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Roger Sherman

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BIOGRAPHY

OF

7
SELF-TAUGHT MEN:

WITH AN

INTRODUCTORY ESSAY.

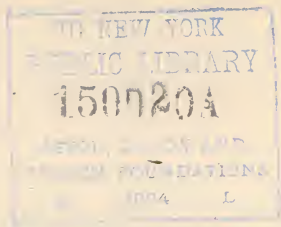
Per augusta ad augusta.

VOL. I

BOSTON:
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1846.

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ADVERTISEMENT.

THE present volume, with the exception of the last article, was prepared by Professor B. B. EDWARDS, of the Theological Seminary, Andover, and published several years since. Several sketches, however, in the volume then published are omitted in this, but will probably appear hereafter, somewhat enlarged. It was the original plan of the author to extend the work to several volumes, as he might be able to prepare them from time to time; but other duties, more immediately connected with the station he now occupies, have compelled him to relinquish it, to be completed by others.

The object of the author in commencing the work,—which was “to furnish encouragement to a very large and very deserving class of young men in this country, who are endeavoring to rise to respectability and usefulness by their own efforts and resources,”—is that of the publishers in issuing a new edition, and will also be kept in view in the preparation of future volumes.

It is the design of the publishers to issue a second volume in a few months, to be succeeded by others, should public patronage warrant.

BOSTON, OCTOBER, 1846.

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INTRODUCTORY ESSAY.

THE future history of the United States is a subject of deep interest. We are come to a very important period in our course. The strength of our political system is beginning to be tried. The tendencies of our institutions are becoming apparent. The elements which form a general national character, are combining and coalescing. It is emphatically a day of trial. Every thing is subjected to a rigid scrutiny. Merely prescriptive rights are abandoned. Reliance upon authority is given up. Such being the condition of the country, it is not an inappropriate question, What is to be done? There are local divisions, civil strifes, rival religious denominations, great questions pending in political economy, interesting relations with other portions of the world, and boundless resources for good or evil. What then are the duties which devolve on the American citizen?

It is very obvious, in the first place, that in the passion for novelty and change, we are to see that we do not give up any thing which is truly valuable. We ought to remain firm on those great principles of politics and education, morals and religion, which have been tried, and have not been found wanting. There is little danger in this country of a too pertinacious attachment to old systems. The hazard is all on the other side. The love of innovation is vastly an overmatch for a blind regard to authority and antiquity. In detaching ourselves from what is absurd and erroneous in former opinions, we shall, without great circumspection, abandon the true with the false, and shall soon find ourselves on an unknown sea, without any experience from the past, or guide for the future. As an instance in point, I might allude to the excessive simplification in books of education, relieving the student from the necessity of patient attention, and of thorough and discriminating habits of thought.

Another duty of great importance is, to induce a more fervent and general coöperation of the advocates of sound principles, in the diffusion of their opinions. There is little concentrated sympathy and fellow-feeling among the friends of man. They have not learned the power of associated effort. They do not act in masses. This trait in

our character is principally owing to two reasons. We have no capital city. We have no acknowledged metropolis of letters or influence. There is no London, to which all the provincial towns willingly bow in homage. The tendency of our republican institutions is such, also, as to prevent an embodied and powerful action of the friends of virtue. Our freedom of thought and independence of character we sometimes carry to an extreme. We are better as private citizens than as members of a commonwealth. It is not true that the state of public morals and virtue is as elevated as that of the individuals who compose a community. We do that in a collective capacity, which we should not dare to do as friends or neighbors. Conscience, and the faith of solemn compact, are often voted away, when personal honor, or a mere verbal engagement, are sacredly remembered and redeemed. When a great principle is at stake, we must learn to dismiss all minor differences, to forget all local attachments, to abjure utterly every selfish consideration. What is a party, what is a religious denomination, when a fundamental law of right or justice is at issue?

