields grow generally at the extremities of the branches, are nearly flat, or slightly concave, thin, ash-colored above, pale brown underneath, and radiated with fine rigid fibres. As the plant grows old the branches become covered with a white, rough, warty crust; but the young ones are destitute of it. It was formerly used in the shops as an astringent to stop hæmorrhages; but is out of the modern practice. Linnæus says, the Laplanders apply it to their feet to relieve the excoriations occasioned by much walking.

12. L. prunastri, the common ragged hoary lichen, grows upon all sorts of trees, but is generally most white and hoary on the sloe and old palm trees, or upon old pales. This is the most variable of the whole genus, appearing different in figure, magnitude, and color, according to its age, place of growth, and sex. The young plants are of a glaucous color, slightly divided into small acute crested segments. As they grow older they are divided, like a stag's horn, into more and deeper segments, somewhat broad, flat, soft, and pitted on both sides, the upper surface of a glaucous color, the under one white and hoary. The male plants are short, seldom more than an inch high, not hoary on the under side, and have pale glaucous shields situated at the extremities of the segments, standing on short peduncles, which are only small stiff portions of the leaf produced. The females have

numerous farinaceous tubercles both on the edges of their leaves, and the wrinkles of their surface. The pulverised leaves have been used as a powder for the hair, and also in dyeing yarn of a red color.

13. L. pulmonarius, the lung-wort lichen, grows in shady woods upon the trunks of old trees. The leaves are as broad as a man's hand, of a kind of leather-like substance, hanging loose from the trunk on which it grows, and laciniated into wide angular segments. Their natural color, when fresh, is green; but in drying they turn first to a glaucous, and afterwards to a fuscous color. It has an astringent bitter taste; and, according to Gmelin, is boiled in ale in Siberia, instead of hops. The ancients used it in coughs and asthmas, &c., but it is not used in modern practice.

14. L. rangiferinus, the rein-deer lichen, is common in woods, heaths, and mountainous places. Its general height, when full grown, is about two inches. The stalk is hollow, and very much branched from bottom to top; the branches are divided and subdivided, and at last terminated by two, three, four, or five, very fine, short, nodding horns. The axillæ of the branches are often perforated. The whole plant is of a hoary white or gray color, covered with white farinaceous particles, light and brittle when dry, soft and elastic when moist. The fructifications are very minute, round, fuscous, or reddish-brown tubercles, which grow on the very extremities of the finest branches; but these tubercles are very seldom found. The plant seems to have no foliaceous ground for the base, nor scarcely any visible roots. Linnæus informs us that, in Lapland, this moss grows so luxuriant that it is sometimes found a foot high. There are many varieties of this species, of which the principal is the sylvaticus, or brown-tipt rein-deer lichen. The most remarkable difference between them is, that the sylvaticus turns fuscous by age, while the other always continues white.

15. L. saxatilis, the gray-blue pitted lichen, is very common upon trunks of trees, rocks, tiles, and old wood. It forms a circle two or three inches diameter. The upper surface is of a blue-gray, and sometimes of a whitish ash color, uneven, and full of numerous small pits or cavities; the under side is black, and covered all over, even to the edges, with short simple hairs or radicles. A variety sometimes occurs, with leaves tinged of a red or purple color. This is used by finches and other small birds, in constructing the outside of their curiously formed nests.

16. L. tartarius, the large yellow-saucered dyer's lichen, is frequent on rocks, both in the Highlands and Lowlands of Scotland. The crust is thick and tough, either white or greenish white, and has a rough warted surface. The shields are yellow or buff-colored, of various sizes, from that of a pin's head to the diameter of a silver penny. Their margins are of the same color as the crust. This lichen is much used by the Highlanders for dyeing a fine claret red color.

17. L. ventosus, the red spangled tartareous lichen, has a hard tartareous crust, cracked and tesselated on the surface, of a pale yellow color when fresh, and a light olive when dry. The tubercles are of a blood-red color at top, their margin and base of the same color as the crust.

18. L. vulpinus, the gold-wiry lichen, grows upon the trunks of old trees, but is not very common. It is produced in erect tufts, from half an inch to two inches in height, of a fine yellow or lemon color, which readily discovers it. The filaments which compose it are not cylindrical, but a little compressed and uneven in the surface, variously branched, the angles obtuse, and the branches straggling and entangled one with another. Linnæus informs us that the inhabitants of Smaland, in Sweden, dye their yarn of a yellow color with this lichen; and that the Norwegians destroy wolves by stuffing dead carcasses with this moss reduced to powder, and mixed with pounded glass, and so exposing them in the winter season to be devoured by those animals.

LICHFIELD, or LITCHFIELD, an ancient city of Staffordshire in the hundred of Offlow. It stands near the site of an old Roman station named Etocetum: which has been traced about a mile distant from the present town, at the place where the Ikenild and Watling Street Roads cross each other. 'Lichenfield' the oldest name by which it is known, is said by some antiquaries, see the word LICKWAKE, to signify the field of dead bodies, from a massacre of the Christians; which took place here in the reign of Dioclesian. Other writers derive the name of this town from its marshy situation; the Sax. leccian, signifying land covered with water.

Mr. Shaw, the historian of Staffordshire, considers this by far the more probable origin of the name, and that the place owes its entire origin to the Saxons. He thinks it was one of the first established seats of that people in Britain; but observes that, so late as A. D. 669, when St. Chad was bishop, it was little more than a village. Berracapil in the neighbourhood seems to have been a chief residence of the Saxon princes. At the Norman conquest the synod held in London decided that Lichenfield was too mean a place for an episcopal residence, and it appears to have been entirely neglected until the reign of Henry I., when it was encompassed with a ditch, and a castle, which Bishop Clinton fortified. There is still a field of the neighbourhood called from this circumstance Castle field.

Stephen granted the right of coining to this town, which it seems only however to have enjoyed for a short period. The reign of Edward I. brings it forward to considerable notice. In 1305 it first sent two members to parliament, and enjoyed in the same reign the patronage of its celebrated bishop Langton, who built a respectable bridge over the lake, or pool of water, which separated it from the Castle field. Following its political history we find Edward VI. constituting it a city by charter, dated 1549, queen Mary confirmed and enlarged four years afterwards, constituting this city a county by itself, from and after the then ensuing feast of St. Thomas. All actions of whatever denomination, arising within the city, were ordained to

be held by the bailiffs and citizens, if they could determine them, and if not by the justices next coming into the city, and not on any account by any authority out of the city. These great privileges were conferred in consequence of the faithful services of the citizens in the time of rebellion. These charters were both ratified by queen Elizabeth, and further confirmed by her successor James I. Charles II. confirmed all the privileges of this city, by a charter dated the 5th of November 1664. The government is vested at present in two bailiffs, elected from the common-council, one of whom is named by the bishop, and the other by the council themselves, a recorder, a sheriff, a steward, and other inferior officers. The burgesses are twenty-four in number. The right of election of the two members is in the bailiffs, magistrates, freeholders of 40s. a-year, the holders of burgage tenements, and such freemen as are enrolled and pay scot and lot.

Lichfield stands on an enchanting situation in a healthy valley, and is chiefly inhabited by persons of respectable property and independence; its pretensions as a trading or manufacturing town being small. It was formerly divided into two portions, by three lakes or pools of water, one of which is now dried up, and contains three parishes, but part of the lands of St. Chad's and St. Michael's lie without the boundaries of the city. It is adorned with various buildings well worthy of notice, both on account of their antiquity and splendid architecture. The most conspicuous of these is the cathedral, which stands in the close, and is said to have been first fortified by bishop Clinton; though Dr. Shaw thinks he only repaired the fortifications. Some ascribe the foundation of the cathedral to king Oswy, in the year 655; others attribute it to Peada, his son-in-law. St. Chad is generally allowed the honor of being the first bishop. The cathedral, then called the Mercian church, was probably at first only constructed of wood, and the whole was taken down in 1148, by bishop Clinton, who substituted another of enlarged dimensions, and more elegant design. To this prelate it is indebted for that magnificent stone vault, which is to this day one of the finest works of its kind extant. The next benefactor to this cathedral was Walter de Langton, who expended the sum of £2000 on a shrine for the relics of St. Chad, laid the foundation of the choir, and obtained many privileges for the vicars and canons; amongst which was the formidable one of hanging upon the next gallows, without trial, persons who withheld some disputed lands from the church. This beautiful edifice continued in undiminished glory till the Reformation, when it was despoiled of many valuable relics.

Lichfield, in the civil wars, was the first cathedral that fell into the hands of the parliament, when the roof was stripped, and many of the curious statues, monuments, and other carved works, demolished with axes and hammers. The inimitable painted windows were battered to pieces. In short, it scarcely escaped ruin; and what did remain was further desolated in 1651, when colonel Danvers, by authority of the Rump Parliament, employed workmen in order to effect this purpose. At this time, the bell called 'Jesus bell,' was knocked to pieces by a pewterer, and Dr. John Hacket rendered himself remarkable for his courageous perseverance in his sacred duties. When a serjeant and trooper were sen to stop the performance of the daily service, and putting a pistol to his head, threatened to shoot him instantly if he did not desist, this prelate calmly, but resolutely, replied, 'Soldier, I am doing my duty; do you your's:' a sentence which so impressed the minds of the soldiers, that they left him to the free performance of the service. No sooner was he nominated to the bishopric of Lichfield, than he vigorously set himself to restore the splendor of the cathedral. By his large benefactions, and those of the dean and chapter and neighbouring gentleman, he greatly succeded in restoring this building. In the bishopric of Dr. James Cornwallis it received its last addition in the painted window at the east end of the choir, the execution of which reflects high honor on the artist Mr. Eginton. The whole edifice is now 411 feet in length, and 155 in breadth. From the centre rises an elegant spire 256 feet high. At the west front are two towers, terminated by spires, sixty-six feet high. The chancel is paved with alabaster and channel stone, in imitation of black and white marble. The north door is particularly rich in sculpture. On the western front are a number of beautiful images, the subjects of which are taken from the sacred writings.

The government of the cathedral is in a dean and four residentiary canons. The diocese, joined to Coventry, contains all the county of Stafford (with the exception of Brome and Clent), all Derbyshire, and nearly one-half of Shropshire. The archdeaconries are Coventry, Stafford, Derby, and Salop. At the north-east side of the close is the bishop's palace. The original building said to have been founded by bishop Clinton, but probably of earlier date, was destroyed in the civil wars, when bishop Hacket expended £1000, *it is* said, on the present house, and fixed upon it as his residence. It is now not inhabited by the bishop, whose residence has long been at Eccleshall.

Another ecclesiastical building worth notice is the church of St. Chad or Stowe church, considered as the oldest edifice in or near Lichfield. St. Ceadda or Chadda had his cell here in the year 653. The interior has been lately repaired and improved; and contains a number of neat monuments. St. Mary's church stands in the market-place, near the guild-hall. Leland calls it a right beautiful piece of work, in the very 'market-place.' The body of the building certainly is of pleasing appearance, and it is adorned with a handsome altar-piece. St. Michael's church is on the summit of Greenhill, at the south-east extremity of the city, and is remarkable for the extent of its burial-ground. This hill is likewise remarkable for a court held here annually on Whit-Monday, in a temporary stand for wood, and anciently called the court of array. On the top of the hill a small edifice has been erected by subscription, with seats. Not far from hence is the hospital and chapel of St. John, originally a monastery. The

front of the building is remarkable for the antique form and great number of its chimneys. An inscription over the door-way ascribes its erection to bishop Smith, the founder of Brazen-nose College, Oxford. The free grammar school, built nearly at the same time, stands opposite.

Dr. Samuel Johnson was born in a stuccoed house situated at the corner of Market-street, Lichfield, where his father kept a bookseller's shop. Garrick was a native of this town. Two neat monuments to their memory are now to be found in the cathedral. The guildhall, the theatre, and free English school, are in Broad Street. The latter is in an ancient building, erected and endowed about the year 1670. At the back of the guildhall is a gaol for the debtors and felons of the city. To the west of Bird Street is a pleasant seat called the Friary, having been formerly a monastery of Franciscan or Gray friars.

The history of this see is curious. St. Ceadda, or Chad, was consecrated in the year 669. A century afterwards, Offa, king of Mercia, of which Staffordshire formed a part, insisted upon his kingdom being governed by an archiepiscopal see, and that the bishop of Lichfield should be appointed to it. Accordingly Adolphus, the successor of Sigebert, was created archbishop of Lichfield by pope Adrian, and the pall sent to him from Rome, about the year 786. The see, however, did not long enjoy this pre-eminence, for upon the death of Offa it again became a bishopric, at the earnest request of the archbishop of Canterbury, who presented pope Leo with a large sum of money, as a bribe. For a long period the bishoprics of Coventry and Lichfield were united, but at the Reformation they were disjoined.

In the castle, built by bishop Clinton, king Richard II. is said to have kept his sumptuous Christmas festival, in 1397, when he consumed 200 tuns of wine and two thousand oxen. This fortress was, afterwards, likewise the place of his confinement when on his way to London as a prisoner. He attempted to effect his escape from it, it is said, by slipping from the window of the high tower into the garden, but, being discovered, was carried back. In the civil wars between king Charles and the parliament, many of the inhabitants voluntarily subscribed considerable sums of money for his use, and enrolled themselves under the command of captain Richard Dyott, for the protection of their city against the parliament. The cathedral and close were now fixed upon as a proper place of defence. But in a short time after the garrisoo was attacked by the republicans. They maintained their post, however, with resolution, but the town, as well as the cathedral, suffered much damage. In one assault, lord Brook, who commanded the parliamentary army, lost his life in a singular manner. His army was about half a mile from Lichfield, and his lordship, having prayed most devoutly for the destruction of the cathedral, ordered an immediate attack, placing himself in a small house near the south gate, with the view of directing the operations of the gunners. Some sudden accident at this juncture occasioned the soldiers to give a shout, when lord Brook came to the door, and being perceived by a gentleman of the name of Dyott, who stood on the top of the tower, he levelled his piece at him, and the ball penetrated directly into the socket of the eye, lodged in his brain, and caused his instant death. The loss of their commander, however, did not dismay the besiegers, who at last succeeded in compelling the garrison to submit. The troops of the parliament were, however, soon after attacked by prince Rupert; and the commanding situation chosen by him, and the explosion of a mine, soon effected an extensive breach. The prince then conferred the government of the town on colonel Hervey Bagot, who maintained it for the king till the utter destruction of his affairs.

The markets of this city are held on Tuesday and Friday; the fairs on the three first Thursdays after Twelfth day, Ash Wednesday, May 1st, and the Friday before St. Simon and St. Jude. It is sixteen miles north of Birmingham; fourteen south-east of Stafford, and 119 north-west of London.

LICH-WAKE, *n. s.* Sax. lıc, or lıce; Goth. and Swed. *lik*, a corpse, and wake, a vigil or watching. See WAKE. Watching with a corpse. Mr. Pennant, speaking of Highland customs, says, 'The late-wake is a ceremony used at funerals:—The evening after the death of any person, the relation or friends of the deceased meet at the house, attended by bag-pipe or fiddle; the nearest of kin, be it wife, son, or daughter, opens a melancholy ball, dancing and greeting, i. e. crying violently at the same time; and this continues till day-light, but with such gambols and frolics among the younger part of the company, that the loss which occasioned them is often more than supplied by the consequences of that night. If the corpse remains unburied for two nights, the same rites are renewed. Thus, Scythian-like, they rejoice at the deliverance of their friends out of this life of misery.' Lich-gate, as Dr. Johnson observes, was the gate through which the dead were carried to the grave; Lichfield, the field of the dead, a city in Staffordshire, so named from martyred Christians. Lichowl, a sort of owl supposed by the vulgar to foretel death.

How Arcite is brent to ashen cold;
Ne how the *liche-wake* was yhold
All thilke night
I woll not tellen. *Chaucer. Cant. Tales.*

LICIUS (Stolo, Caius), a celebrated Roman tribune, styled Stolo, on account of a law he made, that no Roman citizen should possess more than 500 acres of land; alleging that, when they occupied more, they could not cultivate it with care, nor pull up the useless shoots (stolones) that grow from the roots of tree. He is memorable also for enacting, that one of the consuls should always be of a plebeian family. He lived about A. A. C. 362.

LICK, *v. a.* Sax. lıccan, lıccan; Belg. *licken*; Teut. *lecken*; Fr. *lecher*; Lat. *lingua*; Gr. λειχω, à Heb. לחך. To lap or take up with the tongue; to pass the tongue over; to take food in this way; hence to devour. The Scripture use of this word in Numb. xxii. 4, et passim, is particularly justified by the rapid manner in which all ruminating animals take in their food

Now shall this company *lick up* all that are round about us, as the ox *licketh up* the grass. *Numbers.*

At once pluck out
The multitudinous tongue; let them not *lick*
The sweet which is their poison. *Shakspeare.*

Were a man designed only, like a fly, to buzz about here for a time, sucking in the air, and *licking* the dew, then soon to vanish back into nothing, or to be transformed into worms; how sorry and despicable a thing were he! And such, without religion, we should be. *Barrow.*

A bear's a savage beast;
Whelped without form, until the dam
Has *licked* it into shape and frame.
Hudibras.

Æsculapius went about with a dog and a she-goat, both which he used much in his cures; the first for *licking* all ulcerated wounds, and the goat's milk for the diseases of the stomach and lungs.
Temple.

He with his tepid rays the rose renews,
And *licks* the drooping leaves, and dries the dews.
Dryden.

I have seen an antiquary *lick* an old coin, among other trials, to distinguish the age of it by its taste.
Addison.

When luxury has *licked up* all thy pelf,
Cursed by thy neighbours, thy trustees, thyself:
Think how posterity will treat thy name. *Pope.*

Our love is principle, and has its root
In reason, is judicious, manly, free;
Yours, a blind instinct, crouches to the rod,
And *licks* the foot that treads it in the dust.
Cowper.

Lick, *v. a.* Sax. lecȝan; Goth. *leggia.* To beat, or strike. Retained only in vulgar language.

He turned upon me as round as a chafed boar, and gave me a *lick* across the face. *Dryden.*

LICK'ERISH, *adj.* }
Lick'erous, } Sax. liceƿa, a glutton; Teut. and Swed.
Lick'erishness, *n. s.* } *lecker*, soft, luxurious.
Pampered in appetite or food; eager; greedy; lustful.

Certain rare manuscripts, sought in the most remote parts by Erpenius, the most excellent linguist, had been left to his widow, and were upon sale to the Jesuits, *liquorish* chapmen of all such ware.
Wotton.

The first motive that inclined our *liquorish* grandmother Eve, was, that she saw the tree was good for food. *Bp. Hall.*

Wouldest thou seek again to trap me here
With *lickerish* baits, fit to ensnare a brute?
Milton.

In vain he proffered all his goods to save
His body, destined to that living grave;
The *liquorish* hag rejects the pelf with scorn,
And nothing but the man would serve her turn.
Dryden.

Voluptuous men sacrifice all substantial satisfactions to a *liquorish* palate. *L'Estrange.*

In some provinces they were so *liquorish* after man's flesh, that they would suck the blood as it run from the dying men. *Locke.*

LICKS, in geography, a name given to several places in the United States of America, particularly in the north-western territory, abounding with salt springs; where the earth is furrowed up in a very curious manner by the deer and buffaloes, which lick it on account of the saline particles with which it is impregnated. Streams of brackish water run through these licks, the soil of which is a soft clay. They are distinguished by various names; but the most remarkable are

Licks, Big Bone, lying on each side of Big Bone Creek, a river of Kentucky, so named from a number of extraordinary large bones belonging to the Mammoth found about it. See Mammoth. Big Bone Licks lie eight miles above the mouth of Big Bone Creek.

LICNON, in the Dionysian solemnities, the mystical van of Bacchus; so essential to all the solemnities of this god that they could not be duly celebrated without it. See Dionysia.

LICOLA, a lake of Naples, formerly famous for plenty of excellent fish; but in 1538 an explosion of a volcano changed one part of it into a mountain of ashes 1000 feet high, and four miles in circumference, and the other into a morass. It was anciently called Lucrinus Lacus.

LIC'ORICE, *n. s.* Old Fr. *liquerice;* Ital. *ligoritia;* Belg. *likeresse*, see Lickerish: Gr. γλυκυρριζα. A sweet root.

Liquorice root is long and slender, externally of a dusky reddish brown, but within of a fine yellow, full of juice, and of a taste sweeter than sugar: it grows wild in many parts of France, Italy, Spain, and Germany. The inspissated juice of this root is brought to us from Spain and Holland; from the first of which places it obtained the name of Spanish juice. *Hill's Materia Medica.*

Licorice. See Glycirrhiza.

LIC'TORS, *n. s.* Lat. *lictor.* Officers or beadles, among the Romans, who always attended the chief magistrates when they appeared in public.

Saucy *lictors*
Will catch at us like strumpets. *Shakspeare.*

Proconsuls to their provinces
Hasting, or on return, in robes of state,
Lictors and rods the ensigns of their power.
Milton.

Democritus could feed his spleen, and shake
His sides and shoulders till he felt 'em ake;
Though in his country-town no *lictors* were,
Nor rods, nor ax, nor tribune. *Dryden. Juvenal.*

Lictors, among the ancient Romans, were officers established by Romulus, who attended the consuls when they appeared in public. The duties of their office were these: 1. Submotio, or clearing the way for the magistrate they attended: this they did by word of mouth; or, if there was occasion, by using the rods they always carried with them. 2. Animadversio, or causing the people to pay the usual respect to the magistrate; as, to alight, if on horseback or in a chariot; to rise up, uncover, make way, and the like. 3. Præitio, or walking before the magistrates: this they did, not confusedly, or all together, nor by two or three abreast, but singly following one another in a straight line. They also preceded the triumphal car in public triumphs; and it was also part of their office to arrest criminals, and to be public executioners in beheading, &c. Their ensigns were the fasces and securis. As to the number of lictors allowed each magistrate, a dictator had twenty-four; a master of the horse six; a consul twelve; a prætor six; and each vestal virgin, when she appeared abroad, had one.

LID, *n. s.* Sax. hliÞ; Goth. *lid;* Teut. *lied.* A cover of any kind; any thing that closes the mouth or aperture of a vessel: often particularly applied to the eye-lid.

But Jehoiada the priest took a chest, and bored a hole in the *lid* of it, and set it beside the altar.
2 Kings xii. 9.

Do not for ever with thy veiled *lids*,
Seek for thy noble father in the dust. *Shakspeare.*
Our eyes have *lids*, our ears still ope we keep.
Davies.

Hope, instead of flying off with the rest, stuck so close to the *lid* of the cup, that it was shut down upon her. *Addison.*

That eye dropped sense distinct and clear,
As any muse's tongue could speak;
When from its *lid* a pearly tear
Ran trickling down her beauteous cheek. *Prior.*
The rod of Hermes
To sleep could mortal eye-*lids* fix,
And drive departed souls to Styx
That rod was just a type of Sid's,
Which o'er a British senate's *lids*
Could scatter opium full as well,
And drive as many souls to hell. *Swift.*
Tired Nature's sweet restorer, balmy sleep!
He, like the world, his ready visit pays
Where fortune smiles; the wretched he forsakes:
Swift on his downy pinions flies from woe,
And lights on *lids* unsullied with a tear. *Young.*

LIDDEL (Duncan), M. D., professor of mathematics and medicine in the university of Helmstadt, was born in 1561 at Aberdeen, where he received the first part of his education About the age of eighteen he went to the university of Frankfort, where he spent three years in studying mathematics and philosophy. From Frankfort he proceeded to Breslaw, where he made great progress in mathematics, under professor Paul Witichius. After a year he returned to Frankfort, where he studied physic for three years. A contagious distemper having appeared in that place, Liddel retired to the university of Rostock; where he renewed his studies, rather as a companion than a pupil of the celebrated Brucæus; whom, though an excellent mathematician, he instructed in the more perfect knowledge of the Copernican System, and other astronomical subjects. In 1590 he returned again to Frankfort. But having there heard of the increasing reputation of the Academia Julia, established at Helmstadt by Henry duke of Brunswick, he removed thither; and soon after his arrival was appointed to the lower professorship of mathematics. Thence he was promoted to the more dignified mathematical chair, which he occupied for nine years with much credit to himself and to the Julian Academy. In 1596 he obtained the decree of M.D.; began to teach physic, and by his teaching and writings became the chief support of the medical school at Helmstadt; was employed as first physician at the court of Brunswick, and had much practice among the principal inhabitants. Having been several times elected dean of the faculties both of philosophy and physic, he in 1604 was chosen pro-rector of the university. But neither academical honors, nor the profits of an extensive practice abroad, could make him forget his native country. In 1606 he took leave of the Academia Julia; and, after travelling through Germany and Italy, at length settled in Scotland. He died in 1613, in the fifty-second year of his age. By his last will he bestowed certain lands near Aberdeen upon the university there, for the education of six poor scholars. Among various regulations and injunctions, for the management of this charity, he appointed the magistrates of Aberdeen his trustees, and solemnly denounced the curse of God on any person who should abuse or misapply it. His works are, 1. Disputationes Medicinales; Helmstadt, 1603, 4to. 2. Ars Medica succincte et perspicue explicata; Hamburgi, 1607, 8vo., dedicated to king James VI. and divided into five books, viz. Introductio in totam Medicinam; De Physiologiâ; De Pathologiâ; De Signorum doctrinâ; De Therapeuticâ. 3. De Febribus, Libri tres; Hamburgi, 1610, 12mo.

LIDDISDALE, an extensive district of Scotland, so named from a small river named Liddel, which runs through it from east to west and south. It was anciently styled a county and lordship, and comprehends the whole southern angle of Roxburgshire. Being mountainous, it is chiefly adapted for pasture, though the soil of the low land is excellent, and produces very good crops of wheat, barley, oats, peas, flax, turnips, potatoes, and clover. Limestone abounds, and there are many cairns, Druidical temples, Pictish camps, and other antiquities in this district.

LIDO DI SOTTOMARINO, an island and town of Maritime Austria, near Chioggia, containing about 2600 souls. It is built on a bank, which separates the Venetian Lagunes from the sea, and protected by a strong pier, with walls composed of enormous masses of freestone, thirty-two feet thick, and many fathoms high.

LIE, *v. n.* Sax. liȝan, heȝan; Goth. *ligga;* Teut. *liegan;* Belg. *leggen;* pret. lay, lain, lien. To rest; remain; recline; be recumbent: (hence to sleep); lean; incline; press upon; be deposited; consist; remain fixed: hence, metaphorically, to be imputed; be burdensome, or troublesome; be in a helpless, afflicted, or confined state; be in prison; be in the power of, or belong to; be judicially valid; oblige; be buried. It is used with the prepositions *at, by, down, in* (to express the confinement of women in child-bed), *under, upon, with;* but retains throughout these uses one or other of the above senses, implying, as Dr. Johnson says, 'something of sluggishness, inaction, or steadiness, as applied to persons; and some gravity, or permanency of condition, as applied to things.'

And he found a man, eneas bi name, that fro eighte gheer he hadde *leye* in bed, and was syk in palesie. *Dedis* ix.

If thou doest well, shalt thou not be accepted? and if thou doest not well, sin *lieth* at the door.
Gen. iv. 7.

One of the people might lightly have *lien* with thy wife. *Gen.* xxvi. 10.

I will *lie* with my fathers, and thou shalt carry me out of Egypt, and bury me in your burying-place. *Gen.* xlvii. 30.

The seventh year thou shalt let it rest and *lie* still.
Exodus.

There were *liers* in ambush against him behind the city. *Josh.* viii. 14.

His bones are full of the sin of his youth, which shall *lie down* with him in the dust. *Job* xx. 11.

The highways *lie* waste, the wayfaring man ceaseth. *Isaiah.*

My little daughter *lieth* at the point of death; I pray thee come and lay thy hands on her, that she may be healed. *Mark.*

What houndes *liggen* on the floor adoun. *Chaucer. Cant. Tales.*

As for all other good women that love to do but little work, how handsome it is to *lie in* and sleep, or to louse themselves in the sun-shine, they that have been but a while in Ireland can well witness. *Spenser on Ireland.*

Thou kenst the great care
I have of thy health and thy welfare,
Which many wild beasts *liggen* in wait,
For to entrap in thy tender state. *Id. Pastorals.*

Death *lies* on her like an untimely shower
Upon the sweetest flower of all the field. *Shakspeare.*

If money go before, all ways do *lie* open. *Id.*

How many good young princes would do so; their fathers *lying* so sick as yours at this time is? *Id.*

Your imprisonment shall not be long;
I will deliver you, or else *lie* for you. *Id.*

The image of it gives me content already; and I trust it will grow to a most prosperous perfection:—It *lies* much in your holding up. *Id.*

Every thing that heard him play,
Even the billows of the sea,
Hung their heads, and then *lay by;*
In sweet musick is such art,
Killing care, and grief of heart,
Fall asleep, or hearing die. *Id. Henry VIII.*

You confine yourself most unreasonably. Come, you must go visit the lady that *lies in.* *Id. Coriolanus.*

Pardon me, Bassanio,
For by this ring she *lay with* me. *Shakspeare.*

Do'st thou endeavour, as much as in thee *lies*, to preserve the lives of all men? *Duppa's Rules for Devotion.*

He that commits a sin shall find
The pressing guilt *lie* heavy on his mind,
Though bribes or favour shall assert his cause. *Creech.*

But their way
Lies through the perplexed paths of this drear wood,
The nodding horror of whose shady brows
Threats the forlorn and wandering passenger. *Milton.*

It is but a very small comfort, that a plain man, *lying* under a sharp fit of the stone for a week, receives from this fine sentence. *Tillotson.*

He shews himself very malicious if he knows I deserve credit, and yet goes about to blast it, as much as in him *lies.* *Stillingfleet on Idolatry.*

I have seen where copperas is made, great variety of them, divers of which I have yet *lying* by me. *Boyle.*

The Spaniards have but one temptation to quarrel with us, the recovery of Jamaica, for that has ever *lien* at their hearts. *Temple.*

So the false spider, when her nets are spread,
Deep ambushed in her silent den does *lie.* *Dryden.*

The watchful traveller,
That by the moon's mistaken light did rise,
Lay down again, and closed his weary eyes. *Id.*

Mars is the warrior's god; in him it *lies*
On whom he favors to confer the prize. *Id.*

Are the gods to do your drudgery, and you *lie* bellowing with your finger in your mouth? *L'Estrange's Fables.*

What *lies* beyond our positive idea towards infinity, *lies* in obscurity, and has the undeterminate confusion of a negative idea. *Locke.*

He that thinks that diversion may not *lie* in hard labour, forgets the early rising, and hard riding of huntsmen. *Id.*

The doctor has practised both by sea and land, and therefore cures the green sickness and *lyings-in.* *Spectator.*

Shew the power of religion, in abating that particular anguish which seems to *lie* so heavy on Leonora. *Addison.*

It were to be wished, that men would promote the happiness of one another, in all their private dealings, among those who *lie within* their influence. *Id.*

As a man should always be upon his guard against the vices to which he is most exposed, so we should take a more than ordinary care not to *lie at* the mercy of the weather in our moral conduct. *Id. Freeholder.*

A generous person will *lie under* a great disadvantage. *Smalridge's Sermons.*

Forlorn he must, and persecuted be;
Climb the steep mountain, in the cavern *lie.* *Prior.*

When Florimel designed to *lie* privately *in;*
She chose with such prudence her pangs to conceal,
That her nurse, nay her midwife, scarce heard her once squeal. *Id.*

Envy *lies* between beings equal in nature, though unequal in circumstances. *Collier of Envy.*

Lie heavy on him, earth, for he
Laid many a heavy load on thee. *Epitaph on Vanbrugh.*

Europe *lay* then *under* a deep lethargy, and was no otherwise to be rescued but by one that would cry mightily. *Atterbury.*

These are not places merely of favor, the charge of souls *lies upon* them; the greatest account whereof will be required at their hands. *Bacon.*

It should *lie upon* him to make out how matter, by undirected motion, could at first necessarily fall, without ever erring or miscarrying, into such a curious formation of human bodies. *Bentley's Sermons.*

This mistake never ought to be imputed to Dryden, but to those who suffered so noble a genius to *lie under* necessity. *Pope.*

The maintenance of the clergy is precarious, and collected from a most miserable race of farmers, at whose mercy every minister *lies* to be defrauded. *Swift.*

Do not think that the knowledge of any particular subject cannot be improved, merely because it has *lain* without improvement. *Watts.*

And last (the sum of a' my griefs!)
My noble master *lies* in clay;
The flower amang our barons bold,
His country's pride, his country's stay. *Burns.*

A man that hath so far lost the command of himself, as to *lie at* the mercy of every foolish or vexing thought, is much in the same situation as an host, whose house is open to all comers. *Mason.*

LIE, or LYE, *n.s.* & *v.n.* } Sax. lıᵹa, lıᵹan; Goth. *lygi*, of læ, deceit, proud. A verbal fraud or deception; criminal falsehood; any fiction. 'To give the lie' is to charge with lying; to make the imputation of this crime: to lie is to utter lies, or tell what is untrue, deceitfully. See the extract from Watts.

If a soul *lye* unto his neighbour in that which was delivered him to keep, he shall restore that which was delivered. *Lev.*

Should I *lye* against my right? *Job* xxxiv. 6.

Thou *liest*, abhorred tyrant! with my sword
I'll prove the *lie* thou speakest.
Shakspeare. Macbeth.

That *lie* shall lye so heavy on my sword,
That it shall render vengeance and revenge;
Till thou the *lie* giver, and that *lie*, rest
In earth as quiet as thy father's skull.
Shakspeare.

Truth is the object of our understanding, as good is of our will; and the understanding can no more be delighted with a *lye*, than the will can choose an apparent evil. *Dryden.*

The cock and fox, the fool and knave imply;
The truth is moral, though the tale a *lie*. *Id.*

Men will *give* their own experience the *lie*, rather than admit of any thing disagreeing with these tenets. *Locke.*

Thy better soul abhors a *liar's* part,
Wise is thy voice, and noble is thy heart. *Pope.*

He who tells a *lie* is not sensible how great a task he undertakes; for he must be forced to invent twenty more to maintain that one. *Id.*

Inform us, will the emperor treat?
Or do the prints and papers *lie*? *Swift.*

When I hear my neighbour speak that which is not true, and I say to him, This is not true, or this is false, I only convey to him the naked idea of his error; this is the primary idea; but if I say it is a *lie*, the word *lie* carries also a secondary idea; for it implies both the falsehood of the speech, and my reproach and censure of the speaker. *Watts's Logick.*

Here the soul sits in council, ponders past,
Predestines future action; sees, not feels,
Tumultuous life, and reasons with the storm;
All her *lies* answers, and thinks down her charms.
Young.

The common people do not accurately adapt their thoughts to the objects; nor, secondly, do they accurately adapt their words to their thoughts: they do not mean to *lie*; but, taking no pains to be exact, they give you very false accounts. A great part of their language is proverbial: if any thing rocks at all, they say it rocks like a cradle; and in this way they go on. *Johnson.*

Have I not had my brain seared, my heart riven,
Hopes snapped, name blighted, Life's life *lied* away?
And only not to desperation driven,
Because not altogether of such clay
As rots into the souls of those whom I survey.
Byron.

Lie, in morals. Dr. Paley observes, on this subject, that there are falsehoods which are not lies: that is, which are not criminal: and there are lies which are not literally and directly false. I. Cases of the first class are those, 1. Where no one is deceived: as for instance in parables, fables, novels, jests, tales to create mirth or ludicrous embellishments of a story, in which the declared design of the speaker is not to inform, but to divert; compliments in the subscription of a letter; a prisoner's pleading not guilty; an advocate asserting the justice of his client's cause. In such instances no confidence is destroyed, because none was reposed; no promise to speak the truth is violated, because none was given or understood to be given. 2. Where the person you speak to has no right to know the truth; as where you tell a falsehood to a robber to conceal your property; to an assassin to defeat or to divert him from his purpose. It is upon this principle, that, by the laws of war, it is allowed to deceive an enemy by feints, false intelligence, and the like: but by no means in treaties, truces, signals of capitulation, or surrender: and the difference is, that the former suppose hostilities to continue, the latter are calculated to terminate or suspend them. II. As there may be falsehoods which are not lies, so there may be lies without literal or direct falsehood. An opening is always left for this species of prevarication, when the literal and grammatical signification of a sentence is different from the popular and customary meaning. It is the wilful deceit that makes the lie; and we wilfully deceive, when our expressions are not true, in the sense in which we believe the hearer apprehends them. Besides, it is absurd to contend for any sense of words, in opposition to usage; for all senses of all words are founded upon usage, and upon nothing else. Or a man may act a lie; as by pointing his finger in a wrong direction, when a traveller enquires of him his road; or when a tradesman shuts up his windows, to induce his creditors to believe that he is abroad; for to all moral purposes, and therefore as to veracity speech and actions are the same; speech being only a mode of action.