Intimately connected with the preceding remark, is the undoubted truth, that questions of political economy are to be viewed far more than they

have been in this country, in connection with the operations of the providence of God. What volumes of ingenious speculation have been wasted in this captivating science, simply because the authors did not, or would not, look at the arrangements of the Power that ruleth over all. It is not pretended but that there are great and intrinsic difficulties in shaping a system of commercial intercourse, among the different parts of this country, and between the United States and foreign nations. Still it may be safely asserted, that one half of the vexation and trouble which have been experienced, would have been avoided, if our legislators were all Christian economists. The Author of nature, and of nations, did not leave the great subjects of internal or international commerce in such profound doubt and mystery as is now thrown around them. He has made all the parts of a country mutually dependent upon each other, on purpose to counteract the selfishness of men. To promote the prosperity of one division of the United States, at the expense of the happiness of any other portion, is adopting certain means to ruin the whole. The unnatural growth of one empire is as certainly destructive to itself as it is to that land from which it has subtracted its wealth. Men cannot be politicians, in the best sense of the word, with-

out adopting the principles of the Bible. The book of Proverbs, and the sermon on the Mount, contain the elements of the best political economy which was ever devised. They inculcate what is of immeasurable importance in the intercourse of nations — enlargement of mind, and comprehensiveness of view, and clearness and power of conscience. These would settle questions of foreign intercourse and domestic improvement, with far more certainty and safety than the volumes of Adam Smith, or the statistics of Seybert or Pitkin. Here, then, is a great duty to be performed. Those same elevated and Christian principles are to be carried into all the duties of the statesman, which have been so happily introduced into some of the departments of criminal jurisprudence and penitentiary discipline.

It is very evident, moreover, that great efforts are required to maintain the due ascendancy of mind over matter. The accumulation of wealth is the object which absorbs the attention of all classes of our community. Almost the entire population of the country are earnestly engaged in the development and employment of the physical resources of the nation. There is a boundless selfishness — a restless and unappeasable desire to amass riches. This is the general theme of conversation in the public stage-coach ;

it is the reiterated topic of recommendation in official documents ; it is the foundation of irritating comparisons between different portions of the country ; it causes the desecration of the ever to be hallowed Sabbath ; it stimulates the waking hours and animates the dreams of the private citizen. Mammon is the god of this country. The attainment of wealth is pursued, not as a means, but as an end. Our government does not employ the abundant resources of the nation, in extending the boundaries of science and of civilization, *but rather in the purchase of more land.* Individuals, as a general thing, do not amass wealth for the sake of becoming Mæcenases, or Thorntons, or Boudinots, but for some personal and selfish consideration. Now this insatiate worldliness ought to be counteracted. A powerful weight should be thrown into the opposite scale. Our country is ruined if it becomes too prosperous. Wealth, with all its concomitants and adjuncts, will not save us. Rocky coasts and rough fields, with virtuous hearts, are a richer inheritance than the golden mines of both hemispheres. It is the extension of the empire of mind which we need. It is the cultivation of the domestic graces and accomplishments. It is intellectual and moral glory, after which we must aspire. We must attain the enviable honor of

being an intellectual and religious nation. In renouncing the crowns and coronets, the pomps and vanities, of the old world, let us not devote ourselves to that which is infinitely more sordid.

This leads me to remark, that we are called to the work of educating an innumerable multitude of minds. Popular instruction, in its most comprehensive import, is to be the theme of absorbing interest. Connected with this subject, are questions of very wide application, which have been hardly considered yet. We are to provide means for extending the benefits of education to the extremities of society, to a scattered and ever emigrating population. We are to devise the best methods for combining legislative supervision and patronage, with private munificence. The philosophy of education is to be studied and taught as a practical science. Books, in all the departments of education, are to be written by those who are intimately acquainted with the laws of the human mind. In short, a vast population are not only to have instruction communicated to them, but are to be inured to habits of self-education, and to be intrusted with the power of elevating themselves indefinitely in the scale of improvement.

Once more, a national Christian literature is to be created in this country. There is a period, or

there are periods, in the history of every nation, when the great currents of thought receive their direction, when the organs of intellectual life begin to move. Of what immense benefit had it been to England in all subsequent ages, if her Elizabethan era had been a Christian era; if the great men who then toiled in the fields of knowledge, had all been Boyles and Miltons. How different would have been the destiny of France, if her literary men of the age of Louis XIV., had all been Pascals and Fenelons; if that gorgeous constellation of intellect had been tempered with the mild beams of Christianity. How bright would have been the pages of her now blood-stained history! The great lesson which these facts teach us, is to seize the favorable moment — to preoccupy the ground. Our state of probation, in this respect, is not past. With a few exceptions, we have now no literature. We have nothing which can be called a National Literature. It is yet to be created. Those great controlling influences, which lift themselves into the upper firmament of thought, which are like the polar light, always visible, and always to be regarded, are yet to be collected together. Though there are scattered rays of light every where, yet they have not been concentrated into reigning and radiant orbs. The fourth day is not come.