LIEF, or LIEVE, *adj.* & *adv.* } Sax. leop; Belg. *lief*, *lieve*, to love. Beloved; dear: as an adverb, willingly, by choice.

Ye wot yourself, she may not wedden two
At ones, though ye fighten evermo;
But on of you, al be he loth or *lefe*,
He mot gon pipen in an ivry *lefe*.
Chaucer. Canterbury Tales.

My *liefest* lord she thus beguiled had,
For he was flesh; all flesh doth frailty breed.
Faerie Queene.

You with the rest,
Causeless have laid disgraces on my head;
And with your best endeavour have stirred up
My *liefest* liege to be mine enemy.
Shakspeare. Henry VI.

Speak the speech, I pray you, as I pronounced it to you, trippingly on the tongue: but if you mouth it, as many of our players do, I had as *lieve* the town-crier had spoke my lines. *Shakspeare.*

Action is death to some sort of people, and they would as *lieve* hang as work. *L'Estrange.*

LIEGE, *adj.* & *n. s.* LIEGE'MAN, } Fr. *lige*, *liege*; Ital. *ligio*; barb. Lat. *ligius*, from *ligo*, to bind. Bound by feudal tenure, or law; hence supreme or sovereign, by such tenure: and, as a substantive, the supreme lord or sovereign: liegeman is one who owes allegiance; a subject man.

For sothe, my *liege*, quod I
An hundred times I have been at the gate
Afore this tyme, yet coude I ner espie,
Of myne acqueintaunce eny in mine eye.
Chaucer.

This *liegeman* 'gan to wax more bold,
And when he felt the folly of his lord,
In his own kind, he 'gan himself unfold.
Faerie Queene.

Sith then the ancestors of those that now live, yielded themselves then subjects and *liegemen*, shall it not tye their children to the same subjection?
Spenser on Ireland.

Did not the whole realm acknowledge Henry VIII. for their king and *liege* lord? *Spenser.*

O pardon me, my *liege!* but for my tears
I had forestalled this dear and deep rebuke. *Shakspeare.*

The other part reserved I by consent,
For that my sovereign *liege* was in my debt. *Id.*

Stand, ho! who is there?
—Friends to this ground, and *liegemen* to the Dane. *Id.*

My lady *liege*, said he
What all your sex desire is sovereignty. *Dryden.*

The natives, dubious whom
They must obey, in consternation wait
Till rigid conquest will pronounce their *liege.* *Philips.*

So much of it as is founded on the law of nature, may be stiled natural religion; that is to say, a devotedness unto God our *liege* lord, so as to act in all things according to his will. *Grew's Cosmogony.*

LIEGE, in law, properly signifies a vassal, who holds a kind of fee, that binds him in a closer obligation to his lord than other people. The term seems to be derived from the Latin ligo, to bind; on account of a ceremony used in rendering faith or homage; which was by locking the vassal's thumb or his hand in that of the lord, to show that he was fast bound by his oath of fidelity. Cujas, Vignere, and Bignon, choose rather to derive the word from the same source with leudis or leodi, i. e. loyal or faithful. But Du Cange agrees with those who derive it from liti, a kind of vassals, so firmly attached to their lord, on account of lands or fees held of him, that they were obliged to do him all manner of service, as if they were his domestics. He adds. this was formerly called litgium servitium, and the person litge. In this sense the word is used, Leg. Edw. c. 29. Judæi sub tutela regis ligeas debent esse, that is, wholly under his protection. By liege homage, the vassal was obliged to serve his lord towards all, and against all, excepting his father. In which sense the word was used in opposition to simple homage; which last only obliged the vassal to pay the rights and accustomed dues to his lord; and not to bear arms against the emperor, prince, or other superior lord; so that liegeman was a person wholly devoted to his lord, and entirely under his command. Omnibus, &c., Reginaldus, rex Insularum, salutem. Sciatis quod deveni homo ligeus domini regis Angliæ Johannis, contra omnes mortales quamdiu vixero; &c. MS. penes W. Dugdale. But, it must be observed, there were formerly two kinds of liege homage: the one, by which the vassal was obliged to serve his lord against all, without exception even of his sovereign; the other, by which he was to serve him against all, except such other lords as he had formerly owed liege homage to. In the old English statutes, lieges, and liege people, are terms peculiarly appropriated to the king's subject; as being liges, ligi, or ligati, obliged to pay allegiance to him; 8 Henry VI.; 14 Henry VIII. &c., though private persons had their lieges too.

LIEGE, a large and fertile province in the south-east part of the kingdom of the Netherlands, surrounded by the Prussian province of the Lower Rhine, the grand duchy of Luxemburg, and the Belgic provinces of Namur, South Brabant, and Limburg. Its superficial extent is 2200 square miles, and it is divided into the four districts of Liege, Huy, Viviers, and Marche. The aspect of the country is that of an undulating plain, except in the south and east, where it is hilly and well wooded. These districts border on the forest of Ardennes. The principal river is the Maese, with its subordinate streams, the Ourthe, the Loose, and the Semoys. Most parts of the province are better adapted to pasture than tillage, and cattle and sheep are reared in large quantities. The districts of Liege and Huy produce corn, and an inferior wine resembling that of Burgundy. The mineral productions are coal, which is said to be worked to the extent of 450,000 tons annually, alum, calamine, lead, and iron. The principal mineral waters are those of the celebrated Spa fountains. Large quantities of woollens, hardware, and arms, are made and exported, together with cheese, Spa-water, timber, coal, and the various minerals.

This province sends six deputies to the states-general, and belongs to the fifth military division of the Netherlands. Before the French revolution it was subject to the prince bishop of Liege, a member of the Germanic body, whose revenue exceeded £100,000 a-year; the members of the states consisted almost entirely of the clergy and the nobles. In 1792 the French took possession of the whole bishopric, which they retained at the peace of Luneville, and formed into parts of the departments of the Lower Meuse, the Ourthe, and the Sambre and Meuse. On the fall of Buonaparte the bishopric of Liege was re-incorporated with the Netherlands by the congress of Vienna. Its inhabitants, amounting to 354,000, are chiefly Catholics.

LIEGE, a large old town of the Netherlands, formerly the capital of the bishopric of Liege, is upwards of four miles in circumference, and is seated on the Meuse, in a fine valley surrounded with hills and woods. At this city the Meuse is divided into three branches, which after passing through it, under several bridges, unite again below it. It was formerly a free imperial city of Germany, and one of the largest and most eminent in Europe. Though 100 miles from the sea by water, the Meuse is navigable up to it. It is divided into the upper and lower town, the former of which is very irregularly built, and has a dark and gloomy aspect; the houses being lofty, and the streets narrow, and surcharged with filth. The latter is subdivided into the Isle and the Quarter beyond the Maese. The suburb of Maestricht, distinct from the whole, is a double range of buildings extending along the left bank of the river to the north. There are also the suburb of Valbarge (north-west) and St. Marguerite to the south.

The fortifications of Liege were once imposing, and the town had sixteen gates, and a citadel to the north-west, now rased: but it is no longer considered a garrison town. The public buildings are not very remarkable: the cathedral, built in the eighth century, is an inelegant Gothic edifice. Of the ten other churches, that

of St. Paul is the most remarkable, both for structure and ornaments. Besides a great number of other convents, of both sexes, here was formerly a college of English Jesuits, founded in 1616, and a fine English nunnery. Churches, convents, and other religious foundations, occupied indeed a large part of the town, whence it was called the paradise of priests, the purgatory of men, and the hell of women. In St. William's convent, without the city, is the tomb of the famous English traveller Sir John Mandeville. Near it were long kept the saddle, spurs, and knife, that he used in his travels. Existing institutions worth notice are the lyceum, a great provincial school; the arsenal; and the theatre. The fountains are also fine, particularly one in the centre of the great square. At this place is made a great quantity of excellent cannon and musketry: its clock-work is also superior; and the manufacture of mats is said to occupy from 10,000 to 14,000 hands. All these are large articles of export. Grates and various other hardware articles are also exported from Liege. The cloths and tanneries have also long been in good repute. The carrying trade with Holland and Germany is considerable, the town having ample water communications; and the scenery of the environs fully counterbalances the gloom of the town.

It was bombarded in 1691, and delivered up to the French in 1701. The allies retook it in 1702, and the French besieged it again in 1705, but were obliged to raise the siege on the approach of the duke of Marlborough. In 1734 a fire happened here, which consumed the bishop's palace, with all the furniture and MSS. In 1789 the inhabitants, who had long complained of the oppression which they experienced under the government of their bishop, insisted upon a charter of privileges, and, as that prelate and his chapter would not comply with their demands, they had recourse to arms; until the bishop, apprehensive for his safety, left the city, and appealed to the imperial chamber of Wetzlar. Decrees were now issued by the chamber in his favor; while the king of Prussia, in 1790, seemed to act as a mediator for the citizens: the sentences, however, issued by the imperial chamber against the insurgents, were followed by requisitorial letters, addressed to the government of the Austrian Netherlands, desiring that his imperial majesty's troops would assist those of the electoral princes in enforcing their decrees; in consequence of which the Austrians entered Liege in 1791, restored the old magistracy, who had been expelled, to their functions, and reinstated the bishop. In November, 1792, the French, under Dumouriez, took the city, and effected another revolution; but being driven thence by the allies in March, 1793, the citizens were once more obliged to submit. Early in 1794 it was again however taken by the French under Pichegru, and annexed to that country in 1796, and until the downfall of Buonaparte. Liege is sixteen miles S.S.W. of Maestricht, and fifty-three east by south of Brussels.

LIEGER, *n. s.* Or LEGER, which see. A resident ambassador.

His passions and his fears
Lie *liegers* for you in his breast, and there
Negociate your affairs. *Denham's Sophy.*

LIEGNITZ, a large government of Prussian Silesia, occupying the country which lies to the north of the governments of Breslau and Reichenbach. Its area is 4100 square miles. It includes the former duchies and principalities of Glogau, Sagan, Liegnitz, and Karolath, with part of those of Jauer and Upper Lusatia; and is divided into thirteen circles, viz. Lowenberg Bunzlau, Goldberg, Liegnitz, Luben, Glogau Sprottau, Sagan, Friestadt, Grunberg, Gorlitz, Rothenburg, and Lauban. Population 506,000.

This country is generally of level surface, and intersected by hills of but little elevation. The soil is sandy, but in many places fertile, and producing corn for exportation. The climate is mild, and vines are reared in the eastern part. Timber abounds, and forms a large article of export. The pasturage is also good. The manufactures are of linen and woollen. The rivers are the Oder, the Bober, the Neisse, the Queis, the Schwartzwasser, and the Katzbach.

LIEGNITZ, a town of Lower Silesia, the capital of the preceding government, is situated at the conflux of the Katzbach, the Schwartzwasser, and the Neisse, and surrounded by an earthen mound, covered with fine alleys of lime, mulberry, and chestnut trees. It has four gates, but is not fortified. An old palace of the princes is surrounded by a distinct moat and wall. The castle, town-house, and public school, are worth notice: as also the college formerly belonging to the Jesuits; the Catholic church of St. John, and the noble chapel where the former dukes of Liegnitz were buried. There is also an academy, having five professors, in the town. The chief trade is in woollens and madder. Inhabitants 10,000.

LIEN, Fr., in the English law is of two significations; i. e. personal lien, such as bond, covenant, or contract; and real lien, i. e. a judgment, statute, recognizance, which oblige and affect the land. It signifies an obligation, tie, or claim annexed to, or attaching upon, any property: without satisfying which such property cannot be demanded by the owner. Thus the costs of an attorney are a lien upon deeds and papers in his hands; a factor has a lien on goods in his hands for balance due from his principal, &c. By the common law every person, whether attorney or not, has a lien on the specific deed or paper, delivered to him to do any specific work or business upon; but not on other papers of the same party, unless he be an attorney. A banker has a lien for the amount of his balance upon securities (bills and checks) paid in by a customer upon his running account. A printer has a lien generally upon the copies of a work not delivered, for his balance. But the lien of a common carrier for his general balance, however it may arise in point of law from an implied agreement to be inferred from a general usage of trade, and proved by numerous instances, yet is not to be favored, nor can it be supported by a few recent instances of detention of goods by four or five carriers for their general

balance. But such a lien may be inferred from evidence of the particular words of dealing between the respective parties. The master of a ship has no lien on it for money expended, or debts incurred by him for repairs done to it on the voyage.

LI'ENTERY, *n. s.* } Fr. *lienterie;* from Gr.
LIENT'ERIC, *adj.* } λειον, *leve*, smooth, and εντερον, intestinum, gut. A particular looseness, or diarrhœa, wherein the food passes too quickly through the stomach.

There are many medicinal preparations of iron, but none equal to the tincture made without acids; especially in obstructions, and to strengthen the tone of the parts; as in *lienterick* and other like cases. *Grew's Museum.*

LIENTERY, in medicine, a disease considered by Cullen as a variety of diarrhœa, in which great portions of the food pass off by stool almost unchanged. The term is derived from Gr. λειος, smooth, and εντερον, intestine, ancient physicians conceiving that this disease was owing to the excessive smoothness and lubricity of the internal membrane of the stomach, which allowed the food to slip through it in an undigested state.

Many writers have treated the lientery as a disease altogether distinct from diarrhœa: its principal cause, according to Cullen, appears to consist in a morbid irritability of the stomach and bowels; by which the former organ is excited to an excessive motion of its muscular coat, and consequently expels the aliment into the bowels in an undigested state; and the latter being likewise morbidly sensible to the same stimulus, carry on the undigested matter speedily through the whole canal. The fœces are at the same time loose or liquid, because, while the undigested matter is not taken up by the lacteals, the irritation caused by its rapid passage excites the exhalant vessels, and the excretories of the mucous glands, to pour out a more abundant quantity of their fluids. This symptom causes generally great weakness of the digestive powers as well as an increased morbid irritability of the stomach.

It is one of those diseases which are called hereditary, from their often proceeding through several generations in particular families. In this case, however, nothing more seems to descend than a general looseness of habit. With proper care that the aliment is given in small quantities, and of a digestible quality; that the child have plenty of wholesome air, not that of Fleet Street or Cheapside; and plenty of good exercise, not mere walking in Temple Gardens; the disease may be often overcome as the patient grows up.

It is therefore the endeavour of the physician first to lessen the irritability of the whole alimentary canal; and, secondly, to strengthen as much as possible the digestive powers of the stomach: for, although food, when converted into chyle by the process of digestion, passes through the bowels without producing any irritating effect; yet the same food, when it is transmitted into them from the stomach in a crude unaltered condition, operates as an extraneous and foreign matter on the irritable villous lining of the bowels, and excites them to an extraordinary peristaltic action.

The first indication of allaying the irritability of the stomach and intestines must, of course, be fulfilled by the administration of narcotic medicines, and of astringents. Opium itself is the most effectual soother of morbid irritability that we possess; and, in cases like that under consideration, its operation is improved by the union of some aromatic substance; hence the opiate confection, according to the formula of the London pharmacopeia, is a grateful and efficacious medicine for this purpose. But the irritability is still more effectually allayed, when astringents and absorbents are employed at the same time with the opiates; the best of these are the catechu, and the testaceous powders, or chalk. The confectio catechu of the Edinburgh pharmacopeia, which combines the opiate, astringent, and aromatic, in one substance, is a valuable medicine for the fulfilment of this indication. These substances may be administered in a little distilled water of some aromatic vegetable.

Or, with a view to strengthening the digestive powers of the stomach, the same medicines may be usefully combined with bitters, as the infusion of cascarilla, gentium root, or orange peel, or either the decoction or infusion of cinchona or Jesuit's bark. At the same time moderate exercise, especially on horseback, will aid in re-establishing the functions of the stomach. But, above all, every cold and debilitating kind of food, all substances of difficult solubility, and even the most nourishing and digestible in large quantities, must be studiously avoided. This is the more important as instances sometimes happen in which this disease is accompanied with a bulima or excessive appetite, and parents often feel considerable difficulty in denying their children common articles of food when they desire them, though certain they can only be injurious. Of this fact we have ourselves known instances. All such things as ice sallads, water-cresses, cucumbers, or other raw vegetables, vegetable acids, &c., are to be avoided. We have heard of a severe lientery being brought on by eating a little ice-cream, at a time when a considerable degree of indigestion already prevailed; it appeared at once to sink the feeble digestive powers of the stomach, and the food was discharged almost unchanged. Cheese, hard or salted meats, fatty substances, &c., which require all the energy of the healthy stomach to subdue them into chyle, should on no account be allowed. When the alimentary canal is in the irritable condition above mentioned, it is advisable for the invalid to avoid active exercise immediately after his meals, which is liable to hurry on the food into the intestines before the digestion is completed, and thus to occasion a lienteric attack. Persons subject to habitual indigestion, or at least great feebleness of stomach, have at those times frequently brought on lienteric diarrhœa, unless they remained quiet for some time after every meal. See MEDICINE.

LIEU, Fr. *lieu.* Place; stead: always used with *in*; and not a very respectable Gallicism.

God, of his great liberality, had determined, in *lieu* of man's endeavours, to bestow the same by the rule of that justice which best beseemeth him. *Hooker.*

In lieu of such an increase of dominion, it is our business to extend our trade. *Addison's Freeholder.*

She shall stoop to be
A province for an empire, petty town
In lieu of capital, with slaves for senates;
Beggars for nobles; panders for a people!
Byron.

LIEVENS (John), a celebrated painter, born in Leyden in 1607. He was the disciple of Joris Van Schooten, and afterwards of Peter Lastman. He excelled principally in portraits; but he also executed several historical pieces with great success. He resided three years in England, and painted the portraits of Charles I., the queen, the prince, and several of the nobility; after which he returned to Antwerp, where he met with full employment. There are several of his etchings extant, performed in a slight, but masterly manner. The chiaro scuro is very skilfully managed in them, so as to produce a most powerful effect. His style of etching resembles that of Rembrandt; but is coarser and less finished.

LIEUTAUD (Joseph), M. D., counsellor of state and first physician to the court of France, was born at Aix in Provence, and resided principally there till he took his degree. After this he studied for some years at Montpelier. He returned to Aix, where he soon acquired extensive practice, and became eminent for his literary abilities. There he resided till 1750, when he was invited to act as physician to the royal infirmary at Versailles; where he practised with such reputation and success, that he soon arrived at the head of his profession; and in 1774, upon the death of M. Senac, was appointed archiater. He published many valuable works; particularly, 1. Elementa Philologiæ; 2. Precis de la Medicine; 3. Pratique Precis de Matiere Medicale; 4. Essais Anatomiques; 5. Synopsis Universæ Praxeos Medicinæ; 6. Historia Anatomico-Medica. He died at Versailles in 1780, aged seventy-eight.

LIEUTEN'ANCY, *n. s.*
LIEUTEN'ANT,
LIEUTEN'ANTSHIP. } Fr. *lieutenance*, *lieutenant*. A deputy; a subordinate officer; one who acts in the place or stead of another.

It were meet that such captains only were employed as have formerly served in that country, and been at least *lieutenants* there. *Spenser on Ireland.*

If such tricks as these strip you of your *lieutenancy*, it had been better you had not kissed your three fingers so oft. *Shakspeare.*

Whither away so fast?
—No farther than the tower.
—We'll enter all together,
And in good time here the *lieutenant* comes. *Id.*

I must put you in mind of the lords *lieutenants*, and deputy *lieutenants*, of the counties: their proper use is for ordering the military affairs, in order to oppose an invasion from abroad, or a rebellion or sedition at home. *Bacon.*

Killing, as it is considered in itself without all undue circumstances, was never prohibited to the lawful magistrate, who is the vicegerent, or *lieutenant* of God, from whom he derives his power of life and death. *Bramhall against Hobbes.*

The earl of Essex was made *lieutenant* general of the army; the most popular man of the kingdom, and the darling of the swordsmen. *Clarendon.*

Sent by our new *lieutenant*, who in Rome,
And since from me, has heard of your renown,
I come to offer peace. *Philips's Briton.*

His *lieutenant*, engaging against his positive orders being beaten by Lysander, Alcibiades was again banished. *Swift.*

Canst thou so many gallant soldiers see,
And captains and *lieutenants* slight for me?
Gay.

According to military custom the place was good, and the *lieutenant* of the colonel's company might well pretend to the next vacant captainship.
Wotton.

The list of undisputed masters is hardly so long as the list of the *lieutenancy* of our metropolis.
Felton on the Classics.

The *lieutenant* brought up the rear, and took care that none of the soldiers were left behind, or deserted.
Potter's Antiquities.

He was born in Ireland during the *lieutenancy* of Stafford, who, being both his uncle and his godfather, gave him his own surname. *Johnson.*

A LIEUTENANT is an officer who supplies the place and discharges the offices of a superior in his absence. Of these some are civil, as the lords lieutenants of kingdoms and counties; others military, as the lieutenant-general, lieutenant-colonel, &c.

LIEUTENANT, in the land service, is the second commissioned officer in every company of both foot and horse, being next to the captain, and taking the command upon the death or absence of the captain.

LIEUTENANT-COLONEL, the second officer of a regiment, who commands in the absence of the colonel.

LIEUTENANT-GENERAL is the next in command after the general; and, provided he should die or be killed, the order is, that the oldest lieutenant-general shall take the command. This office is the first military dignity after that of a general. Lieutenant-generals have multiplied in Europe, in proportion as the armies have become numerous. They serve either in field or in the sieges, according to the dates of their commissions.

LIEUTENANT OF ARTILLERY. The lieutenant has the same detail of duty with the captain; because in his absence he commands the company: he is to see that the soldiers are clean and neat; that their clothes, arms, and accoutrements, are in good and serviceable order; and to watch over every thing else which may contribute to their health. He must attend to their being taught the exercise, see them punctually paid, their messes regularly kept, and visit them in the hospitals when sick. He must assist at all parades, &c. He ought to understand the theory of projectiles, and the science of artillery, with the various effects of gunpowder, however managed or directed; to enable him to construct and dispose his batteries to the best advantage; to plant his cannon, mortars, and howitzers, so as to produce the greatest annoyance to an enemy. He is to be well skilled in the attack and defence of fortified places; and to be conversant in arithmetic, mathematics, mechanics, &c.

LIEUTENANT OF A SHIP OF WAR, an officer next in rank and power to the captain, in whose

absence he is charged with the command of the ship, and the execution of whatever orders he may have received from the commander relating to the king's service. The lieutenant who commands the watch at sea keeps a list of all the officers and men thereunto belonging, in order to muster them when he judges it expedient, and report to the captain the names of those who are absent from their duty. During the night-watch, he occasionally visits the lower decks, or sends thither a careful officer, to see that the proper sentinels are at their duty, and that there is no disorder amongst the men; no tobacco smoked between decks, nor any fire or candles burning there, except the lights which are in lanterns, under the care of a proper watch. He is expected to be always upon deck in his watch, as well to give the necessary orders with regard to trimming the sails and superintending the navigation, as to prevent any noise or confusion; but he is never to change the ship's course without the captain's directions, unless to avoid an immediate danger. The lieutenant, in time of battle, must particularly take care that all the men are present at their quarters, where they have been previously stationed according to the regulations made by the captain. He should exhort them every where to perform their duty; and acquaint the captain at all times of the misbehaviour of any person in the ship, and of whatever else concerns the service. The youngest lieutenant in the ship, who is also styled lieutenant at arms, besides his common duty, is particularly ordered, by his instructions, to train the seamen to the use of small arms, and frequently to exercise and discipline them therein. His office in time of battle is chiefly to direct and attend them; and at other times to have a due regard to the preservation of the small arms, that they be not lost or embezzled, and that they be kept in good condition for service.

LIEUTENANT, REFORMED, he whose company or troop is broken or disbanded, but himself continued in whole or half pay, still preserving his right of seniority and rank in the army.

LIEUTENANTS, LORDS, OF COUNTIES, are officers, who, upon any invasion or rebellion, have power to raise the militia, and to give commissions to colonels and other officers, to arm and form them into regiments, troops, and companies. Under the lords lieutenants are deputy lieutenants, who have the same power; these are chosen by the lords lieutenants out of the principal gentlemen of each county, and presented to the king for his approbation.

LIEWARDEN, or LEWARDEN, a large town of the Netherlands, the capital of the province of Friesland, situated on the river Ee. It is surrounded with an earthen mound and broad moat. The streets, which are straight and wide, are intersected by canals, which communicate with the sea. The chief public buildings are the town-house, arsenal, the house belonging to the prince of Orange, as hereditary stadtholder of the province, and a large and handsome church, containing the tombs of the princes of his family. The walls and banks of the canals are delightful promenades, planted with trees. Twenty-eight miles west of Groningen.

LIFE, *n. s.*
LIFE'BLOOD,
LIFE'GIVING,
LIFE'GUARD,
LIFE'LESS, *adj.*
LIFE'LESSLY, *adv.*
LIFE'LIKE, *adj.*
LIFE'STRING, *n. s.*
LIFE'TIME,
LIFE'WEARY.

Sax. lıꝼıan; Teut. *leben*; Belg. *leven*, to exist; Goth. and Swed. *lif*; Dan. *liv*. Existence; animated existence; human existence; man's present state of being: hence, conduct; condition; manner of life; human affairs; living person; narrative of a life: spirit; briskness: activity; enjoyment; and blood, the supposed vehicle of life; a living, or real form, as opposed to copies: life-blood, the blood necessary to life: life-guard, the guard of the king's life or person: life-string, nerve; strings supposed essential to life: lifetime, time of the duration of life: life-weary, tired of life, or living; wretched.

But be clothid aboue, that thilk thing that is deedli be sopun up of *lyf*. *Wiclif*. 2 *Cor*. v.

Let the waters bring forth abundantly the moving creature that hath *life*. *Gen*. i. 20.

For the *life* of the flesh is in the blood. *Lev*. xvii. 11.

Wel coude he peinten *lifly* that it wrought,
With many a florein he the hewes bought.
Chaucer. *Cant*. *Tales*.

Thus I know, not only by reading of books in my study, but also by experience of *life* abroad in the world. *Ascham*.

The weapon bright,
Taking advantage of his open jaw,
Ran through his mouth with so importune might,
That deep empurst his darksome hollow maw,
And back retired, his *life-blood* forth withall did draw. *Spenser*. *Faerie Queene*.

Then avarice 'gan through his veins to inspire
His greedy flames, and kindle *life* devouring fire. *Id*.

His own heat,
Kindled at first from heaven's *lifegiving* fire. *Spenser*.

On thy *life* no more.
—My *life* I never held but as a pawn
To wage against thy foes. *Shakspeare*. *King Lear*.

She shews a body rather than a *life*,
A statue than a breather.
Id. *Antony and Cleopatra*.

Why should I play the Roman fool, and die
On mine own sword? whilst I see lives the gashes
Do better upon them. *Id*. *Macbeth*.

How couldest thou drain the *lifeblood* of the child? *Shakspeare*.

Hopeless and helpless doth Ægeon wend,
But to procrastinate his *lifeless* end. *Id*.

Let me have
A dram of poison, such soon speeding geer,
As will disperse itself through all the veins,
That the *lifeweary* taker may fall dead. *Id*.

This is the best part of beauty which a picture cannot express, no, nor the first sight of the *life*. *Bacon's Essays*.

There is a false gravity that is a very ill symptom; and it may be said, that, as rivers which run very slowly have always the most mud at the bottom; so a solid stiffness, in the constant course of a man's *life*, is a sign of a thick bed of mud at the bottom of his brain. *Savile*.

And since this *life* our nonage is,
And we in wardship to thine Angels be,
Native in heaven's fair palaces,
Where we shall be but denizoned by thee.
Donne. *Divine Poems*.

He that through inconsiderateness doubted twice of his own *life*, doubted not the *life* of his seed, even from the dead and dry womb of Sarah.
Bp. Hall.

These lines are the veins, the arteries,
The undecaying *lifestrings* of those hearts
That still shall pant, and still shall exercise
The motion spirit and nature both impart. *Daniel.*

O *life*, thou nothing's younger brother!
So like, that we may take the one for t'other!
Dream of a shadow: a reflection made
From the false glories of the gay reflected bow,
Is more a solid thing than thou! *Cowley.*

I believe no character of any person was ever better drawn to the *life* than this. *Denham.*

Nor love thy *life*, nor hate; but what thou livest
Live well, how long or short permit to Heaven.
Milton.

Not to know at large of things remote
From use, obscure and subtile; but to know
That which before us lies in daily *life*,
Is the prime wisdom. *Id. Paradise Lost.*

He sat devising death
To them who lived; nor on the virtue thought
Of that *lifegiving* plant. *Id.*

Was I to have never parted from thy side?
As good have grown there still a *lifeless* rib!
Milton.

The Helots bent thitherward with a new *life* of resolution, as if their captain had been a root out of which their courage had sprung. *Sidney.*

When I consider *life*, 'tis all a cheat,
Yet fooled by hope men favour the deceit,
Live on, and think to-morrow will repay;
To-morrow's falser than the former day;
Lies more; and, when it says we shall be blest
With some new joy, takes off what we possest.
Strange cozenage! none would live past years again,
Yet all hope pleasure in what yet remain;
And from the dregs of *life* think to receive
What the first sprightly running could not give.
Dryden.

Rich carvings, portraiture, and imagery,
Where every figure to the *life* expressed
The godhead's power. *Id. Knight's Tale.*

His forehead struck the ground,
Lifeblood and *life* rushed mingled through the wound.
Dryden.

The other victor-flame a moment stood,
Then fell, and *lifeless* left the extinguished wood.
Id.

The identity of the same man consists in nothing but a participation of the same continued *life*, by constantly fleeting particles of matter, in succession vitally united to the same organized body.
Locke.

Some have not any clear ideas all their *lives*. *Id.*

They loved with that calm and noble value which dwells in the heart, with a warmth like that of *lifeblood*. *Spectator.*

Jordain talked prose all his *life-time*, without knowing what it was. *Addison on Medals.*

The administration of this bank is for *life*, and partly in the hands of the chief citizens.
Id. On Italy.

Not with half the fire and *life*,
With which he kissed Amphytrion's wife. *Prior.*

I, who make the triumph of to-day,
May of to-morrow's pomp one part appear,
Ghastly with wounds, and *lifeless* on the bier. *Id.*

Untamed and fierce the tyger still remains,
And tires his *life* with biting on his chains. *Id.*

He that would be a master, must draw by the *life* as well as copy from originals, and join theory and experience together. *Collier.*

They have no notion of *life* and fire in fancy and in words; and any thing that is just in grammar and in measure is as good oratory and poetry to them as the best. *Felton.*

The power which produces their motions, springs from something without themselves: if this power were suspended, they would become a *lifeless* unactive heap of matter. *Cheyne.*

So peaceful shalt thou end thy blissful days,
And steal thyself from *life* by slow decays. *Pope.*

His gushing entrails smoaked upon the ground,
And the warm *life* came issuing through the wound.
Id.

Minerva, *lifelike*, on embodied air
Impressed the form of Ipthema the fair. *Id.*

Henry and Edward, brightest sons of fame,
And virtuous Alfred, a more sacred name,
After a *life* of glorious toils endured,
Closed their long glories with a sigh. *Id.*

Money, the *lifeblood* of the nation,
Corrupts and stagnates in the veins,
Unless a proper circulation
Its motion and its heat maintains. *Swift.*

He entreated me not to take his *life*, but exact a sum of money. *Broome on the Odyssey.*

That *life* is long which answers *life's* great end;
The time that bears no fruit deserves no name.
Young.

What is the *life* of man? Is it not to shift from side to side?—from sorrow to sorrow?—to button up one cause of vexation—and unbutton another?
Sterne.

There's nought but care on every han',
In every hour that passes, O;
What signifies the *life* o' man,
An' 'twerna for the lasses, O? *Burns.*

The first is, because out of it are the issues of *life*; i. e. As our heart is, so will the tenor of our *life* and conduct be. *Mason.*

The Lord of all, himself through all diffused,
Sustains, and is the *life* of all that *lives*:
Nature is but a name for an effect,
Whose cause is God. *Cowper.*

—With weak unsteady step the fainting maid
Seeks the cold garden's solitary shade,
Sinks in the pillowy moss her drooping head,
And prints with *lifeless* limbs her leafy bed.
Darwin.

Therefore, they who all their *lifetime* derive blessings from the Fountain of Grace, by the channels of ecclesiastical ministers, ought then more especially to do it in the time of their sickness. *Paley.*

But vain the wish—for Beauty still
Will shrink, as shrinks the ebbing breath,
And woman's tears, produced at will,
Deceive in *life*, unman in death. *Byron.*

But the white shroud, and each extended tress,
Long—fair—but spread in utter *lifelessness*,
Which, late the sport of every summer wind,
Escaped the baffled wreath that strove to bind. *Id.*

Life Annuities and Assurance. We have disposed of a portion of this subject under the article Assurance, i. e. the history and chief practical details; and our article England contains M. Babbage's list all the respectable companies for the assurance of lives, against fires, &c., with remarks on the principles of their calculations and procedure.

That gentleman, unquestionably the first among those practical mathematicians of our age who have investigated these topics, disappointed us however, with many others of his readers, in

his 'Comparative View' of the various institutions for the assurance of lives, published in 1826. It is in fact only a popular introduction to the scientific consideration of the topics involved; digesting into a very convenient Manual, the preceding labors and investigations of Mr. Morgan, Mr. Baily, and Mr. Milne. But we understand that his wonderful machinery for the computation of logarithms has been for some time employed in the calculation of an entirely new and most important series of Tables on this subject: and we need not remind our readers, who have looked into it, of the jarring claims of former calculations, and the entire dependence of every practical question involved on such data. The Northampton Tables, for instance, which have been the chief basis of all the insurances hitherto made, of the rate of premium charged, &c., compared with the actual deaths among the members of the Equitable Society, according to Mr. Morgan, exhibit the following curious result.

From the age of	the deaths occurring have been only as	
10 to 20	1 to 2	on the Northampton Tables.
20 to 30	1 to 2	
30 to 40	3 to 5	
40 to 50	3 to 5	
50 to 60	5 to 7	
60 to 70	4 to 5	

This society on the whole is said for the last thirty years to have paid therefore only two claims where the tables in question state that three would arise: and hence the source of its exorbitant profits. Government, we may add, is understood to have liberally assisted in the designs of our author, and that the appearance of the calculations in question may be confidently looked for in a few months. We shall, in this case, not fail to avail ourselves of them in the article SURVIVORSHIP, to which under these circumstances the reader is referred.

LIFE BOAT. See BOAT.

LIFFEY, THE, a river of Ireland, which rises in the Wicklow mountains and falls into the bay of Dublin. Its course is about seventy-one miles, although the direct distance from its source to its estuary is not more than ten. In Kildare its banks are well wooded, and when it enters the county of Dublin they present most interesting and picturesque scenery. The tide conducts vessels of burden to the city, but is stopped by a beautiful fall at its western extremity. Its floods, shallows, and rapids, are very frequent.

LIFT, *v. a.*, *v. n.* & *n. s.* } Sax. hlifian; Goth.
LIFT'ER, *n. s.* } *lofa*; Swed. *lyfta*; Teut. *liften*. To heave; raise up; exalt; hold on high; used with *up*, emphatically: hence to elevate mentally; exalt in station, fortune, dignity, or esteem; inflate with pride: as a neuter verb, to strive to raise: as a noun, the act, manner, or effect of raising any thing; also a weight lifted; or a load: a dead lift is a load that remains immoveable after a given exertion, and exhaustion (the consequence of extreme exertions). See DEAD.

I wole that men prei in alle place *liftynge* up cleene hondis withouten wrathe and strf.
Wiclif. 1 *Tymo*. ii.

Arise, *lift* up the lad, and hold him in thine hand.
Genesis.

My heart was *lift* up in the ways of the Lord.
2 *Chron*.

Thou, O Lord, art my glory, and the *lifter* up of mine head. *Psalm* iii. 3.

Lifted up with pride. 1 *Tim*. iii. 6.

Pinch cattle of pasture while summer doth last,
And *lift* at their tailes ere a winter be past.
Tusser.

So down he fell, that the' earth him underneath
Did groan, as feeble so great load to *lift*.
Faerie Queene

Neither can it be thought, because some lessons are chosen out of the Apocrypha, that we do offer disgrace to the word of God, or *lift* up the writings of men above it. *Hooker*.

Your guests are coming;
Lift up our countenance, as 'twere the day
Of celebration of that nuptial.
Shakspeare. Winter's Tale.

Filial ingratitude!
Is it not as this mouth should tear this hand
For *lifting* food to't? *Id. King Lear*.

In the *lift* of the feet, when a man goeth up the hill, the weight of the body beareth most upon the knees. *Bacon*.

Myself and Trulla made a shift
To help him out at a *dead lift*. *Hudibras*.

Propped by the spring, it *lifts* aloft the head,
But of a sickly beauty soon to shed,
In summer living, and in winter dead. *Dryden*.

The goat gives the fox a *lift*, and out he springs.
L'Estrange.

The mind by being engaged in a task beyond its strength, like the body strained by *lifting* at a weight too heavy, has often its force broken. *Locke*.

See to what a godlike height
The Roman virtues *lift up* mortal man!
Addison.

Our successes have been great, and our hearts have been too much *lifted up* by them, so that we have reason to humble ourselves. *Atterbury*.

Of Orpheus now no more let poets tell,
To bright Cæcilia greater power is given;
His numbers raised a shade from hell,
Hers *lift* the soul to heaven. *Pope*.

Mr. Doctor had puzzled his brains
In making a ballad, but was at a stand,
And you freely must own, you were at a *dead lift*.
Swift.

As some tall cliff that *lifts* its awful form,
Swells from the vale, and midway leaves the storm.
Goldsmith.

The quiet night, now dappling 'gan to wane,
Dividing darkness from the dawning main:
The dolphins, not unconscious of the day,
Swam high, as eager of the coming ray;
The stars from broader beams began to creep,
And *lift* their shining eyelids from the deep.
Byron.

LIG, *v. n.* To lie. See LIE.

LIG'AMENT, *n. s.* }
LIGAMEN'TAL, *adj.* }
LIGAMEN'TOUS, }
LIGA'TION, *n. s.* }
LIG'ATURE. }
Fr. *ligament*; Latin *ligamentum*, à *ligo*, to bind. A cartilaginous appendage or bandage of the joints; any tie or

bond: ligation is the act of binding, or state of being bound: ligature, a bandage, that which is bound round something; it is also used synonymously with ligation.

Be all their *ligaments* at once unbound,
And their disjointed bones to powder ground.
Sandys.

But he in a battail seeing his father in danger to be slain, in zeal to save his father's life strained the *ligature* of his tongue, till that broke which bound him. *Bp. Taylor.*

Though our *ligaments* betimes grow weak,
We must not force them till themselves they break.
Denham.

The urachos, or *ligamental* passage, is derived from the bottom of the bladder, whereby it dischargeth the watery and urinary part of its aliment.
Browne's Vulgar Errours.

He deludeth us also by philters, *ligatures*, charms, and many superstitious ways in the cure of diseases.
Browne.

The incus is one way joined to the malleus, the other end being a process is fixed with a *ligament* to the stapes. *Holder.*

If you slit the artery, and thrust into it a pipe, and cast a strait *ligature* upon that part of the artery; notwithstanding the blood hath free passage through the pipe, yet will not the artery beat below the *ligature*; but do but take off the *ligature*, it will beat immediately. *Ray on the Creation.*

Sand and gravel grounds easily admit of heat and moisture, for which they are not much the better, because they let it pass too soon, and contract no *ligature*. *Mortimer's Husbandry.*

The many *ligatures* of our English dress check the circulation of the blood. *Spectator.*

Men sometimes, upon the hour of departure, do speak and reason above themselves; for then the soul, beginning to be freed from the *ligaments* of the body, reasons like herself, and discourses in a strain above mortality. *Addison's Spectator.*

The slumber of the body seems to be but the waking of the soul; it is the *ligation* of sense, but the liberty of reason. *Addison.*

The fatal noose performed its office, and with most strict *ligature* squeezed the blood into his face.
Arbuthnot's John Bull.

The clavicle is inserted into the first bone of the sternon, and bound in by a strong *ligamentous* membrane. *Wiseman.*

I found my arms and legs very strongly fastened on each side to the ground; I likewise felt several slender *ligatures* across my body, from my arm-pits to my thighs. *Gulliver's Travels.*

LIGATURE, in surgery, is a cord, band, or string; or the binding any part of the body with a cord, band, fillet, &c. Ligatures are used to extend or replace bones that are broken or dislocated; to tie the patients down in lithotomy and amputations; to tie upon the veins in phlebotomy; on the arteries in amputations, or in large wounds; to secure the splints that are applied to fractures, &c., and in taking off warts or other excrescences by ligature.

LIGATURE, in the Italian music, signifies a binding together of notes. Hence syncopes are often called ligatures, because they are made by the ligature of many notes. There is another sort of ligatures for breves, when there are many of these on different lines, or on different spaces, to be sung to one syllable.

LIGNY, a village of the Netherlands, in Namur, only remarkable as the scene of an obstinate and sanguinary battle between the Prussians and French, on the 16th of June 1815, the prelude to the decisive battle of Waterloo. It is three miles north-east of Fleurus, and eleven W.N.W of Namur.

LIGHT, *adj.* & *adv.*
LIGHT'-FOOT, *adj.*
LIGHT'EN, *v. a.*
LIGHTLEGGED', *adj.*
LIGHT'LY, *adv.*
LIGHT-MIND'ED, *adj.*
LIGHT'NESS, *n. s.*

Sax. leoht; Goth. *lett*; Teut. *leicht*; Belg. *leiht*. Of small weight, opposed to heavy: hence active; nimble; unincumbered; easy to be lifted, worn, or carried; not dense or gross: and, metaphorically, easy of endurance; not afflictive; not mentally burdensome; easy, generally; not heavy-armed; airy; gay; unsteady; unsettled; unchaste: light, as an adverb, means cheaply, but is a barbarism: to lighten is to make of less weight; to relieve of a burden or affliction; to cheer: the other derivatives seem to require no explanation.

He seith to hem, what thinken ye these thingis in youre hertis? What is *lightere* to seye to the syk man in palesye synnes be forghiven to thee; or to seye rise take thi bed and walke? *Wiclif. Mark* i.

In the wilderness there is no bread, nor water, and our soul loatheth this *light* bread. *Numbers* xxi. 5.

Asahel was as *light* of foot as a wild roe.
2 *Sam.* ii. 18.

The mariners were afraid, and cast forth the wares that were in the ship into the sea, to *lighten* it of them. *Jonah* i. 7.

He that is hasty to give credit is *lightminded*.
Ecclus. xix. 4.

To you my purse, and to none othir wight,
Complain I, for ye be my ladie dere;
I am sorie now that ye be so *light*,
For certis ye now make me hevie chere.
Chaucer's Balades.

Horse, oxen, plough, tumbrel, cart, waggon, and wain,
The *lighter* and stronger the greater thy gaine.
Tusser.

He so *light* was at legerdemain,
That what he touched came not to light again.
Spenser.

Land some of our passengers,
And *light* this weary vessel of her load.
Faerie Queene.

For, unto knight there is no greater shame,
Than *lightness* and inconstancy in love. *Id.*

Him so far had born his *lightfoot* steed,
Pricked with wrath and fiery fierce disdain,
That him to follow was but fruitless pain. *Id.*

Shall we set *light* by that custom of reading, from whence so precious a benefit hath grown? *Hooker.*

If they write or speak publicly but five words, one of them is *lightly* about the dangerous estate of the church of England in respect of abused ceremonies.
Id.

Of two things they must choose one; namely, whether they would, to their endless disgrace, with ridiculous *lightness*, dismiss him, whose restitution they had in so importunate manner desired, or else condescend unto that demand. *Id.*

Paulus Bachitius, with a company of *light* horsemen, lay close in ambush, in a convenient place for that purpose. *Knolles.*

It will be *light*, that you may bear it
Under a cloak that is of any length. *Shakspeare.*
False of heart, *light* of ear, bloody of hand. *Id.*
Let me not be *light*,
For a *light* wife doth make a heavy husband. *Id.*

Believe 't not lightly that your son
Will not exceed the common, or be caught
With cautelous baits and practice. *Id.*

Bid that welcome
Which comes to punish us, and we punish it,
Seeming to bear it *lightly*. *Id.*

As I blow this feather from my face,
Obeying with my wind when I do blow,
And yielding to another when it blows,
Commanded always by the greatest gust;
Such is the *lightness* of you common men. *Id.*

A trusty villain, very oft,
When I am dull with care and melancholy,
Lightens my humour with his merry jest. *Id.*

How oft when men are at the point of death,
Have they been merry! which their keepers call
A *lightning* before death. *Id. Romeo and Juliet.*

A king that would not feel his crown too heavy, must wear it every day; but, if he think it too *light*, he knoweth not of what metal it is made. *Bacon's Essays.*

Unmarried men are best masters, but not best subjects; for they are *light* to run away. *Bacon.*

Some are for masts of ships, as fir and pine, because of their length, straightness, and *lightness*. *Id. Natural History.*

These *light* vain persons still are drunk and mad
With surfeitings and pleasures of their youth. *Davies.*

This grave partakes the fleshly birth,
Which cover *lightly*, gentle earth. *Ben Jonson.*

They have cock-boats for passengers, and *lighters* for burthen. *Carew.*

They are *light* of belief, great listeners after news. *Howell.*

Flatter not the rich; neither do thou willingly or *lightly* appear before great personages. *Taylor.*

There Stamford came, for his honor was lame
Of the gout three months together;
But it proved, when they fought, but a running gout,
For heels were *lighter* than ever. *Denham.*

The English Liturgy, how piously and wisely soever framed, had found great opposition; the ceremonies had wrought only upon *lightheaded*, weak, men, yet learned men excepted against some particulars. *Clarendon.*

Strive
In offices of love how we may *lighten*
Each other's burden. *Milton.*

To entitle every petty chance that arriveth to special providence, may signify *lightness*. *Barrow.*

Lightlegged Pas has got the middle space. *Sidney.*

Is it the disdain of my estate, or the opinion of my *lightness*, that emboldened such base fancies towards me? *Id.*

A *light* error in the manner of making the following trials was enough to render some of them unsuccessful. *Boyle.*

There is no greater argument of a *light* and inconsiderate person, than profanely to scoff at religion. *Tillotson.*

The audience are grown weary of continued melancholy scenes; and few tragedies shall succeed in this age, if they are not *lightened* with a course of mirth. *Dryden.*

Light fumes are merry, grosser fumes are sad;
Both are the reasonable soul run mad. *Id.*

Hot and cold were in one body fixt,
And soft with hard, and *light* with heavy mixt. *Id.*

Light sufferings give us leisure to complain;
We groan, but cannot speak, in greater pain. *Id.*

The force of fire ascended first on high,
And took its dwelling in the vaulted sky;
Then air succeeds, in *lightness* next to fire. *Id.*

Suppose many degrees of littleness and *lightness* in particles, so as many might float in the air a good while before they fell. *Burnet.*

A cheerful temper, joined with innocence, will make beauty attractive, knowledge delightful, and wit good-natured. It will *lighten* sickness, poverty, and affliction; convert ignorance into an amiable simplicity, and render deformity itself agreeable. *Addison.*

These weights did not exert their natural gravity till they were laid in the golden balance, insomuch that I could not guess which was *light* or heavy whilst I held them in my hand. *Id.*

We were once in hopes of his recovery, upon a kind of message from the widow; but this only proved a *lightening* before death. *Id. Spectator.*

The soft ideas of the cheerful note,
Lightly received were easily forgot. *Prior.*

Youths, a blooming band;
Light bounding from the earth at once they rise,
Their feet half viewless quiver in the skies. *Pope.*

I am bright as an angel, and *light* as a feather. *Swift.*

I was the Queen o' bonnie France,
Where happy I hae been,
Fu' *lightly* rose I in the morn,
As blythe lay down at e'en. *Burns.*

The redbreast warbles still, but is content
With slender notes, and more than half suppressed:
Pleased with his solitude, and flitting *light*
From spray to spray, where'er he rests he shakes
From many a twig the pendent drops of ice,
That tinkle in the withered leaves below. *Cowper.*

Upon his hand she laid her own—
Light was the touch, but it thrilled to the bone,
And shot a chillness to his heart,
Which fixed him beyond the power to start. *Byron.*

What mortal among us is there, that, when any misfortune comes on him unexpectedly, does not find himself wonderfully *lightened* of the load of his sorrow, by pouring out the abundance of his vexation in showers of curses on the author of his calamity? *Canning.*

LIGHT, *v. n.* Sax. lihtan; Goth. *ligta;* Teut. *leighten*. From LOT, which see. To descend or fall upon; to happen to find; to fall in a particular direction; descend from a horse or carriage; desist from motion; rest.

Rebekah lifted up her eyes, and, when she saw Isaac, she *lighted* off the camel. *Gen.* xxiv. 64.

When Naaman saw him running after him, he *lighted* down from the chariot to meet him. 2 *Kings* v. 21.

They shall hunger no more; neither shall the sun *light on* them, nor any heat. *Rev.* vii. 16.

O Lord, let thy mercy *lighten* upon us, as we do put our trust in thee. *Common Prayer.*

And whan she saw her fadir in the strete,
She *light* adoun and falleth him to fete. *Chaucer. Canterbury Tales.*

The prince, by chance, did on a lady *light*,
That was right fair, and fresh as morning rose. *Spenser.*

He at his foe with furious rigour smites,
That strongest oak might seem to overthrow;
The stroke upon his shield so heavy *lights*,
That to the ground it doubleth him full low. *Id.*

At an uncertain lot none can find themselves grieved on whomsoever it *lighteth*. *Hooker.*

Haply your eye should *light upon* some toy
You have desired to purchase. *Shakspeare.*

I saw 'em salute on horseback,
Beheld them when they *lighted*, how they clung
In their embracement. *Id.*

I placed a quire of such enticing birds,
That she will *light* to listen to their lays. *Id.*

As in the tides of people once up there want not stirring winds to make them more rough; so this people did *light upon* two ringleaders. *Bacon.*

Then as a bee which amongst weeds did fall,
Which seem sweet flowers, with lustre fresh and gay
She *lights* on that, and this, and tasteth all,
But pleased with none, doth rise, and soar away. *Davies.*

Of late years, the royal oak did *light upon* count Rhodophil. *Howell.*

On me, me only, as the source and spring
Of all corruption, all the blame *lights* due. *Milton's Paradise Lost.*

No more settled in valour than disposed to justice, if either they had *lighted on* a better friend, or could have learned to make friendship a child, and not the father of virtue. *Sidney.*

The way of producing such a change in colours may be easily enough *lighted on*, by those conversant in the solutions of mercury. *Boyle.*

The wounded steed curvets; and raised upright,
Lights on his feet before: his hoofs behind
Spring up in air aloft, and lash the wind. *Dryden.*

He sought by arguments to sooth her pain;
Nor those availed: at length he *lights on* one,
Before two moons their orb with light adorn,
If Heaven allow me life, I will return. *Id.*

Truth, *light upon* this way, is of no more avail to us than error; for what is so taken up by us, may be false as well as true; and he has not done his duty, who has thus stumbled upon truth in his way to preferment. *Locke.*

Whosoever first *lit on* a parcel of that substance we call gold, could not rationally take the bulk and figure to depend on its real essence. *Id.*

Plant trees and shrubs near home, for bees to pitch on at their swarming, that they may not be in danger of being lost for want of a *lighting* place. *Mortimer's Husbandry.*

A curse *lights upon* him presently after: his great army is utterly ruined, he himself slain in it, and his head and right hand cut off, and hung up before Jerusalem. *South.*

As wily reynard walk'd the streets at night,
On a tragedian's mask he chanced to *light*;
Turning it o'er he muttered with disdain,
How vast a head is here without a brain! *Addison.*

The god laid down his feeble rays,
Then *lighted* from his glittering couch. *Swift.*

A weaker man may sometimes *light on* notions which have escaped a wiser. *Watts on the Mind.*

The wretched he forsakes,
Swift on his downy pinions flies from woe,
And *lights on* lids unsullied with a tear. *Young.*

LIGHT, *n. s., adj.* & *v. a.*
LIGHT'EN, *v. a.*
LIGHT'HOUSE, *n. s.*
LIGHT'SOME, *adj.*
LIGHT'SOMENESS, *n. s.*
} Sax. liht, leoht; Teut. *licht*; Lat. *lux*; Gr. λυχνος. The medium of vision; luminous matter; state of the elements in the day time; power of vision: hence sometimes synonymous with day and with sight; also with life (as a great medium of enjoyment): artificial illumination; any instrument or body yielding such illumination; that part of a picture on which the light appears to fall; point of view; direction in which light falls; public view: metaphorically, instruction; knowledge; mental view or illumination; explanation: light, as an adjective, means bright; clear; not dark; approaching to whiteness: to light, is to inflame; kindle; make a flame (i. e. a light); to give light to; to illuminate, literally or mentally; as signifies also the verb to lighten: light is also used with *up*, emphatically: lit is the preterite of light: lighthouse, an edifice erected to give light on dangerous coasts or seas: lightsome, cheerful; airy; opposed to gloominess or darkness of condition.

I am the *light* of the world: he that sueth me, walketh not in derknessis, but schal haue the *light* of lyf. *Wiclif. Jon.* viii.

The lanterne of thi bodi is thin iye: yf thin iye be symple, al thi bodi schal be *ligtful. Wiclif. Matt.* vi.

God called the *light* day, and the darkness he called night. *Genesis* i.

As soon as the morning was *light*, the men were sent away. *Gen.* xliv. 3.

Seven lamps shall give *light*. *Numb.*

The murderer rising with the *light* killeth the poor. *Job.*

Infants that never saw *light*. *Id.*

My strength faileth me; as for the *light* of mine eyes, it also is gone from me. *Psalms.*

Light, and understanding, and wisdom, like the wisdom of the gods, was found in him. *Daniel* v. 11.

Then he called for a *light*, and sprang in and fell down before Paul. *Acts* xvi. 29.

Of those things which are for direction of all the parts of our life needful, and not impossible to be discerned by the *light* of nature itself, are there not many which few men's natural capacity hath been able to find out? *Hooker.*

It suiteth so fitly with that *lightsome* affection of joy, wherein God delighteth when his saints praise him. *Id.*

The horses ran up and down with their tails and manes on a *light* fire. *Knolles.*

That *light* you see is burning in my hall:
How far that little candle throws his beams,
So shines a good deed in a naughty world. *Shakspeare.*

Upon his bloody finger he doth wear
A precious ring, that *lightens* all the hole. *Id.*

Neither the sun, nor any thing sensible is that *light* itself, which is the cause that things are *lightsome*, though it make itself, and all things else, visible; but a body most enlightened, by whom the neighbouring region, which the Greeks call æther, the place of the supposed element of fire, is affected and qualified. *Raleigh.*

Light may be taken from the experiment of the horse-tooth ring, how that those things which assuage the strife of the spirits, do help diseases contrary to the intention desired. *Bacon's Natural History.*

Equal posture, and quick spirits, are required to make colours *lightsome*. *Id.*

They have brought to *light* not a few profitable experiments. *Id.*

White walls make rooms more *lightsome* than black. *Bacon.*

O *Light*, which mak'st the *light* which makes the day,
Which settest the eye without, and mind within;
Lighten my spirit with one clear heavenly ray,
Which now to view itself doth first begin. *Davies.*

So alike thou drivest away
Light and darkness, night and day. *Carew.*
A beam that falls
Fresh from the pure glance of thine eye,
Lighting to eternity. *Crashaw.*

But whence, O God, was that first *light*? the sun was not made till the fourth day; *light* the first. If man had been he might have seen all *lightsome*; but whence it had come he had not seen. *Bp. Hall.*

Several *lights* will not be seen
If there be nothing else between;
Men doubt, because they stand so thick i' the' sky,
If those be stars that paint the galaxy. *Cowley.*

Ere the third dawning *light*
Return, the stars of morn shall see him rise
Out of his grave, fresh as the dawning *light*. *Milton.*

Let them be for signs,
For seasons, and for days, and circling years;
And let them be for *lights*, as I ordain
Their office in the firmament of heaven,
To give light on the earth. *Id.*

If it be true that *light* is in the soul,
She all in every part, why was the sight
To such a slender ball as the' eye confined,
So obvious and so easy to be quenched,
And not as feeling through all parts diffused
That she might look at will through every pore? *Id.*

What *light* is without, that is truth within, shining on our inward world, illustrating, quickening, and comforting all things there, exciting all our faculties to action, and guiding them in it. *Barrow.*

Thus did that morning of divine knowledge, from the first dawning, by degrees grow more *lightsome*. *Id.*

I put as great difference between our new *lights* and ancient truths, as between the sun and a meteor. *Glanville.*

This truth shines so clear, that to go about to prove it, were to *light* a candle to seek the sun. *Id.*

Swinging coals about in the wire, thoroughly *lighted* them. *Boyle.*

I will make some offers at their safety, by fixing some marks like *lights* upon a coast, by which the ships may avoid at least known rocks. *Temple.*

Never admit two equal *lights* in the same picture; but the greater *light* must strike forcibly on those places of the picture where the principal figures are; diminishing as it comes nearer the borders. *Dryden's Dufresnoy.*

The sun
His course exalted through the Ram had run,
Through Taurus, and the *lightsome* realms of love. *Dryden.*

The sun was set, and Vesper, to supply
His absent beams, had *lighted* up the sky. *Id.*

Be witness, gods, and strike Jocasta dead,
If an immodest thought, or low desire,
Inflamed my breast since first our loves were *lighted*. *Id.*

In painting, the *light* and a white colour are but one and the same thing: no colour more resembles the air than white, and by consequence no colour which is *lighter*. *Id.*

If internal *light*, or any proposition which we take for inspired, be conformable to the principles of reason, or to the word of God, which is attested revelation, reason warrants it. *Locke.*

Frequent consideration of a thing wears off the strangeness of it; and shews it in its several *lights*, and various ways of appearance, to the view of the mind. *South.*

The *lightsome* passion of joy was not that which now often usurps the name; that trivial, vanishing, superficial thing, that only gilds the apprehension, and plays upon the surface of the soul. *Id.*

It is impossible for a man of the greatest parts to consider any thing in its whole extent, and in all its variety of *lights*. *Spectator.*

Allegories, when well chosen, are like so many tracks of *light* in a discourse, that make every thing about them clear and beautiful. *Addison.*

Absence might cure it, or a second mistress
Light up another flame, and put out this. *Id. Cato.*

He still must mourn
The sun, and moon, and every starry *light*,
Eclipsed to him, and lost in everlasting night. *Prior.*

Light is propagated from luminous bodies in time, and spends about seven or eight minutes of an hour in passing from the sun to the earth. *Newton's Opticks.*

Two cylindrick bodies with annular sulci, found with sharks' teeth, and other shells, in a *light* coloured clay. *Woodward.*

Here pensive I behold the fading *light*,
And o'er the distant billow lose my sight. *Gay.*

The books of Varro concerning navigation are lost, which no doubt would give us great *light* in those matters. *Arbuthnot on Coins.*

He charged himself with the risque of such vessels as carried corn in winter; and built a *pharos* or *lighthouse*. *Arbuthnot.*

It is to our atmosphere that the variety of colours, which are painted on the skies, the *lightsomeness* of our air, and the twilight, are owing. *Cheyne's Philosophical Principles.*

Thin glitt'ring textures of the filmy dew;
Dipt in the richest tincture of the skies,
When *light* disports in ever mingling dyes. *Pope.*

Ah hopeless, lasting flames! like those that burn
To *light* the dead, and warm the unfruitful urn. *Id.*

Swift roll the years, and rise the expected morn,
O spring to *light*, auspicious babe be born! *Id.*

Grave epistles bringing vice to *light*,
Such as a king might read, a bishop write. *Id.*

It is in disputes, as in armies; where the weaker side sets up false *lights*, and makes a great noise, to make the enemy believe them more numerous and strong than they really are. *Swift.*

I humbly conceive, though I *light* my candle at my neighbour's fire, that does not alter the property or make the wick, the wax, or the flame, or the whole candle less my own. *Id.*

Believe thyself, thy eyes,
That first inflamed, and *lit* me to thy love,
Those stars, that still must guide me to my joy. *Southerne.*

Sounds, which address the ear, are lost and die
In one short hour; but that which strikes the eye,
Lives long upon the mind: the faithful sight
Engraves the knowledge with a beam of *light*. *Watts.*

Nature from the storm
Shines out afresh; and through the *lightened* air
A higher lustre, and a clearer calm,
Diffusive tremble. *Thomson's Summer.*

Books (says Lord Bacon) can never teach the use of books; the student must learn by commerce with mankind to reduce his speculations to practice. No man should think so highly of himself, as to think he can receive but little *light* from books, nor so meanly as to believe he can discover nothing but what is to be learned from them. *Johnson.*

She's fresh as the morning, the fairest in May;
She's sweet as the evening amang the new hay;
As blithe and as artless as the lamb on the lea,
And dear to my heart as the *light* to my ee. *Burns.*

An easy observation of the most common, sometimes of the meanest things in nature, will give the truest *lights*, where the greatest sagacity and industry that slights such observation, must leave us in the dark, or, what is worse, amuse and mislead us by false *lights*. *Burke on the Sublime.*

But, though life's valley be a vale of tears,
A brighter scene beyond that vale appears,
Whose glory, with a *light* that never fades,
Shoots between scattered rocks and opening shades,
And, while it shows the land the soul desires,
The language of the land she seeks inspires.
Cowper.

With silver darts he pierced the kindling frame,
And *lit* with torch divine the ever-living flame.
Darwin.

We sped like meteors through the sky,
When with its crackling sound the night
Is chequered with the northern light. *Byron.*

Theirs be the dreadful glory to destroy,
And theirs the pride of pomp, and praise suborned,
Whose eye ne'er *lightened* at the smile of Joy,
Whose cheek the tear of Pity ne'er adorned. *Id.*

LIGHT. The *nature* of light is a subject in many respects extremely interesting; especially as it tends to assist our views both of the nature of our sensations, and of the constitution of the universe at large. The examination of the production of colors, in a variety of circumstances, is intimately connected with the theory of their essential properties, and their causes; and we shall find that many of these phenomena will afford us considerable assistance in forming our opinion respecting the nature and origin of light in general.

It is allowed, on all sides, that light either consists in the emission of very minute particles from luminous substances, which are actually projected, and continue to move with the velocity commonly attributed to light, or in the excitation of an undulatory motion, analogous to that which constitutes sound, in a highly light and elastic medium pervading the universe; but the judgments of philosophers of all ages have been much divided with respect to the preference of one or the other of these opinions. There are also some circumstances which induce those who entertain the first hypothesis, either to believe, with Newton, that the emanation of the particles of light is always attended by the undulations of an etherial medium, accompanying it in its passage; or to suppose, with Boscovich, that the minute particles of light themselves receive, at the time of their emission, certain rotatory and vibratory motions, which they retain as long as their projectile motion continues. These additional suppositions, however necessary they may have been thought for explaining some particular phenomena, have never been very generally understood or admitted, although no attempt has been made to accommodate the theory in any other manner to those phenomena.

We shall proceed to examine in detail the manner in which the two principal hypotheses respecting light may be applied to its various properties and affections; and in the first place to the simple propagation of light in right lines through a vacuum, or a very rare homogeneous medium. In this circumstance there is nothing inconsistent with either hypothesis; but it undergoes some modifications, which require to be noticed, when a portion of light is admitted through an aperture, and spreads itself in a slight degree in every direction. In this case it is maintained by Newton that the margin of the aperture possesses an attractive force, which is incapable of inflecting the rays: but there is some improbability in supposing that bodies of different forms and of various refractive powers should possess an equal force of inflection, as they appear to do in the production of these effects; and there is reason to conclude from experiments, that such a force, if it existed, must extend to a very considerable distance from the surfaces concerned, at least a quarter of an inch, and perhaps much more, which is a condition not easily reconciled with other phenomena. In the Huygenian System of undulation, this divergence or diffraction is illustrated by a comparison with the motions of waves of water, and of sound, both of which diverge when they are admitted into a wide space through an aperture, so much indeed that it has usually been considered as an objection to this opinion, that the rays of light do not diverge in the degree that would be expected if they were analogous to the waves of the water. But as it has been remarked by Newton, that the pulses of sound diverge less than the waves of water, so it may fairly be inferred, that, in a still more highly elastic medium, the undulations, constituting light, must diverge much less considerably than either.

With respect, however, to the transmission of light through perfectly transparent mediums of considerable density, the system of emanation labors under some difficulties. It is not to be supposed that the particles of light can perforate with freedom the ultimate atoms of matter, which compose a substance of any kind; they must, therefore, be admitted in all directions through the pores or interstices of those atoms; for if we allow such suppositions as Boscovich's, that matter itself is penetrable, that is, immaterial, it is almost useless to argue the question further. It is certain that some substances retain all their properties when they are reduced to the thickness of $\frac{1}{10000000}$th of an inch at most, and we cannot therefore suppose the distances of the atoms of matter in general to be so great as $\frac{1}{100000000}$th of an inch. Now if ten feet of the most transparent water transmits, without interruption, one-half of the light that enters it, each section or stratum of the thickness of one of these pores of matter must intercept only about $\frac{1}{3000000000}$th, and so much must the space or area occupied by the particles be smaller than the interstices between them, and the diameter of each atom must be less than $\frac{1}{140000}$th part of its distance from the neighbouring particles, so that the whole space occupied by the substance must be as little filled as the whole of England would be filled by 100 men, placed at the distance of about thirty miles from each other. This astonishing degree of porosity is not indeed absolutely inadmissible and there are many reasons for believing the statement to agree in some measure with the ac

tual constitution of material substances; but the Huygenian hypothesis does not require the disproportion to be by any means so great, since the general direction and even the intensity of an undulation would be very little affected by the interposition of the atoms of matter, while these atoms may at the same time be supposed to assist in the transmission of the impulse, by propagating it through their own substance. Euler, indeed, imagined that the undulations of light might be transmitted through the gross substance of material bodies alone, precisely in the same manner as sound is propagated; but this supposition is for many reasons inadmissible.

A very striking circumstance, respecting the propagation of light, is the uniformity of its velocity in the same medium. According to the projectile hypothesis, the force employed in the free emission of light must be about a million million times as great as the force of gravity at the earth's surface; and it must either act with equal intensity on all the particles of light, or must impel some of them through a greater space than others, if its action be less powerful, since the velocity is the same in all cases; for example, if the projectile force is weaker with respect to red light than with respect to violet light, it must continue its action on the red rays to a greater distance than on the violet rays. There is no instance in nature besides of a simple projectile moving with a velocity uniform in all cases, whatever may be its cause, and it is extremely difficult to imagine that so immense a force of repulsion can reside in all substances capable of becoming luminous, so that the light of decaying wood, or of two pebbles rubbed together, may be projected precisely with the same velocity as the light emitted by iron burning in oxygen gas, or by the reservoir of liquid fire on the surface of the sun. Another cause would also naturally interfere with the uniformity of the velocity of light, if it consisted merely in the motion of projected corpuscles of matter; M. Laplace has calculated that, if any of the stars were 250 times as great in diameter as the sun, its attraction would be so strong as to destroy the whole momentum of the corpuscles of light proceeding from it, and to render the star invisible at a great distance, and, although there is no reason to imagine that any of the stars are actually of this magnitude, yet some of them are probably many times greater than our sun, and therefore large enough to produce such a retardation in the motion of their light as would materially alter its effects. It is almost unnecessary to observe that the uniformity of the velocity of light, in those spaces which are free from all material substances, is a necessary consequence of the Huygenian hypothesis, since the undulations of every homogeneous elastic medium are always propagated, like those of sound, with the same velocity, as long as the medium remains unaltered.

To determine whether light consists of particles emitted from the luminous body, or only in the vibrations of a subtile fluid, it has been attempted to find out its momentum, or the force with which it moves. The first who set about this with any tolerable pretensions to accuracy was M. Mairan Hartsocker and Homberg had indeed pretended, that in certain cases this momentum was very perceptible; but M. Mairan proved, that the effects mentioned by them were owing to currents of heated air produced by the burning-glasses used in their experiments, or to some other causes overlooked by these philosophers. To decide the matter, therefore, he began with trying the effects of rays collected by lenses of four and six inches diameter, and thrown upon the needle of a compass; but the result was nothing more than some tremulous motion, whence he could draw no conclusion. After this he and M. Du Fay constructed a kind of mill of copper, which moved with an exceeding slight impulse; but, though they threw upon it the focus of a lens of seven or eight inches diameter, they were still unable to draw any conclusions from the result. M. Mairan afterwards procured a horizontal wheel of iron three inches in diameter, having six radii, at the extremity of each of which was a small wing fixed obliquely. The axis of the wheel, which was also of iron, was suspended by a magnet. The wheel and the axis together did not weigh more than thirty grains; but, though a motion was given to this wheel when the focus of the burning-glass was thrown upon the extremities of the radii, yet it was so irregular, that he could not but conclude that it was occasioned by the motion of the heated air. He then intended to have made his experiment in vacuo, but he concluded that it was unnecessary: for, besides the difficulty of making a vacuum, he was persuaded that there was in our atmosphere a thinner medium which freely penetrates even glass itself, the existence of which he imagined that he had fully proved in his treatise on the aurora borealis.

Mr. Mitchell some years ago endeavoured to ascertain the momentum of light in a manner still more accurate. The instrument he made use of consisted of a very thin plate of copper, a little more than an inch square, which was fastened to one end of a slender harpsichord wire about ten inches long. To the middle of this was fixed an agate cap, such as is commonly used for small mariner's compasses, after the manner of which it was intended to turn; and at the other end of the wire was a middling sized shot corn, as a counterpoise to the copperplate. The instrument had also fixed to it in the middle, at right angles to the length of the wire, and in a horizontal direction, a small bit of a very slender sewing needle, about one-third or perhaps half an inch long, which was made magnetical. In this state the whole instrument weighed about ten grains. It was placed on a very sharp-pointed needle, on which the agate cap turned extremely freely; and to prevent its being disturbed by any motion of the air, it was enclosed in a box, the lid and front of which were of glass. This box was about twelve inches long, six or seven inches deep, and about as much in width; the needle standing upright in the middle. At the time of making the experiment, the box was so placed, that a line drawn from the sun passed at right angles to the length of it; and the instrument was brought to

range in the same direction with the box, by means of the magnetical bit of needle above mentioned, and a magnet properly placed on the outside, which would retain it, though with extremely little force, in any situation. The rays of the sun were now thrown upon the copper-plate from a concave mirror of about two feet diameter, which, passing through the front glass of the box, were collected into the focus of the mirror upon the plate. In consequence of this the plate began to move with a slow motion of about an inch in a second of time, till it had moved through a space of about two inches and a half when it struck against the back of the box. The mirror being removed, the instrument returned to its former situation by means of the little needle and magnet; and, the rays of the sun being then again thrown upon it, it again began to move, and struck against the back of the box as before; and this was repeated three or four times with the same success. The instrument was then placed the contrary way in the box to that in which it had been placed before, so that the end to which the copper-plate was affixed, and which had lain, in the former experiment, towards the right hand, now lay towards the left; and, the rays of the sun being again thrown upon it, it began to move with a slow motion, and struck against the back of the box as before; and this was repeated once or twice with the same success. But by this time the copper-plate was so much altered in its form, by the extreme heat which it underwent in each experiment, and which brought it nearly into a state of fusion, that it became very much bent, and the more so as it had been unwarily supported by the middle, half of it lying above and half below the wire to which it was fastened. By these means it now varied so much from the vertical position, that it began to act in the same manner as the sail of a windmill, being impelled by the stream of heated air which moved upwards, with a force sufficient to drive it in opposition to the impulse of the rays of light. If we impute, says Dr. Priestley, the motion produced in the above experiment to the impulse of the rays of light, and suppose that the instrument weighed ten grains, and acquired a velocity of one inch in a second, we shall find that the quantity of matter contained in the rays falling upon the instrument in that time amounted to no more than one 1200 millionth part of a grain, the velocity of light exceeding the velocity of one inch in a second in the proportion of about 1,200,000,000 to 1. The light was collected from a surface of about three square feet, which reflecting only about half what falls upon it, the quantity of matter contained in the rays of the sun incident upon a square foot and a half of surface in one second of time, ought to be no more than the 1200 millionth part of a grain, or upon one square foot only the 1800 millionth part of a grain. But the density of the rays of light at the surface of the sun is greater than at the earth in the proportion of 45,000 to 1; there ought, therefore, to issue from one square foot of the sun's surface in one second of time, in order to supply the waste by light, one 40,000th part of a grain of matter; that is, a little more than two grains in a day, or about 4,752,000 grains or 670 pounds avoirdupois nearly in 6000 years a quantity which would have shortened the sun's semi-diameter no more than about ten feet, if it was formed of the density of water only.

Mr. Partington observes, 'that experience has long ago established the fact, that vegetables become destitute of smell and color, and lose much of their combustibility, by growing in the dark. In Dr. Black's Lectures we find an illustration of this circumstance, in an account given by the celebrated Dr. Robinson of Edinburgh. In the drain of a coal-work under ground, he accidentally laid his hand upon a very luxuriant plant, with large indented foliage, and perfectly white He had not seen any thing like it, nor could any one inform him what it was. He had the plant brought into the open air in the light. In a little time the leaves withered, and soon after new leaves began to spring up, of a green color, and of a different shape from that of the old ones. On rubbing one of the leaves between his fingers he found that it had the smell of common tansy, and ultimately it proved to be that plant, which had been so changed by growing in the dark. Indeed, it was recollected that some soil had been taken into the drain from a neighbouring garden, some time before it was found so altered.

'This effect of light is not less conspicuous in the growth of celery. By covering it with earth, the light is shut out, which would very soon turn it green, and make its flavor so strong as to render it unfit to be eaten, at the same time that it would render it more fibrous and tenacious.

'The parts of fish, also, which are exposed to the light, such as the back or fins, are uniformly colored; but the belly, which is deprived of it, is white in nearly all of them; while birds that inhabit tropical countries have much brighter plumage than those of the north; and this is also the case with every species of insect.'—*Manual of Natural and Experimental Philosophy, by C. F. Partington*, vol. II. p. 5.

If the white sunbeam, admitted through a small hole of a window-shutter into a darkened room, be made to pass through a triangular prism of glass, it will be divided into a number of splendid colors, which may be thrown upon a sheet of paper. Newton ascertained, that if this colored image, or spectrum as it is called, be divided into 360 parts, the red will occupy forty five, the orange twenty-seven, the yellow forty-eight, the green sixty, the blue sixty, the indigo forty, and the violet eighty. The red rays, being least bent by the prism from the direction of the white beam, are said to be least refracted, or the least refrangible; while the violet rays, being always at the other extremity of the spectrum, are called the most refrangible. According to Dr. Wollaston, when the beam of light is only $\frac{1}{20}$ of an inch broad, and received by the eye at the distance of ten feet through a clear prism of flint glass, only four colors appear, red, yellowish-green, blue, and violet.

If the differently colored rays of light, thus separated by the prism, be concentred on one spot by a lens, they will reproduce colorless light. Newton ascribes the different colors of

bodies, to their power of absorbing all the primitive colors except the peculiar one which they reflect, and of which color they therefore appear to our eye.

According to Sir William Herschel, the different colored rays possess very different powers of illumination. The lightest green, or deepest yellow, which are near the centre, throw more light on a printed page than any of the rays towards either side of the spectrum. Sir H. Davy remarks, that, as there are more green rays in a given part of the spectrum than blue rays, the difference of illuminating power may depend on this circumstance. The rays separated by one prism are not capable of being further divided by being passed through another; and in their relations to double refraction and reflection they appear to agree with direct light. An object illuminated by any of the rays in the spectrum is seen double through island crystal, in the same manner as if it had been visible by white light.

If the white luna cornea, the muriate of silver moistened, be exposed to the different rays in the prismatic spectrum, it will be found that no effect is produced upon it in the least refrangible rays, which occasion heat without light; that only a slight discoloration will be occasioned by the red rays; that the blackening power will be greater in the violet than in any other ray; and that beyond the violet, in a space perfectly obscure to our eyes, the darkening effect will be manifest on the muriate. This fine observation, due to M. Ritter and Dr. Wollaston, proves that there are rays more refrangible than the rays producing light and heat. As it appears, from the observations of M. Berthollet, that muriatic acid gas is formed when horn-silver is blackened by light, the above rays may be called hydrogenating. Sir H. Davy found that a mixture of chlorine and hydrogen acted more rapidly upon each other, combining without explosion, when exposed to the red rays, than when placed in the violet rays; but that solution of chlorine in water became solution of muriatic acid most rapidly, when placed in the most refrangible rays in the spectrum. He also observed, that the puce-colored oxide of lead, when moistened, gradually gained a tint of red in the least refrangible rays, and at last became black, but was not affected in the most refrangible rays. The same change was produced by exposing it to a current of hydrogen gas. The oxide of mercury from calomel and water of potassa, when exposed to the spectrum, was not changed in the most refrangible rays, but became red in the least refrangible, which must have been owing to the absorption of oxygen. The violet rays produced, upon moistened red oxide of mercury, the same effect as hydrogen gas.

Dr. Wollaston found that guaiac, exposed to the violet rays, passed rapidly from yellow to green; and M. M. Gay Lussac and Thenard applied to the same influence a gaseous mixture of hydrogen and chlorine, when explosion immediately took place. By placing small bits of card, coated with moist horn-silver, or little phials of those mixed gases, in the different parts of the spectrum, M. Berard verified the former observations of the chemical power acquiring a maximum in the violet ray, and existing even beyond it; but he also found, that, by leaving the tests a sufficient time in the indigo and blue rays, a perceptible effect was produced upon them. He concentrated by a lens all that portion of the spectrum which extends from the green to the extreme boundary of the violet; and by another lens he collected the other half of the spectrum, comprehending the red. The latter formed the focus of a white light, so brilliant that the eye could not endure it; yet in two hours it produced no sensible change on muriate of silver. On the contrary, the focus of the other half of the spectrum, whose light and heat were far less intense, blackened the muriate in ten minutes. The investigations of Delaroche enable us, in some measure, to reduce these dissimilar effects of light to a common principle.

In Mr. Brande's Bakerian lecture, on the composition and analysis of coal and oil gases, this ingenious chemist shows, that the light produced by these, or by olefiant gas, even when concentrated so as to produce a sensible degree of heat, occasioned no change on the color of muriate of silver, nor on a mixture of chlorine and hydrogen; while the light emitted by electrised charcoal speedily affects the muriate, causes these gases to unite rapidly, and sometimes with explosion. The concentrated light of the moon, like that of the gases, produced no change. He concludes with stating, that he found the photometer of Mr. Leslie ineffectual. He employed one filled with the vapor of ether (renewable from a column of that fluid), which he found to be more delicate.

The general facts, says Sir H. Davy, of the refraction and effects of the solar beam, offer an analogy to the agencies of electricity. In the voltaic circuit, the maximum of heat seems to be at the positive pole, where the power of combining with oxygen is given to bodies, and the agency of rendering bodies inflammable is exerted at the opposite surface; and similar chemical effects are produced by negative electricity, and by the most refrangible rays of the solar beam. In general, in nature, the effects of the solar rays are very compounded. Healthy vegetation depends upon the presence of the solar beams, or of light; and, whilst the heat gives fluidity and mobility to the vegetable juices, chemical effects likewise are occasioned, oxygen is separated from them, and inflammable compounds formed. Plants deprived of light become white, and contain an excess of saccharine and aqueous particles; and flowers owe the variety of their hues to the influence of the solar beams. Even animals require the presence of the rays of the sun, and their colors seem materially to depend upon the chemical influence of these rays; a comparison between the polar and tropical animals, and between the parts of their bodies exposed and those not exposed to light, shows the correctness of this opinion.

If air which has been heated up to 900° of Fahrenheit, and which is in itself obscure, be made to fall on pieces of metal, earth, &c., it will speedily communicate to them the power of radiating light. The brilliant flame, exhibited in the burning of charcoal and phosphorus, re-

sults from the ignition of the solid particles of these bodies. At a certain elevation of temperature, about 800° Fahrenheit, all solid bodies begin to give out light. The same effect is produced in vacuo by transmitting voltaic electricity through a metallic wire.

The most complete account which we have of mineral phosphorescence is that recently given by Dr. Brewster, in the first volume of the Edinburgh Philosophical Journal. His method of examination was ingenious and accurate. He never reduced the body to powder, but placed a fragment of it upon a thick mass of hot iron, or, in delicate experiments, introduced it into the bottom of a pistol barrel, heated a little below redness. The following Table presents his results:

Names of the minerals.	Color of the minerals.	Color and intensity of the light.
Fluor spar,	Pink,	Green.
———	Purple,	Bluish.
———	Bluish-white,	Blue.
Compact fluor,	Yellowish,	Fine green.
Sandy fluor,	White,	White sparks.
Calcareous spar,	Yellow,	Yellow.
———	Transparent,	Yellowish.
Limestone from north of Ireland,	———	Yellowish-red.
Phosphate of lime,	Pink,	Yellow.
Arragonite,	Dirty white,	Reddish-yellow.
Carbonate of barytes,	Whitish,	Pale white.
Harmotome,	Colorless,	Reddish-yellow.
Dipyre,	White,	Specks of light.
Grammatite from G'entilt,	———	Yellow.
——— Cornwall,	———	Bluish.
Topaz, Aberdeenshire,	Blue,	———
———, Brazilian,	Yellow,	Faint yellowish.
———, New Holland,	White,	Bluish.
Rubellite,	Reddish,	Scarlet.
Sulphate of lime,	Yellowish,	Faint light.
——— barytes,	Yellow,	Pale light.
——— ———	Slate color,	———
——— strontites,	Bluish,	A fragment shone pretty bright.
——— lead,	Transparent.	Faint and by fits.
Anhydrite,	Reddish,	Faint light.
Sodalite,	Dark green,	Pretty bright.
Bitter spar,	Yellowish,	Faint white.
Red silver ore,	Red,	Pretty bright, but flitting.
Barystrontianite,	White,	Faint.
Arseniate of lead,	Yellowish,	Bright white.
Sphene,	Yellow,	———
Tremolite,	Whitish,	Reddish-yellow.
Mica,	Greenish,	Whitish.
——— from Waygatz,	Black,	White specks.
———	Brown,	Pretty bright.
Titanium sand,	Black,	Feeble specks.
Hornstone,	Gray,	Yellowish.
Table spar, Dognatska,	Whitish,	———
Lapis lazuli,	Blue,	Faint.
Spodumene,	Greenish,	———
Titanite,	Reddish,	Extremely faint.
Cyanite,	Yellowish-white,	Bluish.
Calamine,	Brown,	Faint.
Augite,	Green,	Pretty bright.
Petalite,	Reddish tinge,	Blue and very bright.
Asbestus, rigid,	———	Pretty bright.
Datholite,	Transparent,	Bright.
Corundum,	Brown,	———
Anatase,	Dark,	Reddish yellow.
Tungstate of lime,	Yellowish-white,	Brilt, like a burning coal.
Quartz,	The phosphorescence of these nine minerals was observed in the pistol barrel.	Very faint.
Amethyst,		Faint.
Obsidian,		Pretty bright, dirty blue.
Mesotype from Auvergne,		Very faint.
Glassy actinolite,		Little specks.
Ruby silver,		Rather bright.
Muriate of silver,		Blue.
Carbonate of copper,		Very faint.
Green telesie,		Pale blue, and pretty bright

The phosphorescence of anatase is entirely different from that of the other minerals. It appears suddenly like a flame, and is soon over. Dr. Brewster found, in opposition to what Mr. Vedgewood had stated, that exposure of green fluor spar to the heat of a common fire in a crucible, for half an hour, entirely deprived it of phosphorescence. Though he placed one fragment for several days in the beams of a summer sun, and even exposed it to the bright light near the focus of a burning glass, he could not succeed in obtaining from it the slightest indication of phosphorescence. The light emitted in combustion belongs to the same head. The phosphoric light of minerals has the same properties as the direct light of the sun, according to Dr. Brewster.

Of light emitted from bodies in consequence of the action of extraneous light.—To this section we refer solar phosphori. The most powerful of these is the artificial compound of Canton. If we mix three parts of calcined oyster shells in powder, with one of flowers of sulphur, and, ramming the mixture into a crucible, ignite it for half an hour, we shall find, that the bright parts will, on exposure to the sunbeam, or to the common day-light, or to an electrical explosion, acquire the faculty of shining in the dark, so as to illuminate the dial of a watch, and make its figures legible. It will, indeed, after a while cease to shine; but, if we keep the powder in a well corked phial, a new exposure to the sunbeam will restore the luminescence. Oyster shells, stratified with sulphur, in a crucible, and ignited, yield a more powerful phosphorescent substance than the powder. It also must be kept in a close phial. When the electric discharge is transmitted along the surfaces of certain bodies, or a little above them, a somewhat durable phosphorescence is occasioned, which probably belongs to this division.

Sulphate of barytes gives a bright green light.	
Carbonate,	Do. less brilliant.
Acetate of potassa,	Brilliant green light.
Succinic acid,	Do. more durable.
Loaf sugar,	Do.
Selenite,	Do. but transient.
Rock-crystal gives a light red, and then white.	
Quartz,	Dull white light.
Borax,	Faint green light.
Boracic acid,	Bright green light.

Mr. Skrimshire has given an extensive catalogue of such substances in Nicholson's Journal 8vo., vols. xv. xvi. and xix. He shows that Canton's pyrophorus yields more light by this treatment than any other body; but that almost every native mineral, except metallic ores and metals, becomes more or less luminous after the electric explosion. A slate from Colly Weston, Northamptonshire, which effervesced with acids, gives a beautiful effect. When the explosion of a jar is taken above the centre of a piece some inches square, not only the part above the discharging rods is luminous, but the surface of the slate appears bespangled with very minute brilliant points, to some distance from its centre; and, when the points of the dischargers rest upon the surface of the slate, these minute spangles are detached and scattered about the table in a luminous state.

Of light emitted during chemical changes, independent of heat, or in which no perceptible heat is developed. The substances from which such light is emitted are principally the following:—Marine animals, both in a living state, and when deprived of life. As instances of the first may be mentioned the shell-fish called pholas, the medusa phosphorea, and various other mollusca. When deprived of life, marine fishes, in general, seem to abound with this kind of light. The flesh of quadrupeds also evolves light. In the class of insects are many which emit light very copiously, particularly several species of fulgora, or lantern-fly; and of lampyris or glow-worm; also the scolopendra electrica, and a species of crab called cancer fulgens. Rotten wood is well known to evolve light copiously, as well as peat earth.

Dr. Hulme, in an elaborate dissertation on this light, published in the Philosophical Transactions for 1790, establishes the following important propositions:—

1. The quantity of light emitted by dead animal substances is not in proportion to the degree of putrefaction in them, as is commonly supposed; but, on the contrary, the greater putrescence, the less light is evolved. It would seem that this element, endowed with pre-eminent elasticity, is the first to escape from the condensed state of combination in which it had been imprisoned by the powers of life; and is followed, after some time, by the relatively less elastic gases, whose evolution constitutes putrefaction.

2. This light is a constituent chemical principle of some bodies, particularly of marine fishes, from which it may be separated by a peculiar process, retained and rendered permanent for some time. A solution of one part of sulphate of magnesia in eight of water is the most convenient menstruum for extracting, retaining, and increasing the brilliancy of this light. Sulphate and muriate of soda, also, answer in a proper state of dilution with water. When any of the saline solutions is too concentrated, the light disappears, but instantly bursts forth again from absolute darkness, by dilution with water. This curious experiment has frequently been made with the light procured from whiting. Common water, lime water, fermented liquors, acids even very dilute, alkaline lies, and many other bodies, permanently extinguish this spontaneous light. Boiling water destroys it, but congelation merely suspends its exhibition; for it reappears on liquefaction. A gentle heat increases the vividness of the phenomenon, but lessens its duration. *Vide Dr. Ure's Chemical Dictionary.*

The *inflection* of light is distinct from the peculiar properties of refraction and reflection, both of which will be fully examined under our article on OPTICS. Inflection was first discovered by Grimaldi, who made many curious experiments and observations relative to it; but the following experiments of Sir Isaac Newton will be better adapted than Grimaldi's to explain the nature of this property of light. At the distance of two or three feet from the window of a darkened

room, in which there was a hole three-fourths of an inch broad, to admit the light, he placed a black sheet of pasteboard, having in the middle a hole about a quarter of an inch square, and behind the hole the blade of a sharp knife, to intercept a small part of the light which would otherwise have passed through the hole. The planes of the pasteboard and blade were parallel to each other, and, when the pasteboard was removed to such a distance from the window that all the light coming into the room must pass through this hole in the pasteboard, he received what came through the hole on a piece of paper, two or three feet beyond the knife, and perceived two streams of faint light shooting out both ways, from the beam of light into the shadow. As the brightness of the direct rays obscured the fainter light, by making a hole in his paper he let them pass through, and had thus an opportunity of attending closely to the two streams, which were nearly equal in length, breadth, and quantity of light. That part which was nearest to the sun's direct light was pretty strong for the space of about a quarter of an inch, decreasing gradually until it became imperceptible; and at the edge of the knife it subtended an angle of about 12° or at most of 14°. Another knife was then placed opposite to the former, and he observed that, when the distance of their edges was about the $\frac{1}{400}$th part of an inch, the stream divided in the middle, and left a shadow between the two parts, which was so dark that all the light passing between the knives seemed to be bent to each other; this shadow grew broader, till upon the contact of the knives the whole light disappeared. He observed, also, fringes of different colored light, three made on one side by the edge of one knife, and three on the other side by the edge of the other. Grimaldi, Dr. Hooke, and all the philosophers who made experiments on inflection before the time of Newton, ascribed the broad shadows, and even the fringes which he mentions, to the ordinary refraction of the air; but the investigation upon which he entered, to discover their cause, afforded him satisfactory evidence to conclude that bodies have the power of acting upon light at a distance.

We must now briefly notice the experiments of Mr. Brougham on this interesting subject: they are detailed in the Transactions of the Royal Society for 1796. He commenced by admitting a beam from the sun into a darkened room, through a hole in a metal plate (fixed in the window shutter) of $\frac{1}{20}$th of an inch in diameter; and, all other light being absorbed by black cloth hung before the window in the room, at the hole he placed a prism of glass, whose refracting angle was 45°, and which was covered all over with black paper, except a small part on each side, which was free from impurities, and through which the light was refracted, so as to form a distinct and homogeneous spectrum on a sheet of paper at six feet from the window. In the rays, at two feet from the prism, he placed a black unpolished pin, one-tenth of an inch in diameter, parallel to the paper, in a vertical position; its shadow was formed in the spectrum on the paper, and had a considerable penumbra, especially in the brightest red. It varied very materially in its width; in the violet it was broadest and most distinct; in the red it was narrowest and most confused; and in the intermediate colors it was of an intermediate degree of distinctness. It was not bounded by straight, but by curvilinear sides, which were concave outwardly. This figure of the shadow was not owing to any irregularity in the pin, for the same thing happened with all sorts of bodies that were used; and also if the prism was caused to revolve on its axis, so that the colors might ascend and descend on these bodies, still, wherever the red fell, it made the least, and the violet the greatest shadow. In the next place he fixed a screen, having in it a large hole, on which was a brass plate, pierced with a small hole of $\frac{1}{[illegible]}$ of an inch in diameter; then, causing an assistant to move the prism slowly on its axis, he observed the round image made by the different rays passing through the hole to the paper; that made by the red was greatest; by the violet least; and by the intermediate rays of an intermediate size. When he employed the sharp blade of a knife, so as to produce the fringes mentioned by Grimaldi and Newton, those fringes in the red were broadest, and most moved inwards to the shadow, and most dilated when the knife was moved over the hole; and the hole itself on the paper was more dilated, during the motion, when illuminated by the red, than when illuminated by any of the other rays, and least of all when illuminated by the violet. From these, and a great variety of other experiments, well devised, and often repeated with the greatest care, he infers, that the rays of light are separable into their primitive colors, by inflection, deflection, and reflection, as well as by refraction; that these properties of the rays are inversely as their refrangibilities; that is, those which deviate the least by refraction, deviate the most by flection, and are reflected the farthest from the perpendicular; and that these different phenomena are all produced by the differences in the magnitude of the particles. He calculates that the size of the red particles are to those of the violet as 1275 to 1253. This he extends to all the other colors by similar calculations, their sizes lying between 1275 and 1253; which are the extreme red and extreme violet; the red therefore, according to this hypothesis, is from 1275 to 1272½; the orange from 1272½ to 1270; the yellow from 1270 to 1267; the green from 1267 to 1264; the blue from 1264 to 1260; the indigo from 1260 to 1258; and the violet from 1258 to 1253.

Dr. Thomson, after enumerating the general properties of light, concludes thus: 'such are the properties of light as far as they have been examined. They are sufficient to convince us that it is a body, and possesses many qualities in common with other bodies. It is attracted by them, and combines with them, precisely as other bodies do. But it is distinguished from all other substances, by possessing three peculiar properties of which they are destitute. The first is the power which it has of exciting in us the sensation of vision, by moving from the object seen and entering the eye. The phenomena of colors, and the prismatic spectrum, indicate the existence of

seven different species of light; but to what the difference of these species is owing has not been ascertained. We are altogether ignorant of the component parts of every one of these species. The second peculiar property of light is the prodigious velocity with which it moves, whenever it is separated from any body with which it was formerly combined. This velocity it acquires in a moment, and in all cases, whatever the body be from which it separates. The third and not the least singular of its peculiar properties, is, that its particles are never found cohering together so as to form masses of any sensible magnitude. This difference between light and other bodies can only be accounted for by supposing that its particles repel each other. This seems to constitute the grand distinction between light and other bodies. Its particles repel each other, while the particles of other bodies attract each other; and, accordingly, are found cohering together, in masses of more or less magnitude.'

We cannot better conclude this paper than with the following important and practical problem: Count Rumford has shown that the quantity of light emitted by a given portion of inflammable matter, in combustion, is proportional in some high ratio to the elevation of temperature; and that a lamp having many wicks very near each other, so as mutually to increase their heat, burns with infinitely more brilliancy than the Argand lamps in common use.

To measure the proportional intensities of two or more lights: Place them a few inches asunder, and at the distance of a few feet or yards from a screen of white paper, on a white wall. On holding a small card near the wall, two shadows will be projected on it, the darker one by the interception of the brighter light, and the lighter shadow by the interception of the duller light Bring the fainter light nearer to the card, or remove the brighter one further from it, till both shadows acquire the same intensity; which the eye can judge of with great precision, particularly from the conterminous shadows at the angles. Measure now the distances of the two lights from the wall or screen, square them, and you have the ratio of illumination. Thus if an Argand flame, and a candle, stand at the distance of ten feet, and four feet, respectively, when their shadows are equally deep, we have 10^2 and 4^2, or 100 and 16, or $6\frac{1}{4}$ and 1, for their relative quantities of light.

LIGHT'EN, *v. a.* } Sax. lıᵹ, lıᵹt. From the
LIGHT'NING, *n. s.* } verb to LIGHTEN, above.
To flash with the electric fire of the clouds; to shine like lightning: lightning, the flame, or fire, which proceeds from the clouds; the flash preceding thunder.

He directeth it under the whole heavens, and his *lightning* unto the ends of the earth. *Job.* xxxvii. 3.

The *lightning* that *lighteneth* out of the one part under heaven, shineth unto the other part.
Luke xvii. 24.

Yet looks he like a king; behold his eye,
As bright as is the eagle's, *lightens* forth
Controlling majesty. *Shakspeare.*

This dreadful night,
That thunders, *lightens*, opens graves, and roars,
As doth the lion. *Id.*

Although I joy in thee,
I have no joy of this contract to-night;
It is too rash, too unadvised, too sudden,
Too like the *lightning*, which doth cease to be
Ere one can say it *lightens*.
Id. *Romeo and Juliet.*

Sense thinks the *lightning* born before the thunder;
What tells us then they both together are? *Davies.*

Misery assails riches, as *lightning* does the highest towers. *Burton.*

Salmoneus, suffering cruel pains, I found,
For emulating Jove; the rattling sound
Of mimic thunder, and the glittering blaze
Of pointed *lightnings* and their forky rays.
Dryden.

No warning of the approach of flame,
Swiftly, like sudden death, it came;
Like travellers by *lightning* killed,
It burst the moment I beheld. *Granville.*

Through sparkling spray, in thundering clash,
The *lightnings* of the waters flash
In awful whiteness o'er the shore,
That shines and shakes beneath the roar. *Byron.*

LIGHT'ER, *n. s.* From light, lightening, to make less heavy. A boat into which ships are lightened or unloaded.

They have cock-boats for passengers, and *lighters* for burthen. *Carew.*

He climbed a stranded *lighter's* height,
Shot to the black abyss, and plunged downright.
Pope.

LIGHT'ERMAN, *n. s.* Lighter and man. One who manages a lighter.

Where much shipping is employed, whatever becomes of the merchant, multitudes of people will be gainers; as shipwrights, butchers, carmen, and *lightermen*. *Child.*

LIGHTFOOT (John), D. D., a learned English divine, born in 1602, at Stoke upon Trent in Staffordshire. Having finished his studies at Morton-green, Cheshire, he went in 1617 to Cambridge. Here he made an extraordinary proficiency in the Latin and Greek; but neglected the Hebrew. His taste for the oriental languages was not yet excited. As soon as he had taken the degree of B. A. he left the university, and became assistant to a school at Repton in Derbyshire. About two years after he entered into orders, and became curate of Norton under Hales in Shropshire, near Bellaport, the seat of Sir Rowland Cotton; who, being his constant hearer, made him his chaplain, and took him into his house. This gentleman, being a perfect master of the Hebrew language, engaged Lightfoot in that study; who soon applied himself to it, and made great progress. In 1628 he was offered the living of Stone in Staffordshire, which he accepted, and having, when at Bellaport, formed an acquaintance with the daughter of William Crompton, esq., of Stonepark, he now married her. But his unquenchable thirst after rabbinical learning would not suffer him to continue long in this place. Sion College library, he knew was well stocked with books of that knid. He therefore quitted his charge at Stone, and removed with his family to Hornsey, near London, where he gave the public a specimen of his advancement in those studies, by his Eurubhim, or Miscellanies Christian and Judaical, 1629 He was then only twenty-seven years

of age; and appears to have been well acquainted with the Latin and the Greek fathers, as well as with the classics. These first fruits of his studies were dedicated to Sir Rowland Cotton; who, in 1631, presented him to the rectory of Ashley in Staffordshire, where he applied himself with indefatigable diligence to the study of the Scriptures. In 1642 he was nominated a member of the memorable assembly of divines at Westminster for settling a new form of ecclesiastical polity. This induced him to resign his rectory, and, having obtained the presentation for a younger brother, he set out for London in 1642. He had provided the chief materials, as well as formed the plan of his Harmony; and he now embraced the opportunity of putting it to the press in London, where he had not long been before he was chosen minister of St. Bartholomew's. In the assembly of divines which met in 1643, Mr. Lightfoot became distinguished for his eloquence in debate, and activity in business. His learning recommended him to the parliament, whose visitors, having ejected Dr. William Spurstow from the mastership of Catherine Hall, in Cambridge, substituted Lightfoot in his place in 1653; and he was also presented to the living of Much-Munden, in Hertfordshire, upon the death of Dr. Samuel Ward. Meanwhile he often preached before the house of commons, warmly pressing the speedy settlement of the church in the Presbyterian form, as most agreeable to Scripture. He was during this time employed in publishing the several branches of his Harmony; but he met with great discouragements in that work, chiefly from that anti-eruditional spirit which prevailed, and threatened even the destruction of the universities. In 1655 he entered upon the office of vice-chancellor of Cambridge, to which he was chosen that year, having taken the degree of D. D. in 1652, with great applause. He executed the office of vice-chancellor with exemplary diligence, and, at the commencement, supplied the place of professor of divinity, then undisposed of. At the same time he was engaged with others in perfecting the Polyglot Bible, then in the press. At the Restoration he offered to resign the mastership of Catherine Hall; but, as he had acted from no spirit of opposition to the king and government, a confirmation was granted him from the crown, both of the place and of his living. Soon after this he was appointed one of the assistants at the conference upon the liturgy, held in 1661, but attended only once or twice. He died December 6th, 1675, and was buried in Munden church. Dr. Lightfoot's works were collected and published first in 1684, in two volumes folio. The second edition was printed in Amsterdam, 1686, in two volumes folio, containing all his Latin writings, with a Latin translation of those which he wrote in English. At the end of both these editions there is a list of such pieces as he left unfinished. There was also published a third edition of his works, by John Leusden, in Utrecht, in 1699, folio. Mr. Strype, in 1700, published another collection of these papers, under the title of Some genuine remains of the late pious and learned Dr. John Lightfoot.

A LIGHT-HOUSE is generally erected upon a cape or promontory on the sea-coast, or upon some rock in the sea, and has on its top in the night-time a great fire, or light formed by candles, which is constantly attended by some careful person, so as to be seen at a great distance from the land. It is used to direct the shipping on the coast, that might otherwise run ashore, or steer an improper course when the darkness of the night and the uncertainty of currents, &c., might render their situation with regard to the shore extremely doubtful. Lamp lights are, on many accounts, preferable to coal fires or candles; and the effect of these may be increased by placing them either behind glass hemispheres, or before properly disposed glass or metal reflectors; which last method is now generally adopted.

LIGHTNING is a bright and vivid flash of fire, suddenly appearing in the atmosphere, and commonly disappearing in an instant, sometimes attended with clouds and thunder, and sometimes not.

Lightning was looked upon as sacred both by the Greeks and Romans, and was supposed to be sent to execute vengeance on the earth. Hence persons killed by lightning, being thought hateful to the gods, were buried by themselves, lest the ashes of other men should be polluted by them. Some say they were suffered to rot where they fell because it was unlawful for any man to approoch the place. For this reason the ground was hedged in lest any person should be polluted by it. All places struck by lightning were fenced round, from an opinion that Jupiter had either fixed upon them the mark of his displeasure, or that he had thus chosen them as sacred to himself. The ground thus fenced about was called by the Romans bidental. Lightning was much observed in augury, and was a good or bad omen, according to the circumstances attending it.

In a serene sky, the lightning almost always has a kind of indistinct appearance without any determinate form, like the sudden illumination of the atmosphere occasioned by firing a quantity of loose gunpowder; but when accompanied with thunder it is well defined, and has very often a zig-zag form. Sometimes it makes an angle, like the letter V, sometimes it has several branches, and sometimes it appears like the arch of a circle. But the most formidable and destructive form which lightning is ever known to assume is that of balls of fire. The motion of these is very often easily perceptible to the eye; but, wherever they fall, much mischief is occasioned by their bursting, which they always do with a sudden explosion like that of fire arms. Sometimes they will quietly run along, or rest for a time upon any thing, and then break into several pieces, each of which will explode; or the whole ball will burst at once, and produce its terrible effects in one place only. The next to this in destructiveness is the zig-zag kind; for that which appears like indistinct flashes, whose form cannot be observed, is never known to do injury. The color of the lightning also indicates in some measure its power to do mischief; the palest and brightest flashes being most destructive; such as are red,

or of a darker color, commonly doing less damage Besides these kinds of lightning, it is not uncommon to see flashes unattended by any report. These are always of the sheet kind; they happen very frequently in windy weather, when the sky is clear, and likewise, when the sky is cloudy, immediately before a fall of rain or snow. The general reason of these appears to be, that the electric fluid is the medium by which vapors are suspended in the atmosphere; and, of consequence, every separation of vapor, whether as rain, snow, or hail, must be attended with a discharge of electrical matter. The reason why this kind of lightning is never attended with any report is, that there is no particular object against which the force of the flash is directed; but it dissipates itself among the innumerable conducting bodies with which the atmosphere always abounds. A flash of lightning, however limited its extent may appear, diffuses its effects over a great space of atmosphere; for, after one of these silent flashes, it is no uncommon thing to observe the sky become obscure, though it had been quite serene before; or, if it had been cloudy, to see rain or snow begin to fall in a very few minutes.

A very surprising property of lightning, the zig-zag kind especially, when near, is its seeming omnipresence. If two persons are standing in a room looking different ways, and a loud clap of thunder accompanied with zig-zag lightning happens, they will both distinctly see the flash, not only by that indistinct illumination of the atmosphere which is occasioned by fire of any kind; but the very form of the lightning itself, and every angle it makes in its course, will be as distinctly perceptible as if both had looked directly at the cloud whence it proceeded. If a person happened at that time to be looking on a book, or other object which he held in his hand, he would distinctly see the form of the lightning between him and the object at which he looked. The effects of lightning are seldom similar to those which accompany explosions of gunpowder or inflammable air. Upon one occasion, a tent in a gentleman's garden was carried to the distance of 4000 paces; and a branch torn from a large tree, struck a girl in the forehead at the distance of forty paces from the trunk of the tree, and killed her on the spot. These terrible effects seem to have been owing to the prodigious agitation in the air, occasioned by the emission of such a vast quantity of lightning at once; or perhaps to the agitation of the electric fluid itself, which is still more dangerous than any concussion of the atmosphere; for thunderstorms will sometimes produce most violent whirlwinds. Instances are commonly occurring where lightning, by its own proper force, without any assistance from those less common agitations of the atmosphere or electric fluid, has thrown stones of immense weight to considerable distances; torn up trees by the roots, broken them in pieces; shattered rocks; beaten down houses, and set them on fire, &c. The following singular effect of lightning is recorded, in the Philosophical Transactions, upon a pied bullock. 'In the evening of Sunday the 28th of August, 1774, there was an appearance of a thunderstorm, but no report was heard. A gentleman who was riding near the marshes, not far from Lewes, saw two strong flashes of lightning running along the ground of the marsh, at about nine o'clock P. M. On Monday morning, when the servants went to fetch some oxen to their work, they found a four year old steer, standing up, to appearance much burnt, and so weak as to be scarcely able to walk. The animal seemed to have been struck by lightning in a very extraordinary manner. He was of a white and red color; the white in large marks, beginning at the rump bone, and running in various directions along both sides; the belly all white; and the whole head and horns white likewise. The lightning, with which he must have been undoubtedly struck, fell upon the rump bone, which was white, and distributed itself along the sides in such a manner as to take off all the hair from the white marks as low as the bottom of the ribs, but so as to leave a list of white hair, about half an inch broad, all round where it joined to the red, and not a single hair of the red was touched. The whole belly was unhurt, but the end of the sheath of the penis had the hair taken off; it was also taken off from the dewlap; the horns and the curled hair on the forehead were uninjured; but the hair was taken off from the sides of the face. The farmer anointed the ox with oil for a fortnight; the animal was greatly reduced in flesh, but at length recovered. One very singular effect of lightning is, that it has been observed to kill alternately; that is, supposing a number of people standing in a line; if the first person was killed, the second would be safe; the third would be killed, and the fourth safe; &c. Effects of this kind are generally produced by the most violent kind of lightning; namely, that which appears in the form of balls, which frequently divide themselves into several parts before they strike. If one of these parts of a fire-ball strike a man, another will not strike the person who stands immediately close to him; because there is always a repulsion between bodies electrified the same way. Now, as these parts into which the ball breaks have all the same kind of electricity, it is evident that they must for that reason repel one another; and this repulsion is so strong that a person may be interposed within the stroke of two of them, without being hurt by either. Another singular effect of lightning is said to have taken place, when Julian the apostate ordered the temple of Jerusalem to be rebuilt; when those who attempted to rebuild the temple are reported to have had the marks of crosses impressed upon their garments and bodies. This some have supposed to have arisen from the same cause to which the angular appearance of lightning in the air is owing, namely, its violent impetus and velocity, together with the opposition of the atmosphere; and have endeavoured to account for it on electrical principles. See Warburton's Julian, where this opinion is maintained with equal learning and acuteness; and a similar fact (of crosses impressed in a thunder storm on the bodies of several persons), which happened in England in the seventeenth century, is related. The fact is unquestionable, to account for it may be difficult.

The identity of the electric matter and lightning is now established beyond a doubt. The different forms of the flashes are all exemplified in those of electrical sparks, and the subject of atmospherical electricity or lightning has been fully entered into under that title. See ELECTRICITY.

Though the zig-zag kind of lightning is dangerous, yet the most destructive kind is that which assumes the form of balls. These are produced by an exceedingly strong power of electricity gradually accumulated till the resistance of the atmosphere is no longer able to confine it. In general, the lightning breaks out from the electrified cloud by means of the approach of some conducting substance; either a cloud, or some terrestrial substance: but the fire-balls seem to be formed, not because there is any substance at hand to attract the electric matter from the cloud, but because the electricity is accumulated in such quantity that the cloud can no longer contain it. Hence such balls fly off slowly, and have no particular destination. Their appearance indicates a prodigious commotion and accumulation of electricity in the atmosphere, without a proportionable disposition in the earth to receive it. This disposition, however, is perpetually altered by a thousand circumstances, and the place which first becomes most capable of admitting electricity will certainly receive a fire-ball. Hence this kind of lightning moves slowly backwards and forwards in the air for a considerable time, and then suddenly falls on one or more houses according to their being more or less affected with an electricity opposite to that of the ball at the time. It will also run along the ground, break into several parts, and produce several explosions at once. It is very difficult to imitate lightning of this kind in electrical experiments. The only cases in which it has been done in any degree are those in which Dr. Priestley made the explosion of a battery pass for a considerable way over the surface of raw flesh, water, &c., and in Mr. Arden's experiment, when a fire-ball ascended to the top of an electrified jar, and burst it with a violent explosion. In these cases, if, while the electric flash passed over the surface of the flesh, it had been possible to interrupt the metallic circuit by taking away the chain, the electric matter discharged from the battery would have been precisely in the situation of one of the fire-balls above mentioned; i. e. it would have been at a loss for a conductor. The negative side of the battery was the place of its destination; but to that it would not have easily got, because of the atmosphere which lay in its way, and the incapacity of the neighbouring bodies to receive it. But, while the electric matter was thus stationary for want of a conductor, if any person standing near, or touching the negative side of the battery, presented a finger to that seemingly inoffensive luminous body, he would instantly be struck very violently: because, a free communication being now made by means of his body, the powers by which the electric fluid is impelled from one place to another would instantly urge it upon him. But, if we suppose a person who has no communication with the battery to present his finger to the same body, he may perhaps receive a slight spark from it, but not a shock of any consequence; because there is not a perfect communication by means of his body with the place to which the electric fire is destined. Hence we may account for the seemingly capricious nature of lightning, but especially of that kind which appears in the form of balls. Sometimes it will strike trees, high houses, steeples, and towers, without touching cottages, men or other animals, who are in the neighbourhood. In such cases people would be apt to say, that the neighbourhood of these higher objects preserved the others from the stroke; but with little reason, since low houses, men walking in the fields, cattle, nay the surface of the earth itself, have all been struck, while high trees and steeples in the neighbourhood have not been touched. In like manner, fire-balls have passed very near certain persons without hurting them, while they have, as it were, gone considerably out of their way to kill others. The reason of all this is, that in thunder-storms there is constantly a certain zone of earth considerably under the surface, which the lightning desires (if we may use the expression) to strike, because it hath an electricity opposite to that of the lightning itself. Those objects, therefore, which form the most perfect conductors between the electrified clouds and that zone of earth, will be struck by the lightning, whether they are high or low.

The following account of a melancholy accident which happened near Coldstream, on the Tweed, is given by Mr. Brydone, F. R. S., in the Philosophical Transactions:—'The morning was fine, with the thermometer at 68°; but about eleven A. M. the sky became obscured with clouds in the south-east; and betwixt twelve and one a storm of thunder and lightning came on. This storm was at a distance of five or six miles from Mr. Brydone's house; but, while our author was observing the progress of the storm, he was suddenly surprised with a loud report, neither preceded nor accompanied by any flash of lightning, which resembled the explosion of a great number of muskets, in such quick succession that the ear could scarcely discriminate the sounds. On this the thunder and lightning instantly ceased, the clouds began to separate, and the sky soon recovered its serenity. In a little time Mr. Brydone was informed, that a man with two horses had been killed; and, on returning out to the place, our author found the two horses lying on the spot where they had been first struck, and still yoked to the cart. As the body of the man who was killed had been carried off, Mr. Brydone had not an opportunity of examining it, but was informed by Mr. Bell, minister of Coldstream, who saw it, that the skin of the right thigh was much burnt and shrivelled; that there were many marks of the same kind all over the body, but none on the legs: his clothes, particularly his shirt, had a strong smell of burning; and there was a zig-zag line of about an inch and a quarter broad, extending from the chin to the right thigh, and which seemed to have followed the direction of the buttons of his waistcoat. The body was buried in two days, without any appearance of putrefaction. Mr. Brydone was

informed, by another person who accompanied him that was killed, of the particular circumstances. They were both driving carts loaded with coals; and James Lauder, the person who was killed, had the charge of the foremost cart, and was sitting on the fore part of it. They had crossed the Tweed a few minutes before at a deep ford, and had almost gained the highest part of an ascent of about sixty-five or seventy feet above the bed of the river, when he was stunned with the report above mentioned, and saw his companion with the horses and cart fall down. On running up to him, he found him quite dead, with his face livid, his clothes torn in pieces, and a great smell of burning about him. At the time of the explosion he was about twenty-four yards distant from Lauder's cart, and had him fully in view when he fell, but felt no shock, neither did he perceive any flash or appearance of fire. At the time of the explosion his horses turned round, and broke their harness. The horses of the first cart had fallen on their left side, and their legs had made a deep impression on the dust; which, on lifting them up, showed the exact form of each leg, so that every principle of life seemed to have been extinguished at once, without the least struggle or convulsive motion. The hair was singed over the greatest part of their bodies, but was most perceptible on their belly and legs. Their eyes were dull and opaque, as if they had been long dead, though Mr. Brydone saw them in half an hour after the accident happened. The joints were all supple, and he could not observe that any of the bones were broken or dissolved, as is said to be sometimes the case with those who are killed by lightning. The left shaft of the cart was broken, and splinters had been thrown off in many places; particularly where the timber of the cart was connected by nails or cramps of iron. Many pieces of the coals were thrown to a considerable distance; and some of them had the appearance of having been some time on a fire. Lauder's hat was torn into innumerable small pieces; some part of his hair was strongly united to those which had composed the crown of it. About four feet and a half behind each wheel of the cart he observed a circular hole, of about twenty inches diameter, the centre of which was exactly in the track of each wheel. The earth was torn up as i' by violent blows of a pick-axe; and the small stones and dust were scattered on each side of the road. The tracks of the wheels were strongly marked in the dust, both before and behind these holes, but did not in the smallest degree appear on the spots themselves for upwards of a foot and a half. There were evident marks of fusion on the iron rings of the wheels; the surface of the iron, the whole breadth of the wheel, and for the length of about three inches was become bluish, had lost its polish and smoothness, and was formed into drops which projected sensibly, and had a roundish form; but the wood did not appear any way injured by the heat which the iron must have received. To determine whether these were made by the explosion which had torn up the ground, the cart was pushed back on the same tracks which it had described on the road; and the marks of fusion were found exactly to correspond with the centres of the holes. They had made almost half a revolution after the explosion; which our author ascribes to the cart being pulled a little forward by the fall of the horses. Nothing remarkable was observed on the opposite part of the wheel. The broken ground had a smell something like that of ether; the soil itself was very dry and gravelly. The catastrophe was likewise observed by a shepherd, at the distance of about 200 or 300 yards from the spot. He said, that he was looking at the two carts going up the bank when he heard the report, and saw the foremost man and horses fall down; but observed no lightning, nor the least appearance of fire, only he saw the dust rise about the place. There had been several flashes of lightning before that from the south-east; whereas the accident happened to the north-west of the place where he stood. He was not sensible of any shock. Our author next gives an account of several phenomena which happened the same day, and which were evidently connected with the explosion. A shepherd, attending his flock in the neighbourhood, observed a lamb drop down; and said, that he felt at the same time as if fire had passed over his face, though the lightning and claps of thunder were at a considerable distance. He ran up to the creature immediately, but found it quite dead; on which he bled it with his knife, and the blood flowed freely. The earth was not torn up; nor did he observe any dust rise, though he was only a few yards distant. This happened about a quarter of an hour before Lauder was killed, and the place was only about 300 yards distant. About an hour before the explosion, two men standing in the middle of the Tweed, fishing for salmon, were caught in a violent whirlwind, which felt sultry and hot, and almost prevented them from breathing. They could not reach the bank without much difficulty and fatigue; but the whirlwind lasted only a very short time, and was succeeded by a perfect calm. A woman, making hay near the banks of the river fell suddenly to the ground, and called out that she had received a violent blow on the foot, and could not imagine whence it came; and Mr. Bell, the minister above mentioned, when walking in his garden, a little before the accident happened to Lauder, felt several times a tremor in the ground. The conclusion drawn from these facts by Brydone is, that at the time of the explosion the equilibrium between the earth and the atmosphere seems to have been completely restored, as no more thunder was heard, nor lightning observed; the clouds were dispelled, and the atmosphere resumed the most perfect tranquillity; 'But how this vast quantity of electric matter,' says he, 'could be discharged from the one element to the other, without any appearance of fire, I shall not pretend to examine. From the whole it would appear, that the earth had acquired a great superabundance of electrical matter, which was every where endeavouring to fly off into the atmosphere. Perhaps it might be accounted for from the excessive dryness of the ground, and for many months the almost total want of rain, which is probably the agent

that nature employs in preserving the equilibrium between the two elements.'

The following account of a similar accident which occurred in May, 1821, from Schweigger's Journal, may serve to throw some light upon the mode of action of this formidable meteor. As two carts were proceeding in a hollow way, bordered on either side by a wood, they were successively struck by a thunder-bolt. In the first cart were seated the two brothers Teele, the one aged thirty-three years, the other twenty-nine: in the second, Mr. Teele the nephew, a young man of twenty, and Mr. Decker. The lightning struck successively the horse of the first cart, the two brothers, Mr. Decker, and his companion, the latter of whom did not survive the accident. The horse was killed upon the spot; the skin of the belly was torn in all the lower part; the mouth left open; and the teeth blackened. It struck the younger Teele, passing through his umbrella, which was thrown to a distance of twenty-four paces from the cart; the cart itself was perforated with a hole of half a foot in diameter. The body, on being carried to the nearest village, was put into a tepid bath, and rubbed; blood flowed from the nose, the mouth, and ears, but no sign of life appeared. The mouth and nose were blackened; the skin and muscles of the arms and hands, which were both employed in holding the shaft of the umbrella, were furrowed to the bone; the sleeves of the coat and shirt were torn; but the lesions of the skin were not of the nature of tumors or scars, such as are produced by the application of red-hot iron: the skin looked as if it had been raised by a very quick rubbing. In the same manner, the clothes bore no marks of burning, but seemed as if they had been torn by the rapid passage of a sharp point. Mr. Decker, who was in the same cart, received, at the same instant, so violent a blow in the lower belly that he was precipitated from the cart, and remained senseless for half an hour. When he was undressed, the place in which he had felt the shock was of a bright red color, but without any open wound. He was by this time in a condition for continuing his journey.

The two brothers Teele had suffered considerable damage from the lightning; they, however, quickly recovered, as will presently be seen. But it will be interesting, in the first place, to follow the progress of the electric fluid over the different parts of their bodies, and to observe the nature of the wounds which resulted. They were sitting by the side of one another when struck. The lightning first hit the head of the elder; it tore to pieces the velvet cap which he had on, grazed the temporal bone an inch above the left ear, and then behind the ear; after which, slightly raising the skin, it descended upon the neck, traversed the back part obliquely, and ascended towards the right ear; here it scratched the inner part of the ear, near the tragus and antihelix; it then fell upon the right shoulder, passed beneath the chin, over the right breast and arm; and, returning to the back, descended along the vertebral column to the sacrum. In this latter part of the course of the lightning the skin was not cut, but only a little raised, and very red. Impressions of the same nature were seen across the arms; and attested, as well as the rupture of the clothes, the zig-zag progress of the lightning, which had passed alternately from the right side of the younger brother to the left side of the elder. It fixed upon the latter, on meeting with some pieces of metal that were in his waistcoat pocket: here it raised the skin upon a space about the size of the hand. After this it descended upon the left part of the region of the pubis, and traversed the inner surface of the thigh, the ham and calf of the leg. A piece of steel, which the younger of the brothers carried in his fob, led the lightning to the region of the groin, where a space of the size of the piece was deprived of the skin, and affected with a deep wound. The breadth of the mark left by the lightning upon the different parts of the body was in general two inches; the wounds were more extended and deeper at the intersections of this mark; several of them were very painful, and suppurated abundantly. The skin had been rolled, in close folds, to the right and left, by the rapid passage of the lightning. The wounds did not bleed; and all needful to be done was to provide for the renovation of the skin destroyed. In a word, there was no indication of any lesion of organs by fire or heat; but the effect produced might be compared to that which takes place when a ball grazes the surface of a limb.

Dr. Tilesius, having assisted at the two first dressings, had all the leisure necessary for carefully examining the form and nature of the hurts; he even took a sketch of them, which accompanies his memoir.

The brothers Teele, after having perfectly recovered themselves, were affected with violent nausea, and vomited repeatedly, when some cups of ea were given them to drink; they threw up a little blood at first, as had happened o the one who had been killed. Notwithstanding the great extent of their wounds, and their being besides of a robust habit, they had no fever. The elder was perfectly deaf on the day of the accident; but, on the following day, he recovered his hearing to a certain degree. No trace of paralysis made its appearance in the limbs struck by the lightning; the wounds were cicatrised in the space of a few weeks.

Dr. Tilesius having seen Dr. Bauer, the physician of the brothers Teele, a year after the accident (which took place in May 1821), received from him the following information. The elder has remained somewhat dull of hearing, more or less so, according to the season. He experiences a marked disposition to sleep, and would often remain twenty-four hours together asleep, were he not wakened. The younger has latterly had an inflammatory fever. He is subject to a periodical weakness or state of relaxation, which was before unknown to him. In general, it has had a much greater influence upon the nervous system of the two brothers than might have been presumed from the vigor of their constitution. The cicatrices of the wounds now present, in several places, the appearance of the turns of a screw.

Professor Pictet, of Geneva, communicated to

the Helvetic Society an account of a singular effect produced by a stroke of lightning on the 3rd of July, 1824. The house had no conductors, but its roof was covered with white iron, and had bars of the same metal communicating with the ground. The stroke of lightning did no damage to the house, but the lightning perforated a piece of white iron with two holes, of an inch in diameter, and five inches distant; and, what was very remarkable, the bars at the edges of the holes were in opposite directions. Hence, as Professor Pictet remarks, it appears to follow, either that the electric fluid had passed through the white iron, forming one hole, and, after moving five inches along it, had penetrated it again in an opposite direction; or that two currents of electric fluid had moved simultaneously in opposite directions, and at the distance of five inches from each other.

The mineralogists of Philipothal, East Prussia, have availed themselves of the force of lightning to shiver or blast the rock instead of gunpowder. For this purpose an iron-rod, similar to a conductor, is fixed in the work that is intended to be blasted; when the occurrence of the first thunder-storm generally conveys the electric fluid down the rod in such quantity as to split it into several pieces without displacing it. See ELECTRICITY, ATMOSPHERIC.

LIGHT-ROOM, a small apartment enclosed with glass windows, near the magazine of a ship of war. It is used to contain the lights by which the gunner and his assistants are enabled to fill the cartridges with powder to be ready for action.

LIGHTS, *n. s.* From light, not heavy; so called from their lightness in proportion to their bulk. The lungs; the organs of breathing in animals.

The complaint was chiefly from the *lights*, a part as of no quick sense, so no seat for any sharp disease.
Hayward.

LIGNAC (Joseph Adrian de), a French ecclesiastic, born at Poictiers, who published several works, particularly Letters to an American, concerning Buffon's Natural History. He died in Rome in 1762.

LIGN-ALOES, *n. s.* Lat. *lignumaloes*. Aloes wood.

The vallies spread forth as gardens by the river's side, as the trees of *lignaloes* which the Lord hath planted, and as cedar trees beside the water.
Numb. xxiv. 6.

The woful teris that thei leten fal
As bitter werein, out of teris kinde,
For paine, as is *lignealoes* or gal.
Chaucer. Troilus and Creseide.

LIGNE (Charles Joseph, prince de), was born at Brussels in 1735, of an ancient Flemish family. He entered the army of his country in 1752, and made his first campaign as captain in 1757. He was made a colonel for his gallantry at Hochkirchen; and was a major-general at the accession of Joseph II. In 1771 he became a proprietor of a regiment of infantry, and added greatly to his military reputation in the war relating to the succession of Bavaria in 1778, when he commanded the advanced guard of Laudohn. Going in 1782 on a mission to Russia, he became a favorite with Catharine II., who nominated him a field marshal of that empire, and gave him an estate in the Crimea. In 1788 Joseph II. made him general of artillery, and sent him to assist prince Potemkin at the siege of Okzakow; he also divided with Laudohn the glory of taking Belgrade. The death of Joseph II. terminated his military career. Francis II. in 1808 made him a field marshal, and he was often consulted on public affairs. He died in 1814. He published a collection of his writings in 30 vols. 12mo. in 1807; and subsequently Vie du Prince Eugène de Savoie, écrite par lui-même; and Lettres et Pensées du Marechal Prince de Ligne, both which were translated into English. His posthumous works were published in 1817 in 6 vols. 8vo.

LIGNE, a town of the Netherlands, in the department of Gemappes, and late province of Austrian Hainault, on the Dender, twelve miles north-west of Mons, and twenty north of Valenciennes.

LIG'NEOUS, *adj.* Fr. *ligneux*; Lat. *ligneus*. Wooden: made of, or resembling, wood.

It should be tried with shoots of vines, and roots of red roses; for it may be they, being of a more *ligneous* nature, will incorporate with the tree itself.
Bacon's Natural History.

Ten thousand seeds of the plant hart's-tongue hardly make the bulk of a pepper-corn: now the covers, and the true body of each seed, the parenchymous and *ligneous* part of both, and the fibres of those parts, multiplied one by another, afford a hundred thousand millions of formed atoms, but how many more we cannot define.
Grew.

LIGNET, among goldsmiths, a longitudinal hollow iron mould, made for receiving melted masses of gold or silver. It has a large hollow for the former, and a small one for the latter. See INGOT. This word is by some derived from lignum, wood; ingots of gold and silver having been probably at first thrown into lignets made of hollow hard wood, till their rapid consumption by the melted metal had shown the necessity of making them of more durable stuff. They are now made of iron, and are also called ingots.

LIGNICENSIS TERRA, in the materia medica, a fine yellow bole dug in many parts of Germany, particularly about Emeric in Westphalia, and used in astringent complaints.

LIGNIERE, or LIGNIERES, a town of France, in the department of Cher, and late province of Berry, with a castle: twenty-four miles south of Bourges, and thirteen and a half south-east of Issoudon. Long. 2° 24′ E., lat. 46° 47′ N.

LIGNUM VITÆ. See GUAIACUM.

LIGNY, a town of France, in the department of the Meuse, and late duchy of Bar, with a castle on the Orney, nine miles south-east of Bar le Duc, and 125 south-east of Paris. Long. 5° 25′ E., lat. 48° 39′ N.

LIGON, a sea-port of Siam, in Malacca, capital of a territory so named, with a magazine belonging to the Dutch East India Company, on the east coast. Long. 100° 5′ E., lat. 7° 40′ N.

LIGUEIL, a town of France, in the department of Indre and Loire, nine miles south-west of Loches, and twenty-one south-east of Tours. Long. 0° 52′ E., lat. 47° 3′ N.

LIGUEUX, a town of France, in the department of Dordogne, nine miles N. N. E. of Perigueux.

LIGULATED, among botanists, an appellation given to such floscules as have a straight end turned downwards, with three indentures, but not separated into segments.

The LIGURE, in Hebrew antiquity, was the first stone in the third row of the high priest's breast-plate, and had the name of Gad inscribed on it. Exod. xxviii. 19. It is said to have been spotted like the ounce. Some suppose it to be the jacinth.

LIGURIA, in ancient geography, a country of Italy, bounded on the south by the Mediterranean Sea; on the north by the Appennine mountains, on the west by part of Transalpine Gaul, and on the east by Etruria.

LIGURIANS, the ancient inhabitants of Liguria. There is a great disagreement among critics concerning their origin, though most probably they were descended from the Gauls. Some carry up their origin as far as the fabulous heroes of antiquity; while others trace them from the Ligyes, a people mentioned by Herodotus as attending Xerxes in his expedition against Greece. They are by some ancient geographers placed in Colchis, by others in Albania. According to Diodorus Siculus, the Ligurians led a very wretched life; their country being entirely overgrown with woods, which they were obliged to pull up by the roots in order to cultivate their land, which, being naturally barren, made but very poor returns for all their labor. They were much addicted to hunting; and, by a life of continual exercise and labor, became very strong. The women are said to have been almost as strong as the men, and to have borne an equal share in all laborious enterprises. They were, however, subdued by the Romans about A. A. C. 211.

LIGUSTICUM, in botany, lovage, a genus of the digynia order and pentandria class of plants; natural order forty-fifth, umbellatæ. The fruit is oblong, and quinquesulcated on each side; the florets are equal; the petals involuted or rolled inwards and entire. There are fourteen species: the most remarkable are,

1. L. levisticum, the common lovage, a native of the Appennine mountains in Italy. It has a thick, fleshy, deeply penetrating perennial root, crowned by very large, many-parted, radical leaves, with broad lobes, having incisions at top, upright, strong channelled stalks, branching six or seven feet high, and all the branches terminated by yellow flowers in large umbels. The root agrees nearly in quality with that of angelica: the principal difference is, that the lovage root has a stronger smell, and somewhat less pungent taste, accompanied with a more durable sweetness, the seeds being rather warmer than the root.

2. L. Scoticum is a native of Scotland, and grows near the sea. It has a thickish, fleshy, penetrating, perennial root, crowned by large doubly trifoliated leaves, with broad, short, indented lobes, upright round stalks, half a yard high, terminated by small yellow umbels. The leaves are sometimes eaten raw as a sallad, or boiled as greens, by the inhabitants of the Hebrides. The root is reckoned a good carminative. Both these species are hardy, and easily propagated by seeds sown in spring or autumn.

LIGUSTRUM, privet, in botany, a genus of the monogynia order, and diandria class of plants; natural order forty-fourth, sepiariæ: cor. quadrifid; berry tetraspermous. There are four species.

L. sempervirens, the evergreen privet, is a hardy plant, rising from ten to fifteen feet high, adorned with oblong entire leaves and spikes of infundibuliform oblong white flowers, succeeded by black berries. It is easily propagated by seed, layers, suckers, or cuttings, and is used for making hedges. With the addition of alum, the berries are said to dye wool and silk of a good durable green; for which purpose they must be gathered as soon as they are ripe. The leaves are bitter and slightly astringent. Oxen, goats, and sheep, eat the plant; horses refuse it,

LIKE, *adj.*, *adv.*, *n. s.*, *v. a.* & *v. n.*
LIKE'LIHOOD, *n. s.*
LIKE'NESS,
LIKE'LY, *adj.* & *adv.*
LI'KEN, *v. a.*
LIKE'NESS, *n. s.*
LIKE'WISE, *adv.*
LI'KING, *adj.* & *n. s.*

Sax. lic; Sw. *like*; Goth. and Belg. *lyk*; Teut. *lyck*. Similar; equal; of the same quality or quantity; resembling; hence probable credible: as an adverb, in the same manner, or in a befitting manner: like and likely are both used also for probably; credibly: such as may reasonably be thought or expected. It is often, Dr. Johnson observes, not easy to determine whether like is used as an adverb or adjective. To like is to choose; prefer; approve; please; or be pleased with (taking *of* before the object), but both these last are obsolete senses: likelihood was in Shakspeare's time used for show; appearance; resemblance: it now signifies probability; verisimilitude: to liken is, to exhibit or represent as resembling; compare: likeness, similarity; resemblance; counterpart: likewise, in like manner: liking, in good condition; plump: pleasure or delight in; plumpness; inclination; state of trial or approval.

What euer thingis he doith, the son doith in *lijk* maner tho thingis. *Wiclif. Jon.* v.

Blynde, loueris of lustes more than of God, hauynge *lickenesse* of pitee, but denyynge the vertue of it. *Id.* 2 *Tymo.* iii.

He shall dwell where it *liketh* him best.
Deut.

Be strong, and quit yourselves *like* men.
1 *Sam.* iv. 9.

Their young ones are in good *liking*; they grow up with corn. *Job* xxxix. 4.

Like as a father pitieth his children, so the Lord pitieth them that fear him. *Psalm* ciii. 13.

He is *like* to die for hunger, for there is no more bread. *Jeremiah* xxxviii. 9.

Jesus said unto them, I also will ask you one thing, which if ye tell me, I *likewise* will tell you by what authority I do these things.
Matt. xxi. 24.

Conformity with them is only then a disgrace, when either we follow them in that they think or do amiss, or follow them generally in that they do, without other reason than only the *liking* we have to

the pattern of their example. which *liking* doth intimate a more universal approbation of them than is allowable. *Hooker.*

That way we are contented to prove, which being the worse in itself is notwithstanding now, by reason of common imbecility, the fitter and *likelier* to be brooked. *Id.*

Of any thing more than *of* God they could not by any means *like*, as long as whatsoever they knew besides God, they apprehended it not in itself without dependency upon God. *Id.*

The man who has nothing to boast of but his illustrious ancestors, is *like* a potatoe—the only good belonging to him is under ground. *Sir T. Overbury.*

The joyous nymphs and lightfoot fairies,
Which thither came to hear their musick sweet,
Now hearing them so heavily lament,
Like heavily lamenting from them went. *Spenser.*

Well hoped he, ere long that hardy guest,
If ever covetous hand, or lustful eye,
Or lips be laid on thing that *liked* him best,
Should be his prey. *Spenser. Faerie Queene.*

Why do you longer feed on loathed light,
Or *liking* find to gaze on earthly mold? *Id.*

The young soldiers did with such cheerfulness *like of* this resolution, that they thought two days a long delay. *Knolles.*

He was a man, take him for all in all,
I shall not look upon his *like* again. *Shakspeare.*

I *like* the work well; ere it be demanded,
As *like* enough it will, I'd have it copied. *Id.*

I looked upon her with a soldier's eye;
That *liked*, but had a rougher task in hand
Than to drive *liking* to the name of love. *Id.*

What of his heart perceive you in his face,
By any *likelihood* he shewed to-day?
—That with no man here he is offended. *Id.*

Many of *likelihood* informed me of this before, which hung so tottering in the balance, that I could neither believe nor misdoubt. *Id. All's Well that Ends Well.*

Sir John, they are your *likeliest* men; I would have you served with the best. *Id. Henry IV.*

The prince broke your head for *likening* him to a singing man of Windsor. *Id.*

Never came trouble to my house in the *likeness* of your grace; for trouble, being gone, comfort should remain. *Shakspeare.*

There is no *likelihood* between pure light and black darkness, or between righteousness and reprobation. *Raleigh.*

Report, being carried secretly from one to another in my ship, had *like* to have been my utter overthrow. *Id.*

The trials were made, and it is *like* that the experiment would have been effectual. *Bacon.*

This desire being recommended to her majesty, it *liked* her to include the same within one entire lease. *Id.*

So was it in the decay of the Roman empire, and *likewise* in the empire of Almaigne, after Charles the Great, every bird taking a feather. *Id.*

The yearly value thereof is already increased double of that it was within these few years, and is *like* daily to rise higher till it amount to the price of our land in England. *Davies.*

Albeit an eagle did bear away a lamb in her talons, yet a raven endeavouring to do the *like* was held entangled. *Hayward.*

The *likeliest* things always succeed not. *Bp. Hall.*

One offers, and in offering makes a stay
Another forward sets, and doth no more:
A third the *like*. *Daniel's Civil War.*

Hopton resolved to visit Waller's quarters, that he might judge whether he were *like* to pursue his purpose. *Clarendon.*

He gave such an account as made it appear that he *liked* the design. *Id.*

For no falshood can endure
Touch of celestial temper, but returns
Of force to its own *likeness*. *Milton.*

His desire
By conversation with his *like* to help,
Or solace his defects. *Id. Paradise Lost.*

There let them learn, as *likes* them to despise God and Messiah. *Id.*

For who, though with the tongue
Of angels, can relate? or to what things
Liken on earth conspicuous, that may lift
Human imagination to such height
Of God-like power. *Id.*

Both in respect to the generality of men, who by them were warned, and by such examples deterred from incurring the *like* mischiefs. *Barrow.*

While man was innocent, he was *likely* ignorant of nothing that imported him to know. *Glanville.*

Though they did not *like* the evil he did, yet they *liked* him that did the evil. *Sidney.*

He proceeded from looking to *liking*, and from *liking* to loving. *Id.*

These young companions make themselves believe they love at the first looking of a *likely* beauty. *Id.*

Are we proud and passionate, malicious and revengeful? Is this to be *like*-minded with Christ, who was meek and lowly? *Tillotson.*

They roared *like* lions caught in toils, and raged:
The man knew what they were, who heretofore
Had seen the *like* lie murthered on the shore. *Waller.*

Two *likes* may be mistaken. *L'Estrange.*

His son, or one of his illustrious name,
How *like* the former, and almost the same. *Dryden's Æneid.*

Beasts can *like*, but not distinguish too,
Nor their own *liking* by reflection know. *Dryden.*

The royal soul, that, like the labouring moon,
By charms of art was hurried down;
Forced with regret to leave her native sphere,
Came but a while on *liking* here. *Id.*

He that has the prison doors set open is perfectly at liberty, because he may either go or stay, as he best *likes*. *Locke.*

What will be my confusion, when he sees me
Neglected, and forsaken *like* himself. *Philips.*

More clergymen were impoverished by the late war, than ever in the *like* space before. *Sprat.*

Scarce any man passes to a *liking* of sin in others, but by first practising it himself. *South.*

Where things are least to be put to the venture, as the eternal interests of the other world ought to be; there every, even the least, probability, or *likelihood* of danger, should be provided against. *Id.*

There are predictions of our Saviour recorded by the evangelists, which were not completed till after their deaths, and had no *likelihood* of being so when they were pronounced by our blessed Saviour. *Addison on the Christian Religion.*

Full fifteen thousand lusty fellows
With fire and sword the fort maintain;
Each was a Hercules, you tell us,
Yet out they marched *like* common men. *Prior.*

Poor Cupid, sobbing, scarce could speak,
Indeed, mamma, I do not know ye:
Alas! how easy my mistake?
I took you for your *likeness* Cloe. *Id.*

We *like* our present circumstances well, and dream of no change. *Atterbury.*

Thus, in all *likelihood*, would it be with a libertine, who should have a visit from the other world: the first horror it raised would go off, as new diversions come on. *Id.*

Spirit of vitriol poured to pure unmixed serum, coagulates as if it had been boiled. Spirit of sea-salt makes a perfect coagulation of the serum *likewise*, but with some different phænomena.

Arbuthnot on Aliments.

If the fluid be supposed to consist of heterogeneous particles, we cannot conceive how those dissimilar parts can have a *like* situation. *Bentley.*

She'd study to reform the men,
Or add some grains of folly more
To women than they had before;
This might their mutual fancy strike,
Since every being loves its *like*. *Swift.*

This plan, as laid down by him, looks *liker* an universal art than a distinct logick. *Baker.*

A few seem favourites of fate,
In pleasure's lap carest;
Yet think not all the rich and great
Are *likewise* truly blest. *Burns.*

A man to whom sculpture is new, sees a barber's block, or some ordinary piece of statuary; he is immediately struck and pleased, because he sees something *like* an human figure; and, entirely taken up with this *likeness*, he does not at all attend to its defects. *Burke on the Sublime.*

By these, and the *like* arguments, the spiritual man may raise the drooping spirits of good men in their causeless dejections. *Paley.*

Moments *like* to these
Rend men's lives into immortalities. *Byron.*

So when destruction lurks unseen,
Which men, *like* mice, may share,
May some kind angel clear thy path,
And break the hidden snare. *Barbauld.*

LIL'ACH, *n. s.* Fr. *lilas*; Span. *lila*. A shrub.

The white thorn is in leaf, and the *lilach* tree. *Bacon.*

Lilach, or Lilac. See Syringa.

LILBURNE (John), an enthusiastic English republican, born in 1618, and descended of an ancient family in Durham. He was brought up a clothier, but he gave up business in 1636, and became assistant to Dr. Bastwick, in whose sufferings he shared. In 1636 he went over to Holland to get Bastwick's Merry Liturgy printed; and on his return, in 1637, was tyrannically punished by the star-chamber court; being put in the pillory, whipped, fined, and imprisoned, and loaded with heavy irons, for publishing pamphlets, reflecting on the church of England and its bishops, particularly Prynne's News from Ipswich. In 1641 he was released by the long parliament; and from that period made himself formidable to all parties, by his bold aspiring genius. He signalized himself in the parliamentary army, in which he was made a major in 1643, and a colonel in 1644. He was at one time the secret friend and confidant of Cromwell, and at another his avowed enemy and accuser; so that, in 1650, Cromwell found it his interest to silence him by a grant of £3000 out of some forfeited estates. Yet, after this, he attacked the protector's government; became chief of the levellers; and was twice tried for high treason, but acquitted by the juries. After this he settled at Eltham, where he joined the Quakers; and died August 29th, 1657, aged thirty-nine. His funeral was attended by 4000 persons. His brother Robert was a major-general in Cromwell's army. He wrote his Christian Man's Trial, in 1637, 4to., and many similar pieces while in prison.

LILIUM, the lily, in botany, a genus of the monogynia order, and hexandria class of plants; natural order tenth, coronariæ: cor. hexapetalous and campanulated, with a longitudinal nectariferous line or furrow: caps. connected by small cancellated hairs. There are many species, all bulbous-rooted, herbaceous, flowery perennials, rising with erect annual stalks three or four feet high, garnished with long narrow leaves, and terminated by clusters of large, bell-shaped, hexapetalous flowers of exceeding great beauty, of white, red, scarlet, orange, purple, and yellow colors. All the species are propagated by sowing the seeds; and, if care is taken to preserve these seeds from good flowers, very beautiful varieties are often produced. The manner of sowing them is as follows: Some square boxes should be procured, about six inches deep, with holes bored in the bottoms to let out the wet; these must be filled with fresh, light, sandy earth; and the seeds sown upon them pretty thick in the beginning of August, and covered over about half an inch deep with light sifted earth of the same kind. They should then be placed where they may have the morning sun; and, if the weather proves dry, they must be watered at times, and the weeds carefully picked out. In October the boxes are to be removed to a place where they may have as much sun as possible, and be secured from the north and north-east winds. In spring the young plants will appear, and the boxes are then removed into their former situation. In August the smallest roots are to be emptied out of these boxes, strewed over a bed of light earth, and covered with about half an inch depth of the same earth sifted over them. Here they must be watered, shaded at times, and defended from the severity of winter by a slight covering of straw in the hardest weather. In February the surface of the bed should be cleared, and a little light earth sifted over it. When the leaves are decayed, the earth should be a little stirred over the roots; and in the month of September following some more earth sifted on. In the September of the following year the roots must be transplanted to the places where they are to remain, and set at the distance of eight inches; the roots being placed four inches below the surface: this should be done in moist weather. They will now require the same care as in the preceding winters; and, the second year after they are transplanted, the strongest roots will begin to flower. The fine ones should then be removed at the proper season into flower beds, and planted at great distances from one another, that they may flower strong. The roots of the white lily are emollient, maturating, and greatly suppurative. They are used externally in cata-

plasms for these purposes. The common form of applying them is boiled and bruised; but some prefer roasting them till tender, and then beating them to a paste with oil, in which form they are said to be excellent against burns. Gerard recommends them internally against dropsies.

L. Kamtschatense, or Kamtschatka lily, called there saranne, makes a principal part of the food of the Kamtschatkans. Its roots are gathered by the women in August, dried in the sun, and laid up for use: they are the best bread of the country; and after being baked are reduced to powder, and serve instead of flour in soups and several dishes. They are sometimes washed, and eaten as potatoes; are extremely nourishing and have a pleasant bitterish taste. The natives often parboil and beat them up with several sorts of berries, so as to form a very agreeable confection. Providentially it is a universal plant there, and all the grounds bloom with its flower during the season. Another remarkable circumstance is, that while fish are scarce the saranne is plentiful; and when it is scarce the rivers abound with fish. A species of mouse saves the Kamtschatkan women a great deal of trouble. The saranne forms part of their winter provisions; they not only gather them in the proper season, and lay them up in their magazines, but bring them out in sunny weather to dry them, lest they should spoil. The natives search for their hoards, but leave part for the owners, being unwilling to suffer such useful caterers to perish.

LILLE, a large, handsome, and strong town of France, in the department of the north (French Flanders) and the chief place of a prefecture. It is the capital of the arrondissement of the same name, being a post town, containing 64,291 inhabitants, and is situated in the midst of a fertile country, on the canal which connects the river Sensée with the sea, and on the Moyenne-Deule, which crosses it, and is navigable. Surrounded by immense fortifications, and defended by a citadel, the work of the celebrated Vauban; it is regarded as the finest remaining specimen of his skill in Europe. The streets are broad, clean, and airy, the houses well built, the squares spacious and regular, and the public edifices of singular beauty.

It was founded in 1009, by Baudouin IV. earl of Flanders; fell into the hands of Philip the Fair in 1296, after a siege of three months; and was retaken by Guy earl of Flanders in 1302. The protestants attempted in vain to surprise it in 1581, and in 1645 the French were equally unsuccessful. Being taken from the Spaniards on the 27th of April 1667, and retaken by the allies in 1708, after a very long and obstinate siege, it was yielded to France by the treaty of Utrecht. The Austrians bombarded it from the 29th of September to the 6th of October 1792; but the garrison, aided by the courage of the inhabitants, forced them to raise the siege. The manufactures consist of unbleached and bleached coarse linen, ticking, calicoes, table linen, handkerchiefs, and printed cottons. It has also factories for thread, for sewing and lace-making; cloths, camlets, waggoners' frocks, wool-combing, lace-making, stay-laces cotton yarn, white lead, powder blue, soap, and ropes. There are many distilleries of brandy from corn; salt and sugar refining houses; oil mills; bleaching grounds; starch, paper, glass and porcelain manufactories; and tanning and currying yards. It has likewise a royal factory for the refining of saltpetre, and in the neighbourhood there are more than 200 wind-mills for the preparation of oil. It carries on a considerable trade in linens, thread, flax, lace, spun cotton, combed wool, corn, oils, tobacco, madder, endive, coffee, colonial produce, spices, wines, brandy, hollands, &c. Among its public buildings and institutions may be mentioned, the public library, containing 18,000 volumes, the museum of pictures, the citadel, the arsenal, the depôt of arms, the town hall, the infirmary, the circus, the markets, and the botanical garden. It is 168 miles north of Paris, fifty-seven south-east of Dunkirk, fifty-seven north-west of Mons, seventy-five W. S. W. of Brussels, twenty-four north of Douay, and thirty-three N. N. E. of Arras.

LILLERS, a town of France, in the department of the Straits of Calais, and ci-devant province of Artois; ceded to France by Spain at the peace of the Pyrenees, when its fortifications were demolished. It is seated on the Navez, six miles north-west of Bethune and seventeen of Arras. Long. 2° 35′ E., lat. 50° 30′ N.

LILLO (George), a celebrated dramatic writer, born in London in 1693. He was a *jeweller* by profession, and followed his business for many years in that neighbourhood with reputation. His George Barnwell, Fatal Curiosity, and Arden of Feversham, are all planned on common and well known stories; yet they have perhaps oftener drawn tears from an audience than more pompous tragedies. He died in 1737, in the forty-seventh year of his age. His works were published, with his Life, in 2 vols 12mo., by Mr. T. Davis.

LILLY, or Lylly (John), a dramatic poet, born in Kent, about 1553, and educated in Magdalen College, Oxford, where he took the degree of A. B. in 1573, and that of M. A. in 1575. From Oxford he removed to Cambridge, and thence to London, where he became acquainted with some of queen Elizabeth's courtiers, by whom he was caressed as a poet and a wit, and on particular festivals the queen honored his dramatic pieces with her presence. He wrote nine plays, but his first publication, printed in 1580, was a romance, which was called Euphues, and which was universally read and admired. 'Lilly was,' says Oldys, 'a man of great reading, good memory, ready faculty of application, and uncommon eloquence; but he ran into a vast excess of allusion.' When or where he died is not known. Wood says he was living in 1597, when his last comedy was published. After attending the court of queen Elizabeth thirteen years, notwithstanding his reputation as an author, he was under a necessity of petitioning the queen for support in his old age. His two letters to her majesty on that subject are preserved in MS

Lilly (William), a noted English astrologer, born in Leicestershire in 1602. He arrived in London in 1620, and lived four years as a ser-

vant to a mantua-maker; after which he entered into the service of Mr. Wright, master of the Salters' Company, who not being able to write, Lilly kept his books. In 1627, his master dying, he married the widow, with a fortune of £1000. Being now his own master, he followed the puritanical preachers; and, turning his mind to judicial astrology, became pupil to one Evans, a Welsh parson, in that pretended art. He was the author of The Book of Fortune; Merlinus Anglicus junior; The Supernatural Sight; and The White King's Prophecy. In him we have an instance of the general superstition that prevailed during the civil war between Charles I. and his parliament; for the king consulted this astrologer to know in what quarter he should conceal himself, if he could escape from Hampton Court; and general Fairfax, on the other side, sent for him to ask, whether God was with them and their cause? In 1648 he published his Treatise of the three Suns seen the preceding winter; and also an astrological judgment upon a conjunction of Saturn and Mars. This year the council of state gave him £50, and a pension of £100 per annum, which he received for two years, and then resigned on some disgust. In June 1660 he was taken into custody by order of the parliament, by whom he was examined concerning the person who cut off the head of Charles I. The same year he sued out his pardon under the great seal of England. The plague raging in London, he removed with his family to his estate at Hersham; and in October 1666 was examined before a committee of the house of commons concerning the fire of London, which happened in September that year. After this he studied physic, and, by means of Mr. Ashmole, obtained from archbishop Sheldon a license to practise it. He adopted for his son, by the name of Merlin junior, one Henry Coley, a tailor, and gave him the property of his almanac after it had been printed for thirty-six years. He died in 1681, of a dead palsy. Mr. Ashmole erected a monument over his grave in the church of Walton upon Thames. His Observations on the Life and Death of Charles, late King of England, if we overlook the astrological nonsense, may be read with as much satisfaction as more celebrated histories, Lilly being not only well informed, but strictly impartial. This work, with the Lives of Lilly and Ashmole, written by themselves, were published in 1 vol. 8vo. in 1774, by Mr. Burman.

LIL'Y, *n. s.*
LIL'IED, *adj.*
LIL'YLIVERED, *adj.* } Lat. *lilium*. A flower: lilied, abounding with lilies: lilylivered, white-livered; cowardly.

Biholde ye the *lilies* of the feeld hou thei weren, thei traveilen not neither spynnen.
Wiclif. Matt. vi.

I am the rose of Sharon and the *lily* of the valleys.
Cant. ii. 1.

O rubi cunde rose, and white as the *lyly*,
Clarified chrystal of worldly portraiture!
O courfin figure, resplendent with glory,
Geme of beauti! o carbuncle shining pure!
Your faireness exceedeth the craft of nature.
Chaucer's Balades.

Shipwrecked upon a kingdom, where no pity!
No friends! no hope! no kindred weep for me!
Almost no grave allowed me! Like the *lily*,
That once was mistress of the field, and flourished,
I'll hang my head, and perish. *Shakspeare.*

A base, *lilylivered*, action-taking knave.
Id. King Lear.

Arnus, a river of Italy, is drawn like an old man, by his right side a lion, holding forth in his right paw a red *lily*, or flower-de-luce.
Peacham on Drawing.

Nymphs and shepherds dance no more
By sandy Ladon's *lilied* banks. *Milton.*

Lily of the valley has a strong root that runs into the ground. *Mortimer's Husbandry.*

Take but the humblest *lily* of the field;
And if our pride will to our reason yield,
It must by sure comparison be shown,
That on the regal seat great David's son,
Arrayed in all his robes, and types of power,
Shines with less glory than that simple flower.
Prior.

For her the *lilies* hang their heads, and die. *Id.*

There are thirty-two species of this plant, including white *lilies*, orange *lilies*, red *lilies*, and martagons of various sorts. *Miller.*

Now blooms the *lily* by the bank,
The primrose down the brae;
The hawthorn's budding in the glen,
And milk-white is the slae. *Burns.*

What scenes of glory rise
Before my dazzled eyes!
Young Zephyrs wave their wanton wings,
And melody celestial rings:
Along the *lilied* lawn the nymphs advance,
Flushed with love's bloom, and range the sprightly dance. *Beattie.*

And her dead drooped as when the *lily* lies
O'ercharged with rain. *Byron.*

To be enfolded to this desolate heart—
A blighted *lily* on its icy bed—
Nay, look not up, 'tis thus I would behold thee.
Maturin.

LILY, in botany. See LILIUM, and AMARYLLIS.

LILY, HYACINTH. See SCILLA.

LILY OF THE VALLEY. See CONVALLARIA.

LILYBÆUM, in ancient geography, a city of Sicily, seated on the most westerly cape of Sicily, and said to have been founded by the Carthaginians, on their expulsion from Motya by Dionysius tyrant of Syracuse. It sustained three sieges; one by Dionysius, another by Pyrrhus king of Epirus, and the third by the Romans. The first two failed in their attempts, but the Romans made themselves masters of it, though with no small difficulty. No remains of this once stately city are now to be seen, except some aqueducts and temples; though it was standing in Strabo's time.

LILYE (William), the grammarian, was born in 1466 at Oldham in Hampshire; and in 1486 was admitted a semi-commoner of Magdalen College, in Oxford. Having taken the degree of A. B. he left the university, and travelled to Jerusalem. Returning thence, he continued five years in Rhodes, where he studied the Greek, several learned men having retired thither after the taking of Constantinople. From Rhodes he travelled to Rome; where he improved himself in the learned languages, under Sulpitius and P. Sabinus. He then returned to London, where for some time he taught a private grammar-school, being the first person, it is said, who taught

Greek in this metropolis. In 1510, when Dr. Colet founded St. Paul's school, Lilye was appointed the first master; at which time he was married and had many children. In this employment he had labored twelve years, when being seized by the plague, which then raged in London, he died in February 1523, and was buried in St. Paul's. He had the character of an excellent grammarian, and a successful teacher. His principal work is Brevissima Institutio, seu ratio Grammatices Cognoscendæ; London, 1513, very often reprinted, and commonly called Lilye's Grammar. The English rudiments were written by Dr. Colet, dean of St. Paul's; and the preface to the first edition by cardinal Wolsey. The Latin syntax was chiefly the work of Erasmus. The rest was written by Lilye. See Ward's preface to his edition of Lilye's Grammar, 1732.

LIMA, a province of Peru, bounded on the north by Truxillo, east by Tarma and Guancavelica, west by the Pacific, and south by Arequipa. Its principal districts are Lima Proper, Chancay, Huarachiri, Canta, Canete, Ica, Pisco, and Nasca. Rain is seldom or never known to fall on the west of the Cordillera of the Andes, which runs along its eastern side; and on the sea coast the climate is intensely warm, but towards the interior it becomes milder and more salubrious. The wealth of the province greatly consists in the produce of the mines of Tarma, which are worked by proprietors in Lima; but agriculture is not neglected, and the new and more liberal institutions of South America are no where more highly appreciated.

LIMA (or in the Indian language Rimai), the capital of the above province, and of Peru, has also been called by way of eminence Ciudad de los Reyes, or the City of Kings, and was founded by the celebrated Francisco Pizarro, in the beginning of the sixteenth century. It stands in the valley of Rimai and on the river of that name, both called after the name of an idol, who was here said to afford auricular responses to his votaries, the word Rimai signifying to speak. Over the river, which when not flooded is small, is an elegant stone bridge, having at one end a gate which forms an entrance into the city by the grand square. The form of the city is triangular; the base, or longest side, extending along the banks of the river, being about 1920 toises, or exactly two-thirds of a league, in length. Its greatest breadth from north to south, that is, from the bridge to the angle opposite to the base, is 1080 toises, or two-fifths of a league. It is surrounded with a brick wall, flanked with thirty-four bastions, without platforms or embrasure; the intention of it being merely to enclose the city against any sudden attack of the Indians. It has, in its whole circumference, seven gates and three posterns. On the other side of the river is a suburb called St. Lazaro.

The pavement of the streets, which are all built at right angles, is formed of small rounded stones washed down from the mountains, extremely fatiguing to walk over; all those in the direction of east and west have a small stream of water running down them. The suburb alluded to is inhabited by the less respectable part of the community. The plaça, or great square, is said to be 500 feet above the Pacific, the cabildo occupies one side. It is a building very much in the Chinese style, and in front of it is the cathedral, a very handsome pile. The riches which have been lavished at various times upon the interior of this edifice are scarcely to be credited any where, says Mr. Caldcleugh, but in a city which once paved a street with ingots of silver to do honor to a new viceroy. The balustrades surrounding the great altar, and the pipes of the organ, were of silver. It may be mentioned, as a proof of the abundance of silver ornaments, that three weeks prior to my arrival a ton and a half of silver was taken from the various churches, without being missed, to meet the exigencies of the state.'

This writer notices the church of San Pedro as remarkable for its architecture, and the small church built by Pizarro, which has never been totally ruined by the earthquakes, and which is situate abajo de la puente. Of the monastic establishments, which are very numerous and of singular extent and splendor, the convent of the Franciscans seems most worthy of attention. It is calculated to cover an eighth part of the whole city. The usual number of its inmates is only however about 160. Other public buildings worthy of notice are the palace of the archbishop, the mint, the famous palace of the inquisition, and a noble establishment for retired secular clergymen, adjoining the church of San Pedro. The former college of the Jesuits is converted into a foundling hospital. On the right bank of the river a late viceroy laid out large sums in forming a public walk called the Paseo d'Agua; at the termination of it the bull-ring is seen. Another object which strangers are directed to visit is the Pantheon, or burial place of a part of the city. It is surrounded and divided by walls with niches for the reception of the dead. The funeral service is performed in the church which adjoins.

Several years ago a municipal regulation was published to prevent the towers of the churches being constructed of any other materials than wood and painted canvas, in order to obviate the horrors which occurred during earthquakes: latterly they have been built of clay, which in time takes the hardness of stone. For the same reason the houses have rarely an upper story. when they have, an overhanging wooden balcony is attached to the windows: they are all constructed of unburnt bricks, with a court and garden in the rear. The walls of the court and gateway are covered with fresco paintings; and when there is a dead wall in front it is often decorated in the same way. The rooms are gaudily adorned with gold and silver, and the floors are generally tiled; an estrada or long narrow sofa fills up one side, before which is a piece of carpet. The roofs of all the houses are perfectly flat, and are merely composed of lath and plaster.

Mr. Caldcleugh, who was here in 1818, supplies us with the following lively picture of the manner of the inhabitants: 'The nobility and higher orders of the clergy appeared to live in some style, and drove about in their caleches

richly gilt, and drawn by one horse at a foot pace. The streets were at all times full of monks, the whole number of whom in the city is computed at nearly 1100. They still preserve that custom of begging which, until a few years ago, distinguished the cloistered inhabitants of Europe, and proved so annoying to travellers. Latterly the viceroy, finding the army in want of recruits, threw every difficulty in the way of professing. The influence of religion is considerable; one order, that of Buena Muerte, is distinguished by the black gown and large red cross on the left arm. As these friars have the peculiar privilege of attending persons in their last moments, they are mounted on mules, and are seen at all times galloping about the city and running a race with death. The convents for women consist of fourteen, with a rental of not less than 150,000 dollars. Independently of these are several establishments of Beatas (sœurs de la charité) and of Casas de Exercicio, where ladies, leaving their families, shut themselves up for two or three weeks at a time, in order to submit themselves to a stricter discipline in fasting and prayer than they can observe in their own houses.

'As a university has existed in Lima since the year 1551 (the most ancient consequently of the New World), as well as many other establishments for learning, besides many private schools; and as, in addition to these reasons, the Spaniards sent to Lima were always of a better class and more educated than those who went to Buenos Ayres, Chile, and New Granada, literature has been by no means overlooked, and several works published in Lima have been much sought after. The opportunities of acquiring information in Lima are so numerous that the generality of men are well informed and polite.

'The ladies have also the full benefit of the various nunneries and establishments for instruction, which abound in this capital. They are generally endowed with great beauty, and their figures boast that rich fulness of person which is the truest symptom of health in a warm country. They have very small feet and ancles, and no means are resorted to to produce this effect. Their persons are shown to great advantage in the usual walking-dress, the saya and manto. The former is composed of an elastic silk petticoat, like a stocking, which is drawn over the head down to the ancles, and then fastened round the waist with a buckle;—this is the saya. It is usually worn of a deep blue, black, or cinnamon color. Its elasticity makes it sit perfectly tight, showing the contour of the person; and some ladies wear it so contracted at the ancles that they can scarcely step over the little streams which run down the streets. The manto is formed of a large square piece of black silk, which is first placed behind, and two strings attached to the corners are tied in front, it is then brought over the back of the head down to the waist, and held there by the arms, which are enveloped in it. One eye is alone visible, and generally the left. It appears at first impossible to recognise one's acquaintance in the streets in this costume, but custom soon overcomes the difficulty. This is the walking dress of all the respectable persons, indeed of every class above the menial slaves, and they may be seen occasionally with an old saya tha does not fit them, which belonged to their mistress. An Englishman, who arrived at Lima during my stay there, observed a remarkably fine figure in the street, and determined to find out her abode. He followed her down several streets, and as she entered her house she threw back her manto, and to his great regret he discovered a black face. I am informed that the ladies wear during the warm months, under the saya and manto, merely a shift finely ornamented with lace, and a neckerchief. The ladies, when concealed in this dress, are termed tapadas, and the appearance of so many in the streets is not a little extraordinary.

'In the house the costume partakes more of the ordinary fashion of Spain than of France. The hair is ornamented with flowers, and a black veil is thrown back on the head. The manners of the ladies are extremely agreeable, and they are as kind and attentive to foreigners as the Spanish women every where show themselves. In their persons they are extremely cleanly, taking the cold bath several times a day, although it must be stated that they smoke a little, and occasionally take snuff. They get rid of the unpleasantness which attends the former operation by chewing paper. It is not unusual for them to smoke a little at the theatre, but they always choose small cigars, and, placing their fan before them, retire to the back of the box. This custom may be therefore considered on the wane. It proceeds in a great measure from the almost constant fogs which prevail in Lima, and from an idea, not without foundation, that it prevents stomach attacks. The habits of the people have generally a tropical turn in every thing. Dances are not so common as in Chile, nor any of those games so prevalent in that country. Cards, chess, and music, which require little exertion, and sitting tranquilly at the bull ring, are the more usual enjoyments of Lima. The people of rank rise early, and their slaves bring them directly a light breakfast of chocolate and fruit; sometimes, it must be confessed, stewed meat is added. Dinner takes place about two o'clock, and consists of excellent fish, meat dressed in a variety of ways, and highly seasoned. The wine is either Peruvian or European. The siesta follows until six o'clock, and about nine o'clock a cup of chocolate forms their supper. At evening parties, which are of constant occurrence, punch is the more usual beverage.' Before the earthquake in 1687, when this city suffered so dreadfully, the harvests of wheat and barley were sufficient to supply the country around without importation; but by this convulsion of nature the soil was so vitiated, that the wheat rotted soon after it was sown, occasioned it is supposed by the vast clouds of sulphureous particles exhaled, and the prodigious quantities of nitrous effluvia diffused through it. The land continued forty years in this state of sterility, when the husbandmen began to perceive an alteration, and upon trial, wheat was now found to thrive as before. The olive plantations appear like forests; the height, magnitude, and fulness of their leaves exceed those of Spain. The grapes are of various kinds, and among them one, called the Italian, is very delicious.

The bread at Lima is said to be the best in all this part of America. Mutton is the most common and palatable meat, though the beef also is good. Here is also plenty of poultry, partridges, turtle-doves, &c.; and pork is in great abundance. Of fish there is a great variety daily brought from the neighbouring parts. Most of the dried fruits are brought from Chili. Among the most noted of the manufactures to be met with here are articles of silver filagree of exquisite workmanship, which are chiefly made in Huamanga, consisting of animals, and devices for burning pastilles, holding fruit, &c. The workmen are of a mixed race, like the greater proportion of those exercising handicrafts in the city.

Another noted fabric of this place and neighbourhood is that of a species of grass, bleached and plaited into various articles, such as pouches and cigar cases, of extreme regularity and fineness. Hats of the same material, but coarser, are exported in large quantities. The raw material grows on the coast to the northward in profusion. The pastilles of Lima are also very celebrated and much used to drive away insects. But, whether the latter have become accustomed to them I know not, says the traveller we have already quoted: these insects may be considered the only plagues of this part of the world. The mosquito is not so troublesome as in other warm countries, but fleas of more than usual size and activity try the tempers, not only of foreigners but of the natives, who make war upon them in every way. I never saw such numbers of these disgusting and annoying insects in any other place; they swarmed like flies on the sea beach. The other entomological production incident to beds (to use the expression of the worthy doctors Hoppe and Hornschuch in their erudite travels), it must be confessed is far too numerous. Dr. Unanue asserted that insects were not more common in Lima than in the large cities of Europe, and that in Paris alone there were upwards of seventy species of cimex; but after making every allowance for climate and want of rain, I was obliged to give him credit for a large stock of the 'amor patriæ.' The earthquakes to which this country is so subject, have more than once involved Lima in almost total ruin. The first concussion, after the establishment of the Spaniards in these parts, happened in 1582, a few years after its foundation and was chiefly felt at Arequipa. One on the 9th of July, 1586, is solemnly commemorated. In 1609 was another. On the 27th of November 1630 such prodigious damage was done that it is noted by a festival annually. In 1655, on the 3d of November, the inhabitants fled into the country, and remained there several days, to avoid the threatening danger. On the 17th of June 1678 another earthquake happened, by which several houses were destroyed, and the churches much damaged: but one of the most dreadful of which we have any account was that of the 20th of October 1687. During this concussion the sea retired considerably from its bounds, and, returning in immense waves, totally overwhelmed Callao, and the neighbouring parts. Others happened on the 29th of September 1697; on the 14th of July 1699; the 6th of February 1716; on the 8th of January 1725; and on the 2d of December 1732; in the years 1690, 1734, and 1745. These, however, were less terrible than one on the 28th of October 1746. In little more than three minutes the greatest part, if not all the buildings, great and small, in the whole city, were destroyed on this occasion, burying under their ruins those inhabitants who had not made sufficient haste into the streets and squares. European goods in greatest request in Lima, and Peru, are silk, superfine cloth, lace, and fine linen. There is also a considerable demand for ordinary linen, and for all the inferior cloths and woollens, cutlery, and hardware. The inhabitants amount to about 70,000. See America, South. Lima is about two leagues from the sea-coast, and thirty from the Cordilleras.

LIMASSOL, or Limisso, a town of Cyprus, in the south of the island. Of the ancient city nothing but ruins remain, though it was a celebrated place, even under the government of the dukes. King Richard I., the conqueror of the last of these vassals of the empire, raised it in 1191, and it was never rebuilt. It was the ancient Amathus, or Amathonte; famous, as Pausanias tells us, for its temple of Venus and Adonis; and was the residence of the first nine kings of Cyprus. It was erected into an archbishopric in the time of the Christians, and has produced a number of personages celebrated for their learning and sanctity. Near it are copper mines, which the Turks have been forced to abandon.

Ovid takes notice of its metals in the Metamorphoses, lib. X. ver. 220 and 531: where he styles it 'fœcundam, gravidamque Amathunta metallis;' and where he relates the metamorphosis of its inhabitants into wild bulls, on account of their ferocious barbarity in sacrificing all strangers to Jupiter. (Fab. vi.) The place where Limassol stands had also formerly had the name of Nemosia, from the many woods which surrounded it. Richard I. king of England, having destroyed Amathonte, Guy de Lusignan in the twelfth century laid the foundations of a new city, which the Greeks called Neopoleos. The family of Lusignan, which continued to embellish and fortify it, built palaces, and Greek and Latin churches; and made it the seat of a bishop. When Cyprus was taken by the Turks, in July 1570, they plundered and burnt this city. The harbour is commodious, and, being sheltered from impetuous winds, affords a safe asylum to vessels overtaken by a storm. The best Cyprus wine is made from the vines on the hills of Limassol.

LIMAX, the slug, or naked snail, a genus of insects belonging to the order of vermes mollusca. The body is oblong, fitted for crawling, with a kind of muscular coat on the upper part; and the belly is plain. They have four tentacula, or horns, situated above the mouth, which they extend or retract at pleasure. This reptile is always destitute of shell; but besides that its skin is more clammy, and of a greater consistency than that of the snail, the black naked slug has a furrowed cloak, almost as thick and as hard as leather, under which it withdraws its head as within a shell.

The head is distinguished from the breast by a black line. In its head and back the snail-stone is found; which is a small pearled and sandy stone, of the nature of limestones: according to a popular opinion, it cures the tertian ague, if fastened to the patient's arm. These slugs move on slowly, leaving every where clammy and shining marks of their passage. They come together about the end of spring. They deposit their eggs in the earth. There are eight species, distinguished entirely by their color; as the black, the white, the reddish, the ash-colored slug, &c. The black slug is hermaphrodite. A black slug powdered over with snuff, salt, or sugar, falls into convulsions, casts forth all its foam, and dies.

LIMB, *n. s.* & *v. a.* } Sax. lım; Scott. *lim*, LIMBED, *adj.* } *lem;* Swed. and Belg. *lem*. A member; a jointed or articulated part of animals: to supply with limbs; and, strangely enough, to tear them off, or to dismember

A second Hector, for his grim aspect,
And large proportion of his strong knit *limbs*.
Shakspeare.

O! that I had her here, to tear her *limb* meal?
Id.

Now am I come each *limb* to survey,
If thy appearance answer loud report.
Milton's Agonistes.

As they please,
They *limb* themselves, and colour, shape, and size
Assume, as likes them best, condense, or rare.
Milton.

A steer of five years age, large *limbed*, and fed,
To Jove's high altars Agamemnon led.
Pope's Iliad.

Chill horror the dissolving *limbs* invades;
Smit by the blasting lightning of his eyes,
A bloated paleness beauty's bloom o'erspreads,
Fades every flowery field, and every verdure dies.
Beattie.

'Bring forth the horse!'—the horse was brought;
In truth he was a noble steed,
A Tartar of the Ukraine breed,
Who looked as though the speed of thought
Were in his *limbs*.
Byron.

LIMB, *n. s.* Fr. *limbe;* Lat. *limbus*. An edge; a border; a philosophical term.

By moving the prisms about, the colours again emerged out of the whiteness, the violet and the blue at its inward *limb*, and at its outward *limb* the red and yellow. *Newton.*

LIM'BECK, *n. s.* Corruption of ALEMBIC, which see. A still.

Her cheeks, on which this streaming nectar fell,
Stilled through the *limbeck* of her diamond eyes.
Fairfax.

Fires of Spain, and the line,
Whose countries *limbecks* to our bodies be,
Canst thou for gain bear? *Donne.*

The earth, by secret conveyances, lets in the sea, and sends it back fresh, her bowels serving for a *limbeck*. *Howel.*

Call up, unbound,
In various shapes, old Proteus from the sea,
Drained through a *limbeck* to his naked form.
Milton.

He first surveyed the charge with careful eyes,
Yet judged, like vapours that from *limbecks* rise,
It would in richer showers descend again.
Dryden.

The warm *limbeck* draws
Salubrious waters from the nocent brood.
Philips.

LIM'BER, *adj.* From limb. Flexible; easily bent or twisted.

You put me off with *limber* vows. *Shakspeare.*

At once came forth whatever creeps the ground,
Insect, or worm; those waved their *limber* fans
For wings; and smallest lineaments exact
In all the liveries decked of summer's pride.
Milton.

She durst never stand at the bay, having nothing but her long soft *limber* ears to defend her.
More on Atheism.

The muscles were strong on both sides of the aspera arteria, but on the under side, opposite to that of the œsophagus, very *limber*. *Ray on Creation.*

I wonder how, among these jealousies of court and state, Edward Atheling could subsist, being the indubitate heir of the Saxon line: but he had tried, and found him a prince of *limber* virtues; so as though he might have some place in his caution, yet he reckoned him beneath his fear. *Wotton.*

LIM'BO, *n. s.* Ital. *limbo;* Lat. *limbus*. Eo quod sit limbus inferorum. Du Cange. According to the Romish writers, a region bordering upon hell, in which there is neither pleasure nor pain. Popularly hell; and hence any place of restraint or misery.

Oh, what a sympathy of woe is this!
As far from help as *limbo* is from bliss.
Shakspeare.

All these up-whirled aloft
Fly o'er the backside of the world far off,
Into a *limbo* large, and broad, since called
The paradise of fools. *Milton's Paradise Lost.*

For he no sooner was at large,
But Trulla straight brought on the charge;
And in the self-same *limbo* put
The knight and squire, where he was shut.
Hudibras.

Friar, thou art come off thyself, but poor I am left in *limbo*. *Dryden's Spanish Fryer.*

LIMBORCH (Philip), a learned writer among the Remonstrants, born at Amsterdam in 1633. After having made great proficiency in his studies, he was, in 1655, licensed to preach, which he did first at Haerlem. He was chosen minister of Goudja, whence he was called to Amsterdam, and appointed professor of divinity, in which office he acquired great reputation. He had great talents, and a tenacious memory; and corresponded with the most eminent men of his age. His letters to Mr. Locke are printed with those of that celebrated author. He preserved his vigor of body and mind till he died, in 1712, aged seventy-nine. He wrote many works, the principal of which are, 1. Amica collatio de veritate religionis Christianæ cum erudito Judæo, in 12mo. 2. A complete body of Divinity, according to the opinions and doctrines of the Remonstrants. 3. A history of the Inquisition; translated into English by Dr. Samuel Chandler.

LIMBURG, a province of the Netherlands, bounded by Prussia, and the provinces of Liege, Antwerp, South and North Brabant. It has a territorial extent of 1500 square miles; and though a flat and marshy yet fruitful soil, which rears corn, flax, and tobacco in considerable quantities. Here is also very rich pasturage, and numerous herds of cattle. Its coal mines pro-

duce annually about 150,000 tons; and there are also mines of calamine and iron. The capital is Maestricht.

LIMBURG, a town of the Netherlands, in the province of Liege, and celebrated for its cheese, is seated on a steep rock near the Vesse, among shady woods: it consists chiefly of one broad street. It was taken by the French in 1675, and by the confederates under the duke of Marlborough in 1702. It contains about 30,000 inhabitants, and lies eighteen miles south-east of Liege.

LIMBUS, in the church of Rome, is used in two different senses: 1. The limbus patrum, or limbus of the patriarchs, is said to be the place where the patriarchs waited for the redemption of mankind: in this place they suppose our Saviour's soul continued from the time of his death to his resurrection. 2. The limbus of infants dying without baptism is a place supposed to be distinct both from heaven and hell; since, say the Catholics, children dying innocent of any actual sin do not deserve hell; and, by reason of their original sin, cannot be admitted into heaven.

LIME, *n. s.* Sax. lınd; Lat. *tilia.* The linden tree: also Fr. *lime;* Span. *lima;* a species of lemon.

For her the *limes* their pleasing shades deny,
For her the lilies hang their heads and die.
Pope.

Bear me, Pomona! to thy citron groves!
To where the lemon and the piercing *lime,*
With the deep orange glowing through the green,
Their lighter glories blend. *Thomson's Summer.*

LIME, *n. s.* & *v. a.* LIME'KILN, *n. s.* LIME'STONE, LIME'WATER, LI'MOUS, *adj.* LI'MY. } Sax. lıme; Goth. *lim;* Swed. *lijm;* Lat. *limus,* slime. A viscous vegetable substance with which twigs were smeared formerly to catch birds; a calx of stone, of which mortar is made: to lime, to smear or spread with lime; to entangle; entrap. The other words are explained in the extracts.

And the people shall be as the burnings of *lime.*
Isaiah xxxiii. 12.

But for al this, whan that he seeth his time,
He held his pees, non othir bote him gained,
For love began his fethers so to *lime,*
That wel unneth unto his folke he fained
That other besy nedis his distrained.
Chaucer. Troilus and Cresside.

Laws are not made like *lime*-twigs or nets, to catch at every thing that toucheth them, but rather like sea-marks, to guide from shipwreck the ignorant passenger. *Sir P. Sidney.*

Striving more, the more in laces strong
Himself he tied, and wrapt his winges twain
In *limy* snares, the subtil loops among.
Spenser.

You must lay *lime,* to tangle her desires,
By wailful sonnets, whose composed rhimes
Should be full fraught with serviceable vows.
Shakspeare.

The bird that hath been *limed* in a bush,
With trembling wings misdoubteth every bush
And I, the hapless male to one sweet bird,
Have now the fatal object in my eye,
Where my poor young was *limed,* was caught, and
Id.

I will not ruinate my father's house,
Who gave his blood to *lime* the stones together,
And set up Lancaster. *Id. Henry VI.*

The counter gate is as hateful to me, as the reek of a *lime-kiln.* *Id. Merry Wives of Windsor.*

They were now, like sand without *lime,* ill bound together, especially as many as were English, who were at a gaze, looking strange one upon another, not knowing who was faithful to their side. *Bacon.*

Jollier of this state
Than are new-beneficed ministers, he throws,
Like nets or *lime* twigs, whereso'er he goes,
His title of barrister on every wench. *Donne.*

That country became a gained ground by the muddy and *limous* matter brought down by the Nilus, which settled by degrees unto a firm land.
Browne's Vulgar Errours.

Encouragement that abatement of interest gave to landlords and tenants, to improve by draining, marling, and *liming.* *Child.*

Then toils for beasts, and *lime* for birds were found,
And deep-mouthed dogs did forest walks surround.
Dryden.

A thrush was taken with a bush of *lime* twigs.
L'Estrange.

All sorts of pease love *limed* or marled land.
Mortimer.

Fire stone and *lime stone,* if broke small and laid on cold lands, must be of advantage. *Id.*

Lime is commonly made of chalk, or of any sort of stone that is not sandy, or very cold. *Id.*

A human skull covered with the skin, having been buried in some *limy* soil, was tanned, or turned into a kind of leather. *Grew's Musæum.*

They were found in a *lime-kiln,* and having passed the fire, each is a little vitrified. *Woodward.*

They esteemed this natural melancholick acidity to be the *limous* or slimy fœculent part of the blood.
Floyer.

Or court a wife, spread out his wily parts,
Like nets or *lime* twigs, for rich widows' hearts.
Pope.

As when a lofty pile is raised,
We never hear the workmen praised,
Who bring the *lime,* or place the stones,
But all admire Inigo Jones. *Swift.*

Lime-water, made by pouring water upon quick *lime,* with some other ingredients to take off its ill flavour, is of great service internally in all cutaneous eruptions, and diseases of the lungs. *Hill.*

A knowledge of the first principles of chemistry will teach him when to use *lime* hot from the kiln, and when slacked. *Parkes's Chemistry.*

What is called poor *lime* has this peculiar property ; but as this species of *limestone* rarely occurs, it is often an expensive article. *Id.*

LIME. See CHEMISTRY and CALCIUM. The most important compounds of lime will be found noticed under the different acids, combustibles, &c. We shall therefore only now notice its use as a cement. There are two modes in which lime acts as a cement; in its combination with water, and in its combination with carbonic acid.

When quicklime is rapidly made into a paste with water it soon loses its softness, and the water and the lime form together a solid coherent mass, which consists of one part of water to three parts of lime. When hydrate of lime, whilst it is consolidating, is mixed with red oxide of iron, alumina, or silica, the mixture becomes *harder* and more coherent than when lime alone is used; and it appears that this is owing to a

certain degree of chemical attraction between hydrate of lime and these bodies; and they render it less liable to decompose by the action of the carbonic acid in the air, and less soluble in water.

The basis of all cements that are used for works which are to be covered with water must be formed from hydrate of lime: and the lime made from impure lime-stones answers this purpose very well. Puzzolana is composed principally of silica, alumina, and oxide of iron; and it is used mixed with lime to form cements intended to be employed under water. Mr. Smeaton, in the construction of the Eddystone light-house, used a cement composed of equal parts by weight of slaked lime and puzzolana. Puzzolana is a decomposed lava. Tarras, which was formerly imported in considerable quantities from Holland, is a mere decomposed basalt; two parts of slaked lime and one part of tarras form the principal part of the mortar used in the great dykes of Holland. Substances which will answer all the ends of puzzolana and tarras are abundant in the British Islands. An excellent red tarras may be procured in any quantities from the Giant's Causeway, in the north of Ireland; and decomposing basalt is abundant many parts of Scotland, and in the northern districts of England in which coal is found.

Parker's cement, and cements of the same kind made at the alum works of lord Dundas and lord Mulgrave, are mixtures of calcined ferruginous, siliceous, and aluminous matter, with hydrate of lime. See CEMENT.

The cements which act by combining with carbonic acid, or the common mortars, are made by mixing together slaked lime and sand. These mortars at first solidify as hydrates, and are slowly converted into carbonate of lime by the action of the carbonic acid of the air. Mr. Tennant found that a mortar of this kind, in three years and a quarter, had regained sixty-three per cent. of the quantity of carbonic acid gas, which constitutes the definite proportion in carbonate of lime. The rubbish of mortar from houses owes its power to benefit lands principally to the carbonate of lime it contains, and the sand in it; and its state of cohesion renders it particularly fitted to improve clayey soils. The hardness of the mortar, in very old buildings, depends upon the perfect conversion of all its parts into carbonate of lime. The purest lime-stones are the best adapted for making this kind of mortar: the magnesian limestones make excellent water cements, but act with too little energy upon carbonic acid gas to make good common mortar.

The Romans, according to Pliny, made their best mortar a year before it was used; so that it was partially combined with carbonic acid gas before it was employed.

In burning lime there are some particular precautions required for the different kinds of limestones. In general, one bushel of coal is sufficient to make four or five bushels of lime. The magnesian limestone requires less fuel than the common limestone. In all cases in which a limestone containing much aluminous or siliceous earth is burnt, great care should be taken to prevent the fire from becoming too intense; for such lime easily vitrifies, in consequence of the affinity of lime for silica and alumina. And, as in some places there are no other limestones than such as contain other earths, it is important to attend to this circumstance. A moderately good lime may be made at a low red heat; but it will melt into a glass at a white heat. In limekilns, for burning such lime, there should be always a damper.

In general, when limestones are not magnesian, their purity will be indicated by their loss of weight in burning; the more they lose, the larger is the quantity of calcareous matter they contain. The magnesian limestones contain more carbonic acid than the common limestones; and all of them lose more than half their weight by calcination. See CHEMISTRY.

LIME, CHLORIDE OF, the more scientific and proper name of the bleaching powder of Mr. Tennant, commonly called oxymuriate of lime, see CHEMISTRY and CHLORINE. The following account of its manufacture and the methods of ascertaining its purity, from a paper communicated to the Journal of Science and the Arts by Dr. Ure in 1823, may not be unacceptable to some of our readers. 'A great variety of apparatus,' says that writer, 'has been at different times contrived to assist the combination of chlorine with slacked lime, for the purposes of commerce. One of the most ingenious forms was that of a cylinder, with narrow wooden shelves within, and suspended on a hollow axis, by which the chlorine was admitted, and round which the barrel was made to revolve. By this means the lime-dust being exposed on the most extensive surface, was speedily impregnated with the gas to the requisite degree. But this is a costly refinement, inadmissible on the largest scale of British manufacture. The simplest and best construction for exposing the lime-powder to chlorine, is a large chamber of siliceous sandstone, eight or nine feet, having the joints of the masonry secured witha cement composed of pitch, rosin, and dry gypsum, in equal parts. A door is fitted into it at one end, which can be made air-tight by stripes of cloth and clay lute. A window in each side enables the operator to judge how the impregnation goes on by the color of the air, and also gives light for making the arrangements within at the commencement of the process. If a large valve be made in the roof, which together with the door may be opened by cords passing over a pulley, it will let off the vapors and supersede entirely the necessity of the workmen approaching the deleterious gas, when the apartment is to be opened. A great number of wooden shelves, eight or ten feet long, two feet broad, and one inch deep, are provided to receive the sifted slack lime, containing generally about two parts of lime to three of water. These shelves are piled one over another in the chamber, to the height of five or six feet, cross-bars below each keeping them about an inch asunder, that the gas may have free room to circulate over the surface of the calcareous hydrate.

'The alembics for generating the chlorine, which are usually nearly spherical, are in some cases made entirely of lead; in others, of two he-

mispheres joined together in the middle, the upper hemisphere being lead, the under one cast iron. The first kind of alembic is enclosed for two-thirds from its bottom in a leaden or iron case, an interval of two inches left between the two to receive steam from an adjoining boiler. Those whose lower part consists of cast iron have their bottom directly exposed to a very gentle fire; round the outer edge of the iron hemisphere a groove is cast, into which the under edge of the leaden hemisphere fits, the joint being rendered air-tight by Roman or patent cement. In this leaden dome there are four apertures. The first is about ten or twelve inches square, shut with an air-tight leaden valve, and is destined for the admission of a workman to rectify any derangement in the apparatus, or to detach hard concretions of salt from the bottom. The second aperture is in the centre of the top, and is secured by water lute. Here a tube of lead is fixed, which descends nearly to the bottom, and down which the vertical axis passes, to whose lower end the cross bars of iron, sheathed with lead, are attached, by whose revolution the materials receive the proper agitation for mixing the dense manganese with the sulphuric acid and salt. The motion is communicated either by the hand of a workman applied from time to time to a winch at top, or it is given by connecting the axis with wheel work, impelled by a stream of water, or a steam-engine. The third opening admits the syphon-formed funnel, through which the sulphuric acid is introduced and the fourth is the orifice of the eduction pipe.

Manufacturers differ much about the proportion of their materials for generating the chlorine. In general 10 cwt. of salt (muriate of soda), are mixed with 13 cwt. of manganese on which, after its introduction into the alembic, from 16 to 18 cwt. of sulphuric acid diluted to the specific gravity of about 1·65, are poured. But indeed this dilution is seldom actually made, for the manufacturer of bleaching powder almost always prepares his own sulphuric acid for the purpose, and therefore carries its concentration no higher in the leaden boilers than the density of 1·65, which indicates one-fourth of its weight to be water. The fourth aperture admits the eduction pipe. This pipe is afterwards conveyed into a leaden chest, or cylinder, in which all the other deduction pipes also terminate. In this general diversorium the chlorine is washed from adhering muriatic acid, by passing through a little water, in which each tube is immersed, and from this the gas is led off by a pretty large leaden tube, into the combination room. It usually enters in the top of the ceiling, whence it diffuses its heavy gas equally around. Four days are required, at the ordinary rate of working, to make good marketable bleaching powder. A more rapid formation would produce muriate of lime, at the expense of the bleaching quality. But skilful manufacturers use here an alternating process. They pile up first of all the wooden trays only in alternate shelves in each column. At the end of two days the distillation is intermitted, and the chamber is laid open. After two hours the workman enters to introduce the alternate trays covered with fresh hydrate of lime, and at the same time rakes up thoroughly the half-formed chloride in the others. The door is then secured, and the chamber, after being filled for two days more with chlorine, is again opened, to allow the first set of trays to be removed, and to be replaced by others containing fresh as before. Thus the process is conducted in regular alternation; and very superior bleaching powder is manufactured, and thus the chlorine may be suffered to enter in a pretty uniform stream. But for this judicious plan, as the hydrate advances in impregnation, its faculty of absorption becoming diminished, it would be requisite to diminish proportionately the evolution of chlorine, or to allow the excess to escape, to the great loss of the proprietor. The manufacturer generally reckons on obtaining from one ton of rock-salt, employed as above, a ton and a half of good bleaching powder. But the following analysis of the operation will show, that he ought to obtain two tons.

Science has done only half her duty, when she describes the best apparatus and manipulations of a process. The maximum produce should be also demonstrated, in order to show the manufacturer the perfection which he should strive to reach with the minimum expense of time, labor, and materials. 'For this end,' says Dr. Ure, 'I instituted the following research:— I first examined fresh commercial specimens of bleaching powder; 100 grains of these afforded from 20 to 28 grains of chlorine. This is the widest range of result, and it is undoubtedly considerable; the first being to the second, as 100 to 71. The first yielded by saturation with muriatic acid, 82 grains of chloride of calcium, equivalent to about 41 of lime; it contained besides 26 per cent. of water, and a very little common muriate ready formed. On heating such powder in a glass apparatus, it yielded at first a little chlorine, and then oxygen tolerably pure. The bulk of chlorine did not exceed one-tenth of the whole gaseous product.

'Sulphate of indigo, largely diluted with water, has been long used for estimating the bleaching powder of chloride of lime; and it affords, no doubt, a good comparative test, though from the variableness of indigo it can form no absolute standard. Thus three parts of indigo, from the East Indies, have been found to saturate as much bleaching powder as four parts of good Spanish indigo.'

M. Welter's method is the following:—He prepared a solution of indigo in sulphuric acid, which he diluted, so that the indigo formed $\frac{1}{1000}$ of the whole. He satisfied himself by experiments, that 14 litres (854·4 cubic inches, or 3·7 wine gallons English) of chlorine, which weigh 651½ English grains, destroyed the color of 164 litres of the above blue solution. He properly observes, that chlorine discolors more or less of the tincture, according to the manner of proceeding; that is, according as we pour the tincture on the aqueous chlorine, and as we operate at different times, with considerable intervals; if the aqueous chlorine or chloride solution be concentrated, we have the minimum of discoloration; if it be very weak, the maximum. He says, that solution of indigo, containing about $\frac{1}{1000}$ part, will give constant results to nearly $\frac{1}{20}$, and to greater nicety still, if we dilute the chlo-

rine solution, so that it shall amount to nearly one-half the volume of the tincture which it can discolor; if we use the precaution to keep the solution of chlorine and the tincture in two separate vessels; and, finally, to pour both together into a third vessel. We should, at the same time, make a trial on another sample of chlorine whose strength is known, in order to judge accurately of the hue. On the whole, he considers that fourteen measures of gaseous chlorine can discolor 164 measures of the above indigo solution, being a ratio of nearly one to twelve. The advantage of the very dilute tincture obviously consists in this, that the excess of water condenses the chlorine separated from combination by the sulphuric acid, and confines its whole efficacy to the liquor; whereas, from concentrated solutions, much of it escapes into the atmosphere. 'Though,' says Dr. Ure, 'I have made very numerous experiments with the indigo test, yet I never could obtain such consistency of result as M. Welter describes: when the blue color begins to fade, a greenish hue appears, which graduates into brownish yellow by imperceptible shades. Hence an error of $\frac{1}{20}$ may readily be allowed, and even more, with ordinary observers.

When a mixture of sulphuric acid, common salt, and black oxide of manganese, are the ingredients used, as by the manufacturer of bleaching powder, the absolute proportions are,

1 atom muriate of soda . .		7·5	29·70	100·0
1 atom peroxide of manganese		5·5	21·78	73·3
2 atom oil of vitriol	1·846	12·25	48·52	163·3
		25·25	100·00	

And the products ought to be

Chlorine disengaged .	1 atom	4·5	17·82
Sulphate of soda . .	1	9·0	35·64
Protosulphate of manganese	1	9·5	37·62
Water . . .	2	2·25	8·92
		25·25	100·00

These proportions are, however, very different from those employed by many, nay, I believe, by all manufactures; and they ought to be so, on account of the impurity of their oxide of manganese.

From the preceding computation, it is evident that 1 ton of salt with 1 ton of the above native oxide of manganese properly treated, would yield 0·59 of a ton of chlorine, which would impregnate 1·41 tons of slacked lime, producing 2 tons of bleaching powder, stronger than the average of the commercial specimens; or allowing for a little loss, which is unavoidable, would afford 2 tons of ordinary powder, with a little more slacked lime.

MM. Orfila, Leseure, Gerdy, and Hennelle, having to examine the body of an individual who was supposed to have been poisoned, and who had been dead nearly a month, found the smell so insupportable that they were induced to try the application of the chloride of lime, as recommended by M. Labarraque. A solution of this substance was frequently sprinkled over the body, and produced quite a wonderful effect; for scarcely had they made a few aspersions, when the unpleasant odor was instantly destroyed and the operation was proceeded in with comparative ease.

Since the above experiment, a commission was appointed by the prefect of the police in Paris to clear out offensive drains, in the execution of which much benefit to the protection of the workmens' health was derived from chloride of lime. M. Gaultier de Claubry, after stating that carbonic acid expels the chlorine from the chloride of lime, proposes, as the best and most durable means of disinfecting the air in hospitals moistening the chloride of lime in the apartments of the sick. The carbonic acid of the air will slowly and steadily evolve the chlorine without annoying the patients. This indeed is the only admissible plan of fumigating with chlorine where the rooms cannot be emptied.

LIMERICK, a county in Ireland, in the province of Munster, having for its boundaries, on the north, the river Shannon; on the north and east Tipperary county; on the west the county of Kerry; and Cork county on the south. Its area contains 622,975 acres, or 970 square miles, according to Dr. Beaufort; and it extends fifty-one miles in length by thirty-two in breadth. It is divided into ten baronies, viz. Upper Connelloe, Lower Connelloe, Costlia, Coshma, Small county, Clanwilliam, Coonah, Kerry, Pobble-Brien, Owneybeg, besides the liberties of Kilmallock, and the county of the city of Limerick; these baronies again are subdivided into 125 parishes. The population of the county, exclusive of 'the county of the city,' is returned at 218,432 souls, and the number of habitations amounts to about 35,000. Its chief towns are Limerick, Kilmallock, Askeaton, Rathkeal, Adare, Newcastle, Hospital, Bruff, Kilfinan: the principal rivers are the Deel, the Maig, the Comogue (the two latter of which should be deepened and straightened), the Feale, the Gale, and the Blackwater, besides the noble river Shannon, which may rather be said to flow by the county The surface of the county of Limerick is not much varied, being tolerably level, but sheltered on the south-east by a range of mountains called the Galteas, the highest of which is 2500 feet above the sea level. This chain of lofty and beautiful hills, which extends twenty-five miles in length, is composed of old red sandstone resting on gray-wacke, or transition-slate, the surface on each side being limestone of the latter formation. To the north of the Galteas lies the tract of land so celebrated for its fertility as to be known only by the appellation of the Golden Vein; and on the banks of the Shannon lie the coreahs, or swamps, grass lands, rendered fertile by the annual deposits of rich manure derived from the inundations of the river Shannon; so that this county is proverbial for its fertility and agricultural capabilities. The non-flaming coal-field of Tipperary extends to Loghill in Limerick, and slates of an excellent quality are distant from this county only by the breadth of the river Shannon, being raised at Killaloe. The remains of antiquity here are very numerous, upwards of fifty monastic ruins being still traceable; of these Adare is particularly conspicuous for the romantic character of its beautiful though ruined abbey

built about the year 1315. The ancient families of Limerick were the Fitzgeralds, O'Briens, O'Quins, Purcells, and O'Scanlans. In 1709 the lord Southwell introduced a colony of industrious farmers from Germany, called Palatines, whose example was of important consequences to the native peasantry, and which continues its beneficial operation to the present time; these were planted at Bruff, and under their auspices, and by their energies, the linen manufacture was prosecuted with much success. There are at present about 3000 acres of land, in this county, annually employed in growing flax. Hemp was also a staple here, and was sold in the Cork and Limerick markets for the sail-cloth manufactory, but this trade has considerably decayed from various causes. The fisheries also, once a source of great emolument to the county, have totally degenerated, and require both protection and excitation. The Irish government have not been neglectful of the statistical improvements, which this district chiefly called for; a new line of road has been opened, at the public cost, from Cork to Limerick, under the advice and inspection of Mr. Griffith, and £45,000 is now granted for the execution of a rail-way from Limerick to Waterford, after the design of Mr. Nimms, between the cities of Dublin and Limerick.

Limerick, or Lough-Meath, a market-town, borough, and bishop's see of Ireland, seated on the Shannon, the metropolis of the above county as well as of the province of Munster. It is a county in itself, and is divided into the Irish and English town, the latter being built on an island of the Shannon called King's Island. It is ninety-four miles from Dublin; and was once the strongest fortress in the kingdom.

Its ancient name was Lunneach; and after the arrival of the Danes in Ireland it was a place of considerable trade. It was plundered by Mahon, brother of Brien Borom, after the battle of Sulchoid, in 970: Brien afterwards exacted from the Danes of this city 365 tons of wine as a tribute, which shows the extensive traffic carried on in that article. About A.D. 550 St. Munchin is said to have founded a bishopric and built a church here, which, however, was destroyed by the Danes on their taking the port in 853, and remained in ruins until their conversion in the tenth century. Donald O'Brien, about the time of the arrival of the English, founded and endowed the cathedral; and Donat O'Brien, bishop of Limerick, in the thirteenth century, contributed much to the opulence of the see. About the close of the twelfth century the bishopric of Innis-Cathay was united to that of Limerick.

Limerick was besieged by king William III. in 1690, but without being taken. On the 21st of September, 1691, it was invested by the English and Dutch, and surrendered on the 13th of October, after losing many men; but the garrison had very honorable terms, forming what have been called in history the articles of Limerick. At that period, it was reckoned the second city in Ireland, but has since lost its rank, in the rapid growth of Cork. Limerick is three miles in circumference; has markets on Wednesday and Saturday, and fairs on Easter Tuesday, 1st of July, 4th of August, and 12th of December. Latterly a new quarter of the town has been erected by lord Pery between the Irish and English towns.

This city is governed by a mayor, sheriffs, recorder, aldermen, and burgesses. It had once the privilege of coinage; and different parliaments have been held in it. It was formerly walled, and in 1760 there were seventeen of the gates standing. Since its fortifications have been dismantled, however, a number of handsome streets and convenient quays have added to its respectability. Linen, woollen, and paper manufactures are carried on here to great extent, and the export of provisions is considerable. Besides the ancient cathedral and churches it has a modern episcopal palace at the west end of the city; Methodist, Presbyterian, and Quaker places of worship; and eight chapels for the Catholics. There is also an extensive barrack; and it has a military governor, constable, and town major. A charter was granted to it by king John, and confirmed in succeeding reigns. Limerick obtained the privilege of having mayors ten years before that right was allowed to the citizens of London. Its first provost was John Stafford, in 1195 and 1197; and, during the provostship of Henry Troy, a charter was granted by Richard I., whereby the citizens were allowed to choose mayors and bailiffs, Adam Servant, in 1198 being the first mayor. It continued to be thus governed, until the office of bailiff was changed to that of sheriff, in 1609. Limerick is fifty miles north of Cork and ninety-four south-west of Dublin. The country around is fertile and pleasant.

Limestone, in mineralogy, a species of minerals, divided by professor Jameson into twelve sub-species.

1. *Foliated limestone.*—Color white, of various shades; sometimes it is spotted. Massive, and in distinct angulo-granular concretions. Lustre glistening, between pearly and vitreous. Fracture foliated. Translucent. Hard as calcareous spar. Brittle. Specific gravity, Carrara marble 2·717. It generally phosphoresces when pounded, or when thrown on glowing coals. Infusible. Effervesces with acids. It is a pure carbonate of lime. It occurs in beds in granite, gneiss, &c., and rarely in secondary rocks. It is found in all the great ranges of primitive rocks in Europe. Parian marble, Pentelic marble, the Marmo Greco, the white marble of Luni, of Carrara, and of Mount Hymettus, the translucent white marble of statuaries, and flexible white marble, are the chief of the white marbles which the ancients used for sculpture and architecture. The red antique marble, Rosso antico of the Italians, and Egyptian of the ancients; the Verdo antico, an indeterminate mixture of white marble and green serpentine; yellow antique marble; the antique Cipolin marble, marked with green-colored zones, caused by talc or chlorite; and African breccia marble, are the principal colored marbles of the ancients. The Scottish marbles are the red and white Tiree, the former of which contains hornblende, sahlite, mica, and green earth; the Iona marble, harder than most others, consisting of limestone and tremolite, or occasionally a dolomite; the Skye marble; the Assynt in Sutherland, intro-

duced into commerce by Mr. Joplin of Gateshead. It is white and gray of various shades. The Glentilt marble; the Balachulish; the Boyne; the Blairgowrie; and the Glenavon. Hitherto but few marbles of granular foliated limestone have been quarried in England. The Mona marble is not unlike Verde antico. The black marbles of Ireland, now so generally used by architects, are Lucullites. The Toreen, in the county of Waterford, is a fine variegated sort; and a gray marble, beautifully clouded with white, has been found near Kilcrump, in the same county. At Loughlougher, in Tipperary, a fine purple marble is found. The county of Kerry affords several variegated marbles. Of the continental marbles a good account is given by professor Jameson, *Mineralogy*, vol. ii. p. 502.

2. *Compact limestone.*—Common compact limestone has usually a gray color, with colored delineations. Massive, corroded, and in various extraneous shapes. Dull. Fracture fine splintery. Translucent on the edges. Softer than the preceding sub-species. Easily frangible. Streak grayish-white. Specific gravity 2·6 to 2·7. It effervesces with acids, and burns into quicklime. It is a carbonate of lime, with variable and generally minute proportions of silica, alumina, iron, magnesia, and manganese. It occurs principally in secondary formations, along with sandstone, gypsum, and coal. Many animal petrifactions, and some vegetable, are found in it. It is rich in ores of lead and zinc; the English mines of the former metal being situated in limestone. When it is so hard as to take a polish, it is worked as a marble, under the name of shell, or lumaccella marble. It abounds in the sandstone and coal formations, both in Scotland and England; and in Ireland it is a very abundant mineral in all the districts where clay-slate and red sandstone occur. The Florentine marble, or ruin marble, is a compact limestone. Its constituents are, lime 58, carbonic acid 28·5, water somewhat ammoniacal 11, magnesia 0·5, oxide of iron 0·25, carbon 0·25, and silica 1·25. Klaproth.

3. Chalk, which see.

4. *Agaric mineral*, or rock-milk. Color white. In crusts or tuberose pieces. Dull. Composed of fine dusty particles. Soils strongly. Feels meagre. Adheres slightly to the tongue. Light, almost supernatant. It dissolves in muriatic acid with effervescence, being a pure carbonate of lime. It is found on the north side of Oxford, between the Isis and the Cherwell, and near Chipping Norton; as also in the fissures of limestone caves on the Continent. It is formed by the attrition of water on limestone rocks

5. *Limestone fibrous.* Color white of various shades. Massive and in distinct fibrous concretions. Lustre glistening and pearly; fragments splintery; feebly translucent; as hard as calcareous spar; easily frangible; specific gravity 2·7. Its constituents are, lime 50·8, carbonic acid 47·6. Stromeyer says it contains some per cents of gypsum. It occurs in thin layers in clay-slate at Aldstone-moor in Cumberland: in layers and veins in the middle district of Scotland, as in Fifeshire. It is sometimes cut into necklaces, &c.

6. *Tufaceous limestone.* Color gray. Massive, and in imitative shapes, enclosing leaves, bones, shells, &c. Dull Fracture fine grained, uneven. Opaque. Soft. Feels rough. Brittle. It is pure carbonate of lime. It occurs in beds, generally in the neighbourhood of rivers; near Starly-burn in Fifeshire, and other places. Used for lime.

7. Sub-species. Pisiform limestone, or peastone. Color yellowish-white. Massive, and in distinct concretions, which are round granular, composed of others which are very thin and concentric lamellar. In the centre there is a bubble of air, a grain of sand, or of some mineral matter. Dull. Fracture even. Opaque. Soft. Brittle. Specific gravity 2·532. It is carbonate of lime. It is found in great masses in the vicinity of Carslbad in Bohemia.

8. Sub-species. Slate spar. Schieferspath. Color white of various shades. Massive, and in distinct curved lamellar concretions. Lustre glistening and pearly. Feebly translucent. Soft; between sectile and brittle. Feels rather greasy. Specific gravity 2·63. Its constituents are, carbonate of lime, with three per cent. of oxide of manganese. It occurs in primitive limestone, in metalliferous beds, and in veins. It is found in Glentilt; in Assynt; in Cornwall; and near Granard in Ireland.

9. Aphrite, which see.

10. *Lucullite.* Color grayish-black. Massive. Glimmering. Fracture fine grained, uneven. Opaque. Semihard. Streak, dark ash-gray. Brittle. Specific gravity 3. When two pieces are rubbed together a fetid urinous odor is exhaled, which is increased by breathing on them. It burns white, but forms a black-colored mass with sulphuric acid. Its constituents are, lime 53·38, carbonic acid 41·5, carbon 0·75, magnesia and oxide of manganese 0·12, oxide of iron 0·25, silica 1·13, sulphur 0·25, muriates and sulphates of potassa with water 2·62.—John. It is said to occur in beds in primitive and older secondary rocks. Hills of this mineral occur in the district of Assynt in Sutherland. Varieties of it are met with in Derbyshire, at Kilkenny, and in the counties of Cork and Galway. The consul Lucullus admired it so much as to give it his name. It is the Nero antico of the Italians. Two varieties of this are,

Prismatic lucullite. Colors black, gray, and brown. Massive, in balls, and in distinct concretions. External surface sometimes streaked. Internal lustre shining. Cleavage threefold. Translucent on the edges. Semi-hard. Streak gray colored. Brittle. When rubbed it emits a strong fetid urinous smell. Specific gravity 2·67. When its powder is boiled in water, it gives out a transient hepatic odor. The water becomes slightly alkaline. It dissolves with effervescence in muriatic acid, leaving a charcoaly residuum. Its constituents resemble those of the preceding. It occurs in balls, in brown dolomite, at Building Hill, near Sunderland. It was at one time called madreporite.

Foliated or sparry lucullite. Colors white, gray, and black. Massive, disseminated and crystallised in acute six-sided pyramids. Internal lustre glimmering. Fragments rhomboidal. Translu-

cent. Semi-hard. Brittle. Emits on friction a urinous smell. Specific gravity 2·65. In other respects similar to the preceding. It is found in veins at Andreasburg in the Hartz.

11. *Marl;* of which there are two kinds, earthy and compact. Earthy marl has a gray color, consists of fine dusty particles, feebly cohering; dull; soils slightly; is light; effervesces with acids; and emits a urinous smell when first dug up. Its constituents are, carbonate of lime, with a little alumina, silica, and bitumen. It occurs in beds in the secondary limestone and gypsum formations in Thuringia and Mansfeld. Compact marl has a gray color; is massive, vesicular, or in flattened balls; contains petrifactions; dull; fracture earthy, but in the great slaty; yields to the nail; opaque; streak grayish-white; brittle; feels meagre; specific gravity 2·4. It intumesces before the blowpipe, and melts into a greenish-black slag. It effervesces with acids. Its constituents are, carbonate of lime 50, silica 12, alumina 32, iron and oxide of manganese 2.—Kirwan. It occurs in beds in the secondary flœtz limestone. It is frequent in the coal formations of Scotland and England.

12. *Bituminous marl-slate.*—Color grayish-black. Massive and frequently with impressions of fishes and plants. Lustre glistening. Fracture slaty. Opaque. Shining streak. Soft. Sectile. Frangible. Specific gravity 2·66. It is said to be carbonate of lime, with albumen, iron, and bitumen. It occurs in flœtz limestone. It frequently contains cupreous minerals, petrified fishes, and fossil remains of cryptogamous plants. It abounds in the Hartzgebirge.

LIM'IT, *n. s.* & *v. a.*, LIM'ITARY, *adj.*, LIMITA'TION, *n. s.*, LIM'ITOUR, *n. s.* } Fr. *limité, limiter;* Latin *limito.* Boundary; border; utmost reach or extent; to confine or restrict within certain bounds: limitary is used by Milton for belonging to, or guarding, certain bounds: limitation is the act or state of restriction or confinement: limitour, a friar licensed to beg within certain limits.

The whole *limit* of the mountain round about shall be most holy. *Exod.* xliii. 12.

They tempted God, and *limited* the Holy One of Israel. *Psalms.*

Ther walketh now the *limitour* himself
In undermeles and in morweninges,
And sayth his matines and his holy thingis,
As he goeth in his *limitatioun.*
Chaucer. Cant. Tales.

Limitation of each creature, is both the perfection and the preservation thereof. *Hooker.*

Thanks I must you con, that you
Are thieves profest; for there is boundless theft
In *limited* professions.
Shakspeare. Timon of Athens.

Am I yourself,
But, as it were, in sort of *limitation?*
Shakspeare.

Covetousness and ambition know no *limits.*
Bp. Hall.

Then, when I am thy captive, talk of chains,
Proud *limitary* cherub! *Milton's Paradise Lost.*

To kill the body is, as our Lord himself taught, the utmost *limit* of all human power and malice, the most and worst that man can do. *Barrow.*

We went, great emperor! by thy command,
To view the utmost *limits* of the land:
E'en to the place where no more world is found,
But foaming billows beating on the ground.
Dryden.

I despair, how this *limitation* of Adam's empire to his line and posterity, will help us to one heir. This *limitation*, indeed, of our author, will save those the labour, who would look for him amongst the race of brutes; but will very little contribute to the discovery amongst men. *Locke.*

If a king come in by conquest, he is no longer a *limited* monarch; if he afterwards consent to *limitations*, he becomes immediately king de jure.
Swift.

How our hearts burnt within us at the scene,
Whence this brave bound o'er *limits* fixed to man!
His God sustains him in his final hour!
His final hour brings glory to his God!
Man's glory heaven vouchsafes to call her own.
Young.

With what *limitations* this universality is to be understood, who shall inform us? *Johnson.*

We are *limited* in our enquiry by the strict laws to which we have submitted at our setting out.
Burke on the Sublime.

Now to this view of the matter I have no other objection than this—that the British constitution is a *limited* monarchy; that a *limited* monarchy is, in the nature of things, a mixed government; but that such a House of commons as the radical reformer requires would, in effect, constitute a pure democracy, which, it appears to me, would be inconsistent with any monarchy, and unsusceptible of any *limitation.* *Canning.*

LIMM'ER, *n. s.* Fr. *limier.* A bloodhound.

There ovirtoke I a grete rout
Of huntirs and of foresters,
And many relaies and *limers,*
That hied them to the forest fast,
And I with hem. *Chaucer's Dream.*

LIMN, *v. a.*, LIMN'ER, *n. s.* } Fr. *enluminer*, of Lat. *lumino.* To adorn; paint; take a likeness: the limner is the painter.

Mine eye doth his effigies witness,
Most truly *limned*, and living in your face.
Shakspeare.

Emblems *limned* in lively colours. *Peacham.*

Like as some skilful artizan, some exquisite *limner*, or carver, when he hath made a master-piece of his art, he doth not hide it up in some dark corner, where it may not be seen. *Bp. Hall.*

Poets are *limners* of another kind,
To copy out ideas in the mind;
Words are the paint by which their thoughts are shown,
And nature is their object to be drawn.
Granville.

How are the glories of the field spun, and by what pencil are they *limned* in their unaffected bravery?
Id.

LIMNING, the art of painting in water-colors, in contradistinction to painting which is done in oil colors. Limning is the most ancient kind of painting. Till John Van Eick found out the art of painting in oil, the painters all painted in water and in fresco. See EICK. When they used boards, they usually glued a fine linen cloth over them, to prevent their opening; then laid on a ground of white; and lastly mixed up their colors with water and size, or with water and yolks of eggs, well beaten with the branches of a fig-tree, the juice whereof thus

mixed with the eggs; and with this mixture they painted their pieces. In limning all colors are proper, except the white made of lime, which is only used in fresco. The azure and ultramarine must always be mixed with size or gum; but there are always applied two layers of hot size before the size-colors are laid on: the colors are all ground in water each by itself; and, as they are required in working, are diluted with size-water. When the piece is finished, go over it with the white of an egg well beaten; and with varnish if required.

LIMOGES AUGUSTORITUM, a large and ancient city of France, the chief place of the arrondissement of Limoges, in the department of the Upper Vienne; which formerly constituted part of the province of Limousin. It contains a royal court for the departments of Upper Vienne, La Corrige, and La Creuse, a tribunal of justice for petty causes, boards of trade and manufactures, a royal college, a university academy, lectures on anatomy and midwifery, an agricultural society, a society for arts and sciences, and a mint. It is a bishopric and a post town, with 25,000 inhabitants.

This place is situated in an amphitheatre on the top and side of a hill, at the foot of which flows the Vienne, watering a delightful valley, covered with meadows and bordered with picturesque uplands. It is for the most part badly built; the streets are narrow, crooked, and steep, but they are clean, and washed by the waters of a fountain, brought from a distance by means of an aqueduct. The higher part of the town is surrounded by long boulevards, agreeably planted, and has several spacious squares and fine walks. The air is fresh and pure.

Julius Cæsar speaks of Limoges, in his commentaries, as a place of considerable importance, inhabited by the Lemovices. In the fifth century it was invaded by the Visigoths; in 1360 it was ceded to England, and re-united to the French crown, nine years afterwards, in the reign of Charles V. It was the native place of D'Aguesseau, of marshal Jourdan, and of Vergniaud, an eloquent lawyer and member of the legislative assembly and the convention, who was beheaded at Paris on the 1st of October 1793, when he was only thirty-one years old. There are here extensive manufactories of porcelain and crucibles, cloth, kerseymeres, druggets, sheep-skins, flannel, glue, wax-candles, wooden shoes, and horse-shoe nails; some hydraulic machines for the spinning of cotton and wool, fine paper-mills, brass foundries, potteries, and delf factories. It is the great mart for Toulouse and the southern departments, and carries on a trade in corn, chestnuts, wines, brandy, liqueurs, iron, copper, and brass. The races here are resorted to by the people of thirty-two departments. The buildings most worthy of notice are, the public library, containing 11,000 volumes; the museum of natural history, mechanics, arts, and antiquities; the cathedral; the bishop's palace; the fountain of Aigoulène; and the public squares and promenades. Limoges is situated 291 miles south of Paris, fifty-seven south-east of Poictiers, and seventy-two east by north of Angoulême.

LIMOUSIN, or LIMOSIN, a considerable province of the interior of France, forming the departments of the Upper Vienne and the Correze. It is divided into two parts, Upper and Lower Limousin. The former is hilly, and contains mines of copper, lead, tin, and iron, the Lower Limousin is fertile, and highly beautiful in its scenery. The whole extends seventy miles in length, and in breadth about sixty.

LIMOUX, a trading town of France, in the department of the Aude, situated on the river Aude. Its traffic is in the hardware manufactured, and in the white wine raised in the neighbourhood. Some woollens, leather, and soap, are also made here: fifteen miles southwest of Carcassonne. Population 5200.

LIMP, *adj.* Sax. lempe; Teut. *limp;* Ital. *limpio.* Limber; pliant; weak. Obsolete.

The chub eats waterish, and the flesh of him is not firm, *limp*, and tasteless. *Walton's Angler.*

LIMP, *v. n.* Sax. lempan. To halt; walk lamely.

An old poor man,
Who after me hath many a weary step
Limped in pure love. *Shakspeare. As You Like It*
Son of sixteen,
Pluck the lined crutch from thy old *limping* sire.
Shakspeare.

When Plutus, with his riches, is sent from Jupiter, he *limps* and goes slowly; but when he is sent by Pluto he runs, and is swift of foot. *Bacon.*

Limping death, lashed on by fate,
Comes up to shorten half our date. *Dryden.*

Can syllogism set things right?
No: majors soon with minors fight:
Or both in friendly concert joined,
The consequence *limps* false behind. *Prior.*

He with the mitred head, and cloven heel:—
Doomed the coarse edge of Hewbell's jest to feel;
To stand the playful buffet, and to hear
The frequent ink-stand whizzing past his ear;
While all the five directors laugh to see
The *limping* priest so deft at his new ministry.
Canning.

LIM'PID, *adj.* Fr. *limpide;* Lat. *limpidus.* Clear; pure; transparent.

The springs which were clear, fresh, and *limpid*, become thick and turbid, and impregnated with sulphur as long as the earthquake lasts. *Woodward.*

The brook that purls along
The vocal grove, now fretting o'er a rock,
Gently diffused into a *limpid* plain.
Thomson's Summer.

Thou foundest me, like the morning sun
That melts the fogs in *limpid* air;
The friendless bard, and rustic song,
Became alike thy fostering care. *Burns.*

By cautiously continuing to add the pure ammonia, this oxide will again be dissolved, and the whole become a *limpid* colourless solution.
Parkes's Chemical Catechism.

LIN, *v. n.* Sax. ablinnan, alinnan. To yield; relinquish.

Unto his foe he came,
Resolved in mind all suddenly to win,
Or soon to lose before he once would *lin.*
Faerie Queene.

LINACRE (Thomas), M.D., was born in Canterbury about 1460, and there educated under the learned William Selling; thence he removed to Oxford, and in 1484 was chosen fellow of All-Souls College. Selling being ap-

pointed ambassador from king Henry VII. to the pope, Linacre accompanied him to Rome, where he attained the highest perfection in Greek and Latin, and studied Aristotle and Galen. On his return to Oxford, he graduated, and was chosen professor of medicine. He was soon after called to court by Henry VII., to attend prince Arthur as his tutor and physician. He was afterwards appointed physician to the king, and, on his death, to Henry VIII. He founded two medical lectures at Oxford, and one at Cambridge; and immortalised his name by being the founder of the college of physicians in London. Observing the wretched state of physic, he applied to cardinal Wolsey, and obtained a patent, in 1518, incorporating the physicians of London, in order to prevent illiterate and ignorant medicasters from practising the art. Dr. Linacre was the first president, and held the office as long as he lived. Their meetings were held in his own house in Knight-rider Street, which house he bequeathed to the college. When he was about the age of fifty he began to study divinity; entered into orders; and was collated, in 1509, to the rectory of Mersham; installed prebendary of Wells; in 1518 prebendary of York; and in 1519 was admitted precentor of that cathedral, which he resigned for other preferments. He died of the stone in October 1524, aged sixty-four; and was buried in St. Paul's. Dr. Caius, or Kay, thirty-three years after his death, caused a monument to be erected to his memory, with a Latin inscription. He was a man of great natural talents, a skilful physician, a profound grammarian, and one of the best Greek and Latin scholars of his time. Erasmus in his epistles speaks highly of his translations from Galen. His works are, 1. De Emendatâ Structurâ Latini Sermonis, libri sex; London, printed by Pynson, 1524, 8vo. and by Stephens, 1527, 1532. 2. The rudiments of grammar, for the use of the princess Mary, by Pynson. Buchanan translated it into Latin; Paris, 1536. He likewise translated into very elegant Latin several of Galen's works, printed chiefly abroad at different periods. Also Procli Diadochi sphæra, from the Greek; Venet. 1499, 1500.

LINCOLN, the capital of the county of this name, extends, in a long street, from the foot of a hill, near the Witham, to the south. On the north side, without the walls, is a suburb, called Newport, supposed to have been the outwork of a Roman station. Camden states that this place was a strong hold of the Britons, anterior to the Roman colonisation; and that then it bore the name of 'Lindcoit, from the woods (for which some copies have, corruptly, Lincoit). By Ptolemy and Antoninus the name of the place is written Lindum; and, having the privilege of a colony, it was called Lindum Colonia. The form of the station was that of a parallelogram, divided into four equal parts by two streets, which crossed it at right angles. At the extremities of these were four gates, nearly facing the four cardinal points. The whole was encompassed by an embattled wall, which, on three sides, was flanked by a deep ditch, but on the south side the steepness of the hill rendered a foss unnecessary. The area thus enclosed is estimated to have contained thirty-eight acres. The remaining gate to the north, which is called Newport gate, is described by Stukeley as 'the noblest remnant of this sort in Britain, as far as I know;' and he expresses surprise that it had not 'been taken notice of' before his time. The great or central gateway has a semi-circular arch, sixteen feet in diameter, formed with twenty-six large stones, apparently without mortar. The height is twenty-two feet and a half, of which eleven are buried beneath the ground. Each side of the arch has seven courses of horizontal stones, called springers, some of which are from six to seven feet in length. On each side of the arch are two small lateral doorways or posterns. A mass of the old Roman wall is still to be seen eastward of this gate; and to the west is another large mass, not part of the city-wall, called the mint-wall, which was about sixteen feet high, and forty feet long, and had scaffold holes, and marks of arches. Mr. Gough supposed this to be part of a Roman granary. South of this station were other Roman works, which extended from the brow to the bottom of the hill. In 1793 three stone coffins were found at the south-west corner of the close, near the chequer gate. Beneath was a tessellated pavement, and under that a Roman hypocaust. A similar discovery was made in 1782. In 1790 was found, about three or four feet below the surface, a curious sepulchral monument, evidently of some Roman of high rank. Many fragments of antiquity were preserved by the Rev. Dr. Gordon, the precentor of the cathedral, who gives an account of several earthen and glass urns, which were discovered in the same field, some of which were of singular shape. He also describes a room, twenty feet by sixteen, which was discovered in a quarry. At what period the Saxons possessed themselves of this city does not appear: but early in the sixth century we find Arthur, king of Britain, obtaining great advantages over them here. At this period the old town was nearly destroyed, and, according to Leland, 'new Lincoln was made out of a piece of old Lincoln.' The Saxons fortified the southern part of the hill with ditches and ramparts, walled the town, and erected gates. At the time of the Norman conquest Lincoln was one of the richest and most populous cities in England. The Domesday Survey mentions its 1070 mansions, 900 burgesses, and twelve lagemen, 'having sac and soke.' On the accession of the Conqueror to the throne, he ordered a strong castle to be built on the ridge of the hill, on which this city was situated. The building was 644 yards in circumference, and occupied the space on which it is asserted that 166 houses had stood; seventy-four more were at the same time demolished without the limits, that the whole might be insulated. In the time of Henry I. a navigable canal was made or enlarged, from the river Witham at Lincoln, to the Trent near Torksey; probably the first canal of the kind ever made in England. It is at present called the Foss dyke. By this a communication was formed with the Trent, and down that by the Humber to the sea, and an unobstructed navigation secured to the then good part of Boston.

'Lincoln was now stored,' says a poet of that age, 'with good things, and became the support of the neighbouring country.' When, in 1140, the empress Maud came to England, to assert her title to the crown, she took up her residence at Lincoln, as a place of safety, and conveniently situated for communication with her friends. Stephen on this marched quickly hither, and besieged the city, and took it: but the empress had escaped. During the contest, Lincoln acquired great notoriety. This city and its castle were materially concerned in the contentions between king John and his barons. They continued in the occupation of the crown till the time of Edward I., when Henry de Lacy died seised of them, and they passed, with other parts of his inheritance, to the earl of Lincoln, and so became annexed to the duchy of Lancaster. John of Gaunt greatly improved the castle, and made it his summer residence. Parliaments were held at Lincoln in the reigns of Edward I. II. and III. In 1348 the weavers of Lincoln obtained a charter from Edward III., of what they considered and called their liberties. By this they were invested with the power of depriving any weaver not of their guild, of the privilege of working at his trade within twelve leagues of the city. This and other monopolies were abolished in 1351, by an act called the Statute of Cloths. In the year following the staple of wool was removed from Flanders to England; and Lincoln was one of the staple towns. It was also made a staple for leather, lead, and various other articles; and ranked the second of those towns for the quantity exported, as appears by the record of the sums collected for the king's duties. At the commencement of the civil war, between Charles I. and his parliament, the king came to Lincoln, and convened the freeholders of the county.

The diocese of Lincoln early included so many counties, that it is described as being ready to sink under the weight of its own greatness; and though Henry II. took out of it the diocese of Ely, and Henry VIII. those of Peterborough and Oxford, it is still the largest in England, and except the two archbishoprics, and the principality bishoprics of Winchester, Durham, and Ely, no see has been so well endowed. Prior to the time of Elizabeth, there is no instance of a bishop of this see being translated to another, except Winchester. It is remarkable for the number of its episcopal palaces. In 1547 it had eight. In this county, Lincoln, Sleaford, and Nettleham; in Rutlandshire, Liddington; in Huntingdonshire, Buckden, now the usual residence of the bishops; in Bedfordshire, Woburn; in Buckinghamshire, Fingest; in Oxfordshire, Banbury Castle; two at Newark in Nottinghamshire; and Lincoln Place, Chancery Lane, London. All these, except that at Lincoln, with about thirty manors, were given up in the first year of Edward VI., by Holbech, the first married bishop; so that now only four manors remain of the ancient demesnes.

The cathedral is a magnificent structure, raised at a vast expense by the munificence of several prelates; and its western front attracts the attention of every traveller. On the see being translated from Dorchester, in 1088, St. Remigius de Fescamp, the first bishop, founded a cathedral church, which in four years was ready for consecration; and all the bishops of England were summoned to attend on the occasion. Remigius died two days before the solemnity. His successor, Robert Bloet, finished the building, and dedicated it to the Virgin Mary. Having been destroyed by fire, it was rebuilt by Alexander de Blois in 1124, who arched the new fabric with stone, and greatly increased the size of it. Bishop Hugh Burgundus, who died in 1200, enlarged it by what is called the New Work, and the chapter-house. Kings John of England and William of Scotland assisted to carry his body to the cathedral, where it was enshrined in silver, according to Stukeley; but, according to Sanderson, the shrine was of beaten gold. Bishop Gynewell added the chapel of St. Mary Magdalen. Bishop Fleming, a chapel on the north side, in which he was buried: on his monument is his figure in free-stone. Bishop Alnwick was also a considerable benefactor to the cathedral, and built the stately porch at the great south door. It at present consists of a nave, with its aisles; a transept at the west end; and two other transepts, one near the centre and the other towards the eastern end; and a choir and chancel, with their aisles, of corresponding height and width with the nave and aisles. The great transept has a nave towards the east: attached to the western side of this transept is a gallilee, or grand porch; and on the southern side of the eastern aisle are two oratories, or private chapels; while the northern side has one of nearly similar shape and character. Diverging from the northern side are the cloisters, which communicate with the chapter-house. The whole is surmounted with three lofty towers; one at the centre, and two at the western end, decorated with varied tracery, pillars, pilasters, &c. The dimensions of the whole structure are as follow. The height of the two western towers 180 feet. Previous to the year 1808 each of these was surmounted by a central spire of 101 feet high. The great tower in the centre of the church, from the top of the corner pinnacle to the ground, is 300 feet; its width fifty-three feet. Exterior length of the church, with its buttresses, 524 feet; interior length 482 feet; width of the western front 174 feet; exterior length of great transept 250 feet; interior 222; width 66; the less or eastern transept 170 feet in length, forty-four in width, including the side chapels; width of the cathedral eighty feet; height of the vaulting of the nave eighty feet. The chapter house is a decagon, and measures, interior diameter, sixty feet six inches. The cloisters measure 118 feet on the north and south sides, and ninety-one on the eastern and western sides. The grand western front, wherein the greatest variety of styles prevails, is certainly the workmanship of three, if not more, distinct and distant eras. It consists of a large square-shaped façade; the whole of which is decorated with door-ways, windows, arcades, niches, &c., and has a pediment in the centre, and two octangular stair-case turrets at the extreme angles, surmounted by plain spire-shaped pinnacles. The

upper transept and the choir appear the next in point of date. These are in the sharp-pointed style; and their architecture is very irregular. The vaulting is generally simple; the ribs of a few groins only have a filleted moulding. A double row of arches or arcades, one placed before the other, is continued round the inside of the aisles, beneath the lower tier of windows. The windows are lofty and narrow, placed two or three together; the greater buttresses in front are ornamented in a singular manner with detached shafts, terminating in rich foliage. The great transept, the gallilee porch, and the vestry, are nearly of the same, but in a later style. The vestry is vaulted, the groining having strong ribs; and beneath it is a crypt with groins, converging into pointed arches. The nave and central tower were next rebuilt, probably begun by bishop Hugh de Welles, as the style of their architecture is that of the latter part of the reign of John, or the beginning of Henry III. The part extending from the smaller transept to the east end appears to have been built by bishops Gravesend, Sutton, and D'Alderby, about the commencement of the fourteenth century. The latter prelate built the upper story of the rood tower, and added a lofty wooden spire, which was blown down in a violent storm in the year 1547: the damages then sustained were not wholly repaired till 1775. Dugdale says that Henry VIII. took away from this church 2621 ounces of gold, and 4285 ounces of silver, besides precious stones of great value: at the Reformation, indeed, what the ravages of time had left, the zealots pulled down or defaced; so that at the close of the year 1548 there was scarcely a perfect tomb remaining. Among illustrious persons buried here, who had monuments erected to their memory, were Catharine Swinford, wife of John of Gaunt; Joan, countess of Westmoreland, their daughter; and Bartholomew, lord Burghersh, brother to the bishop of that name. On the north side of, and connected with the cathedral, are the cloisters, of which only three sides remain in the original state.

The chapter-house forms a decagon, the groined roof of which is supported by an umbilical pillar, consisting of a circular shaft, with ten small fluted columns attached to it; having a band in the centre, with foliated capitals. One of the ten sides forms the entrance: in the other sides are nine windows, having pointed arches with two lights each. Over the north side of the cloisters is the library, which contains a large collection of books, and some curious specimens of Roman antiquities. It was built by dean Honeywood. A magnificent work containing several finely engraved views of this cathedral, and a concise well written history of it, was published in 1819 by Mr. C. Wild.

Lincoln had formerly more than fifty churches. Eleven only, exclusive of the cathedral, now remain; scarcely any of which merit a particular description. The most remarkable are, St. Benedict's, St. Mary de Wigford's, and St. Peter's at Gowts: having lofty square Norman towers. St. Peter's is an ancient structure, and appears to have been the chapel of some religious house.

The Dissenters' chapels are, 1. A Presbyterian or Unitarian meeting, erected early in the last century. 2. The Particular Baptist meeting-house in Mint Lane, a very neat and recent erection. 3. The Catholic chapel in New Street a small, neat, brick building, erected in 1799, contains a good painting brought from the convent at Gravelines by the English nuns of that place when expelled at the Revolution. 4. The general Baptist meeting, behind St. Benedict's church, near the High-bridge: they have also now erected (1827) a small building for public worship, about a mile distant from the old one, or near Newport Gate at the northern extremity of the city. 5. The Wesleyan Methodists have a handsome chapel in St. Swithin's Lane, erected in 1816. 6. The Independents have two congregations, one meeting in Zion Chapel near ly adjoining the Catholic Chapel, and erected in 1802; and another meeting in a spacious brick edifice erected in the year 1820, towards the south end of the city. 7. The Society of Friends have also a small building in Newland, made use of for their quarterly meetings.

The number of parishes in the city of Lincoln is twelve, which, with the four townships within its jurisdiction, make sixteen. It has an extensive trade in corn and wool, of which great quantities are exported into Yorkshire and Lancashire, by vessels which obtain a back freightage of coals, &c. This city is a county of itself, having subject to it four townships in the vicinity, Bracebridge, Canwick, Branston, and Waddington; and in official acts it is denominated 'The city and county of the city of Lincoln. Its viscountial jurisdiction extends over twenty miles in circumference. In the history of the boroughs of Great Britain, it is said, 'This city had summons, with London and York, to send members to parliament, the forty-ninth of Henry III.' The right of election is considered to be in the freemen, and the number of voters is about 1300. The civil government is vested in a corporation, consisting of a mayor, twelve aldermen, two sheriffs, twenty-eight common-council-men, and four chamberlains; with a recorder, deputy recorder, steward of the courts of borough-mote, a town-clerk, four coroners, four serjeants of the key, or bailiffs, and other inferior officers. The city was incorporated so early as the seventh year of Edward II.; Henry Best being then the first mayor.

Of the castle, built by William I., little remains; but the few vestiges remaining exhibit the same original structure as that of York. The keep stood half without and half within the castle wall, which ascended up the slopes of the hill, and joined the great tower. It was nearly round, and covered the summit of a high artificial mount. The walls are above seven feet in thickness. In the north-east corner of the castle yard is a curious small building, appearing on the outside like a tower, called Cob's Hall; which Mr. King thinks was originally used as a chapel; it is now made use of as a place of execution for criminals by a drop machine. The mint-wall, mentioned by Mr. Gough, is still remaining, and forms part of the enclosure of a garden.

Checquer gate, at the west end of the cathedral, had two gate-houses; the western one has been taken down about thirty-five years; the remaining one to the east has three gateways, and two turrets between them. In Eastgate Street were two very ancient gateways, both of which are now removed. At the bottom of the town, near Brayford water, are remains of a fort, called Lucy Tower. An oblong building in Broadgate Street was appropriated to the gray friars, and still displays much of its ancient architecture: part of this edifice is now used as a free-school. On the south side of the hill is the bishop's palace, which, from being situated near the summit, Leland describes as 'hanging in declivio,' and was built by bishop Chesney, to whom the site was granted by Henry II. It was enlarged by succeeding prelates, and was scarcely at one time exceeded in grandeur by any of our ancient castles. Nearly opposite to the church of St. Peter, at Gowts, formerly stood the palace of the celebrated John of Gaunt. Opposite to this house is a large building, called John of Gaunt's stables. It was a large structure, probably conventual, in the Norman style; the north and west fronts remain. The Jew's house, on the side of the hill, is a curious object, and is ornamented in front, and in some of its mouldings similar to the west doors of the cathedral: in the centre of the front is a semicircular arched door-way, with a projecting pilaster. It is recorded to have been originally possessed by Belaset de Wallingford, a Jewess, who was hanged for clipping in the 18th of Edward I. Formerly here were two grammar schools, one in the closè, the other in the city: they were united in 1583.

The principal modern buildings are, a good market house, with assembly rooms over, erected in 1736; the county hospital, a large brick edifice on the brow of the hill, erected in 1769, and accommodating yearly about 200 in-patients, and 170 out-patients on an average, at an expenditure of about £1300 per annum; Christ's Hospital, situated near the last mentioned, is a blue-coat school, which maintains, educates, and apprentices sixty poor boys; the county jail, built in 1788, within the area of the castle walls, a neat and strong building: nearly adjoining to which, within the same area, is a splendid county hall, erected in 1823-6, from a Gothic design by Smirke, at an expense of about £40,000, including decorations; the county assembly rooms are in the bail; a good theatre, below the hill, where a respectable company perform from the last week in September to about the second week in November. The city jail and sessions house is a new brick structure, finished in 1809, and situated by the side of the new road, at the foot of the hill: it is to be regretted that increasing crime proves the great want of room in this building, there being no means of classing or separating prisoners, nor any system of employment for them. The national school, a good brick building, near St. Peter's church, was erscted about 1814, from funds collected from various parts of the county, but maintained by the annual subscriptions of the inhabitants. It receives about 300 boys and 200 girls: there is no school on the British or Lancasterian system in Lincoln. The lunatic asylum, a handsome edifice with a stuccoed front, standing conspicuously on the hill, rather west of the city, the front is 260 feet long, and the area, with gardens, &c. occupies about three acres and a half of ground. it was erected in 1820, at an expense of upwards of £15,000.

The judges lodgings is an elegant mansion, erected at the expense of the county for the accommodation of the judges during the assizes; the magistrates of the district also hold their weekly meetings there: it is situated on the castle hill. The race stand, erected in 1826, on Carholm Hill, upon the west common (where the races are held), has cost the corporation, together with other improvements of the course, nearly £5000. The race course is now one of the finest in the kingdom, as well for the convenience of running, as for its beautiful panoramic effect upon the spectator; the annual meetings are said, however, to be but indifferently attended.

Though not the seat of any fixed manufacture, Lincoln possesses considerable advantages as an inland commercial station, communicating with the sea-port of Boston, thirty-two miles distant, by means of the Witham and with the Trent, Humber, and their tributaries; by the Fossdyke Canal from Lincoln to Torksey on the Trent, twelve miles distant. The river Witham, from Lincoln to Boston, is placed in the hands of a joint-stock company, and after many years of vast expenditure the works may now (1827) be considered as very nearly completed; the channel through the town is undergoing most important improvements in respect of width and depth and a new lock of great dimensions and excellent workmanship is in course of erection. The Fossdyke Canal, mentioned above, had in times past been suffered to fall into such disuse and decay as to have been assigned by the corporation of Lincoln to a Mr. Elliston of Thorne, in 1741, for a term of 999 years, at the trifling annual rent of £75; a comparatively insignificant outlay soon sufficed to render it again navigable, and the descendants of that gentleman now derive an annual income of between £10,000 and £12,000 from the tolls. In consequence, however, of the shallow and very inefficient state into which it was suffered to fall, dry seasons and floods alike rendering it almost impassable, a formidable opposition was organised about the year 1826, and a close scrutiny disclosed, in the opinion of eminent counsel, some very serious defects in the title of the lessees. The consequence of the agitation of the subject, and of the strong general feeling produced, has been the offer of such concessions on their part as regarded the necessary improvements required, provided that an act of parliament were procured expressly confirming their title; and it appears probable that an agreement of this kind will be effected.

The picturesque beauty of the city, viewed in almost any direction, together with the peculiar interest attached to many of its antiquities, induces a considerable annual resort of travellers to Lincoln. This is much aided by the greatly improved state of travelling in the district:

while, from the great facility with which passengers are steam-ferried over the Humber at Barton several times a day, Lincoln has become a favorite line of connexion from the south, with the east of Yorkshire, and the northern parts of England. There is, perhaps, no point between London and York which better repays a day's delay to a traveller. Lincoln is 131 miles north by west from London.

Lincoln, a county in the south part of Maine, bounded north by Kennebeck county, east by Hancock county, south by the Atlantic, and west by Cumberland county: the chief towns, Wiscasset and Bath. 2. A county in the central part of Kentucky: chief town, Stanford. 3. A county on the south side of west Tennessee: chief town, Fayetteville. 4. A county in the west part of North Carolina: chief town Lincolntown. 5. A county north part of Georgia: chief towns, Lincolnton and Goshen.

LINCOLNSHIRE.—This county was called by the Saxons Lincollnscyre, and by the Norman invaders Nicholshire: but its etymology is extremely doubtful. Before the Roman invasion it belonged to a people whom the invaders called Coritani; but when the Romans took possession of it they made it a part of the division called Britannia Prima. By the Anglo-Saxons it was attached to the kingdom of Mercia, but was subsequently incorporated with that of Wessex. The Norman conqueror divided the whole county among his followers.

It is a large maritime county, the third with respect to size in the kingdom, bounded on the north by Yorkshire, from which it is separated by the Humber; on the east by the German Ocean, by that arm of the sea called the Wash; on the west by Nottinghamshire, Leicestershire, and Yorkshire; and on the south by Rutland, Northamptonshire, and Cambridgeshire. Its form is an irregular oblong. The late ingenious secretary to the board of agriculture gives the following estimate of the extent of the county in square miles, including the wolds, the heath north and south of Lincoln, the lowland tracts, and a remainder or miscellaneous tract of 1122 miles: in all 2888 square miles, or 1,848,320 acres. Its circumference is about 160 miles. The county consists of three divisions, viz. Lindsey, Kesteven, and Holland; thirty hundreds, five sokes, one city, thirty-one market towns, and 630 parishes. It is in the diocese of its own name, in the province of Canterbury, and is included in the midland circuit.

The climate of this county has long been considered cold, damp, and unhealthy; but these disadvantages have, for some years, been decreasing. The progress of drainage, and consequent cultivation, has gradually operated to render the air more mild and dry. It has, however, been observed, 'that immediately after the Witham drainage, the climate of the lowland district was rendered more agueish than before; but, upon the drainage being completed, this effect disappeared, and it became much healthier than it had ever been. Still, however, the people are subject to agues occasionally. The north-east winds in the spring also are more sharp and prevalent than further inland.' There is also another extraordinary circumstance in the north-west corner of the county: agues were formerly commonly known upon the Trent and Humber side; at present they are rare, and nothing has been effected on the Lincoln side of the Humber to which it can be attributed; but there was a coincidence of time with the draining of Wellin fen in Yorkshire; and this effect Mr. A. Young very justly conjectures to have been the cause of this remarkable change

The face of the country presents many features of beautiful and picturesque scenery. The indefatigable author already quoted observes, that 'about Belton are fine views from the tower on Belmont. Lynn and the Norfolk Cliffs are visible, Nottingham Castle, the Vale of Belvoir, &c.; and on going by the Cliff-towns to Lincoln there are many fine views.' Various places are pointed out which cannot be here enumerated; but it may be sufficient to add, that 'the country round Grantham, in the vicinity of Louth, and that more particularly between Bourn and the former place, including the noble and very spacious woods of Grimsthorpe, abounds with that inequality of surface, that diversified interchange of hill and dale, wood and lawn, which constitute the picturesque and beautiful in natural scenery.' Of the soil of this county it has been observed, that it may be truly said to include all sorts of land that are to be found in the whole kingdom. The county naturally divides itself into the wolds, the heaths, and the fens. The last occupy the south-east parts of the county, and were formerly a swampy and unprofitable waste. The heaths, now enclosed, are north and south of Lincoln; and the wolds extend, somewhat diagonally, from Spilsby to very near the Humber; they are in length about forty miles, and their greatest breadth about ten. Both the heaths and the wolds are calcareous hills. The fens consist of lands which at some former period 'have been covered by the sea, and by human art have been recovered from it.' Some, however, have entertained the opinion that this fen-land was formerly a woody country; but concerning the grounds of this opinion we have here no room to enquire.

The principal rivers belonging to or passing through this county are the Trent, the Ancholme, the Witham, the Welland, and the Glen. The first of these has but very little connexion with Lincolnshire, more properly belonging to Staffordshire. It forms nearly the north-western boundary from North Clifford to Stockworth, and thus constitutes the eastern boundary of the Isle of Axholme. The Witham is the only river that strictly belongs to this county. It rises near South Witham, about ten miles north of Stamford, and pursues a line deviating but a little from the north by Grantham to Lincoln. It then turns eastward, and, joined by a stream from the wolds in the north, proceeds southward through the fens to Tattershall, where it is met by the Bain from Horncastle, and afterwards to Boston, soon falling into the great bay between Lincolnshire and Norfolk, at the mouth of the Fossdyke Wash. This river is defended against the incursions of the sea by a curiously constructed sluice, just before it reaches Boston.

It is the last of those numerous streams which contribute to form the great gulf between the two above-named counties; the Boston Deeps being at its mouth nearly opposite to those of Lynn across the bay. Much of the present bed of the river, from Boston upwards, is a new artificial cut, made for the purpose of widening and straightening the channel, rendering it more commodious for navigation, and better adapted to receive and carry off the water of the contiguous fens. The coast north of Boston is not distinguished by any remarkable streams to the mouth of the Humber; the rivers which reach the sea at Wainfleet and Saltfleet being considerable, though the latter is navigable to Louth.

There are several valuable canals in this county, particularly an inland navigation from Boston by Brothertoft farm on the Witham, cut to Lincoln, and thence by Fossdyke Canal into the Trent; and thence again to all parts of Yorkshire, Lancashire, &c. There is also a canal from Witham to Boston, finished in 1796; and another from Grantham into the Trent, near Holm Pierrepoint. The Ancholme cut is navigable from Bishop's Bridge to the Humber, at Ferraby Sluice. There is another from Horncastle to the river Witham, at Dogdyke, near Tattershall; and another from Louth to the Humber. There is another from Grantham to Nottingham, thirty-three miles, a very fine canal, completed in 1796, which cost £100,000. It passes near some fine beds of plaster; and lime is brought in large quantities from Criche in Derbyshire. Caistor Canal joins the river Ancholme in the parish of south Kelsey, and proceeds in a direct course nearly to the town of Caistor, being a distance of about nine miles. The Stainforth and Keadley Canal commences at the river Dun, about a mile to the west of Fishlake, and runs parallel with that river opposite to Thorn; from whence, in a line nearly due east, it passes Crowle and Keadley, whence it forms a junction with the river Trent. A branch from this canal, about a mile across Thorn Common to Hangman Hill, joins the river Dun. The total length of this canal is between fourteen and fifteen miles; and, running through a fen part of the country, has little elevation, and no lockage, except out of the rivers, and at the extremities. Lincolnshire being so completely a grazing county, there is but little else to notice with respect to its natural productions. Some of the cattle raised in this county are of the most surprising and almost incredible size. This county returns twelve members to parliament; viz. two for the shire, two for the city of Lincoln, two for Stamford, two for Boston, two for Grantham, and two for Grimsby. No other name need be mentioned to establish the biographical honor of this county than that of Sir Isaac Newton, who was born at the manor-house of Woolsthorpe, in the village of Colterworth. The house is still standing.—The accomplished Anne Askewe, who was born at Kelsey about 1520, and martyred at Smithfield 1546, going to heaven, as Fuller expresses it, 'in a chariot of fire.'—The patriotic and loyal Cecil, lord Burleigh. Born at Bourn, 1521. Died 1598.—John Fox, the martyrologist, the celebrated author of the Acts and Monuments of the Church, in which he was greatly assisted by Dr. Grindal, afterwards archbishop of Canterbury. Born at Boston, 1517. Died 1587.—Mr. Alexander Kilham, founder of a new sect, or rather division, of Arminian Methodists, was born at Epworth.—Admiral Sir W. Monson. Born at South Carlton, 1569. Died 1642-3. —Francis Peck, an eminent antiquary, biographer, and critic. Born at Stamford, 1692. Died 1743.—The Patriotic Thomas Sutton, founder of the Charterhouse-School, London. Born at Knaith, 1532. Died 1611.—The two Wesleys, John and Charles, founders of the Arminian Methodists. They were born at Epworth. John, 1703. Died 1791. Charles, 1708. Died 1788.—The zealous and intrepid archbishop Whitgift. Born at Great Grimsby, 1530. Died February 29th, 1603.

There are here no manufactures of any great extent. Woollen and woollen yarn have been considered the staple trade of the county. Ships are built at Gainsborough; and 'a pretty fabric for brushes' is also manufactured there; also coarse hemp-sacking. There are also some factories for the spinning and weaving of flax and linen. Its chief trade, however, is in fat cattle.

LIN'DEN, *n. s.* Sax. lind. The lime-tree. See Lime.

Hard box, and *linden* of a softer grain. *Dryden.*

Linden Tree. See Tilia.

LINDSAY (Sir David), a celebrated Scottish poet, descended of an ancient family, and born in the reign of James IV., near Cupar in Fifeshire. He was educated at St. Andrew's; and, after making the tour of Europe, returned to Scotland in 1514. Soon after his arrival he was appointed gentleman of the bed-chamber to the king, and tutor to the prince, afterwards James V. He enjoyed several other honorable employments at court; but, in 1533, was deprived of them all, except that of lyon king at arms, which he held till his death. His disgrace was probably owing to his invectives against the clergy. After the decease of James V. Sir David became a favorite of the regent earl of Arran; but the abbot of Paisley did not suffer him to continue long in favor with the earl. He then retired to his paternal estate, and spent the remainder of his days in rural tranquillity. He died in 1553. His poetical talents, considering the age in which he wrote, were not contemptible; he treats the Romish clergy with great severity, and writes with humor: but he takes such liberties with words, lengthening or shortening them for measure or rhime, that the Scotch have to this day a proverb, for an unusual expression, There is nae sic a word in a' Davie Lindsay. He wrote several tragedies and comedies, and first introduced dramatic poetry into Scotland. His poems are printed in one volume; and fragments of his plays in MS. are in Mr. William Carmichael's collection.

Lindsay (John), a learned English clergyman, born in 1686, and educated at Oxford. He preached many years to a dissenting congregation in Aldersgate Street. He published, 1. The

Short History of the Regal Succession: 2. Remarks on Whiston's Scripture Politics, 8vo. London. 1720: 3. A Translation of Mason's Vindication of the Church of England; 1726: and some sermons. He died 21st of June 1768, aged eighty-two.

LINDSEY (Theophilus), a modern divine of the Unitarian persuasion, was born at Middlewich in Cheshire, in 1723. He received his early education at Middlewich and Leeds, and at the age of eighteen was admitted a scholar at St. John's Cambridge. Having taken orders, by the recommendation of the earl of Huntingdon, his sponsor, he was appointed domestic chaplain to the duke of Somerset, and in 1754 accompanied earl Percy to the continent. On his return he married the daughter of Mr. archdeacon Blackburne, and was presented to a living in Dorsetshire, which he exchanged in 1764 for that of Catterick, Yorkshire. In 1771 he zealously co-operated with his father-in-law, Dr. John Jebb, and others, to obtain relief in regard to subscription to the thirty-nine articles, and soon after, having rejected the doctrine of the Trinity, he resigned his livings, and came to London, where he opened the Unitarian Chapel in Essex Street, Strand; and conducted the service according to the plan of a liturgy, altered from that of the establishment by the celebrated Dr. Samuel Clarke. About the same time he published his Apology, of which several editions were printed. This was followed by A Sequel to the Apology, in which he replies to the various answers given to that work. He continued to conduct the services of his chapel in conjunction with Dr. Disney until 1793, when he resigned the pulpit, but continued actively to employ his pen. In 1802 he published his last work, entitled Considerations on the Divine Government. He died November 3d, 1803, in his eightieth year. Besides the above works he wrote, On the Preface to St. John's Gospel; On Praying to Christ; An Historical View of the State of the Unitarian Doctrine and Worship, from the Reformation; and several other pieces. Two volumes of his sermons have also been published since his death, and a life of him by Mr. Belsham.

LINDUM, an ancient town of Britain, on or near the site of Lincoln, possessed by the Horesti; mentioned by Richard of Cirencester, with Alauna and Victoria, as the three principal cities of that people. If the conjectures of the moderns are just, that Alauna was Alnwick, Lindum Lincoln, and Victoria Perth, the dominions of the Horesti must have been very extensive.

LINDUS, in ancient geography, a town of Rhodes, situated on a hill on the west side of the island. It was built by Tlepolemus the son of Hercules, according to Diodorus Siculus; by Lindas, one of the Heliades, grandsons of Apollo, according to Strabo. It was the native place of Cleobulus, one of the seven wise men; and had a famous temple of Lindian Minerva, built by the daughters of Danaus. Cadmus enriched it with many splendid offerings. The citizens dedicated and hung up here the seventh of Pindar's Olympic odes, written in letters of gold. The ruins of this superb edifice are still to be seen on the top of a high hill which overlooks the sea. Relics of the walls, consisting of stones of an enormous size, still show it to have been built in the Egyptian style. The pillars and other ornaments have been carried off. On the most elevated peak of the rock are the ruins of a castle, which may have served as a fortress to the city. Its circumference is very extensive.

END OF VOL. XII

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