A great object, therefore, an ultimate object, to be kept in view in this country, now and forever, is the highest possible cultivation of science and literature *in connection with* religion. It is an object vast enough for the concentration of every energy, physical, and mental, and moral, which God has given to us. Here may be exhibited a vigor of intellect, a purity of taste, a strength and fervor of religious feeling, all in delightful combination, such as the old world has never yet seen. Now is the time. We have separation enough from the other continents. We have ample sphere. We have no need to engrave our discoveries on columns of stone, to be wearily deciphered by some subsequent age. We may spread them out before a great people. We may write them on ten thousand living and breathing hearts.

Another very important object is, to turn to the best account the triumphs of the Christian religion, which so mark the years that are now passing over us in this country. These exhibitions of the grace and power of the Redeeming Saviour, may be attended with vast collateral benefits, if they are regarded with that importance which they deserve. When the powers of the world to come are visible, when there is an awakened and tender conscience and clearness of perception,

when men feel deeply that they are spiritual and immortal beings, then is a most favorable time to make sure of other great interests. The moral sense may be brought to bear on the whole circle of duties. Liberality of feeling and comprehensiveness of mind may be successfully inculcated. The individuals in question, may learn to look on themselves as the subjects of a new and glorious economy, where they can breathe a fresher air, and obtain occasional glimpses of the higher abodes, where dwell their elder and more favored brethren. The simple personal safety of an individual, is not the only or the great object in view, in these days of the Redeemer's victories. Why should not the sphere of human sympathy be enlarged? Why should not fresh charms be thrown over the whole aspect of human society? Why should not the genial influence pervade all the intercourse of men? Why should not revivals of Christianity exert a strong influence on the purity of civil elections, on the sacredness of judicial proceedings, on the contracts of commerce, and on the durability of a republican government? The genuineness of that religion may well be questioned, which does not moderate the heat of party zeal, which does not diffuse itself into all the departments of civil life, — in short, which does not make men real philanthropists, pure and incorruptible patriots.

But in order to fulfil these great trusts, and to accomplish these high purposes, we must bring some new powers into the field. A hitherto unknown agency must be employed. All the ordinary and accustomed means of changing public opinion, are not sufficient. We have not men enough, of the proper description, in this country. A new order of cultivated intellect is greatly needed. A limited number of eminent scholars, such as Alexandria, and Athens, and London in the days of Anne, contained, is not demanded. A multitude of learned men in the abstract sciences, such as Paris and some of the German cities embrace, would not accomplish the work. Neither would the parish schools and universities of Scotland supply the deficiency. They nurture metaphysical acumen, and strength of reasoning, indeed, but frequently at the expense of benevolent feeling and religious principle. Neither are the excellent common school systems of the northern States of this country, however great the blessings which they diffuse, equal to the enterprise to be accomplished.

A class of men which will be fully adequate to the exigency, may be found in great numbers in this country. They compose the young men who have vigor of body, great strength and firmness of character, an ardent desire to acquire knowledge, a disposition to employ their powers in the diffusion

of knowledge, with little or no pecuniary resources. They constitute a portion of the members of our colleges. Probably from fifty to seventy-five thousand of this class of young men, are pursuing, with various interest, the study of the sciences and of literature, at the lyceums, which are happily extending into all parts of the country. Several thousand more are engaged in a course of study which is habitually connected with manual labor. A still smaller class, but amounting to nearly two thousand, are under the patronage of various societies for the promotion of ministerial education. So that in all the classes enumerated, there are, doubtless, at least one hundred thousand young men in the United States, who are in a course of self-education.

In this description of young men, there are materials of great value, which may be fashioned and moulded for important public service. No other nation on earth is possessed of such a treasure. This country is comparatively new. There is not, as in Europe, a multitude of large estates, which can furnish abundant means of education to the sons of a family. The population, in many parts of the land, is migratory also. Of course, the ancient seats of learning are left behind. Opportunities for a finished education cannot be obtained for many years after the first

settlement of a country. Besides, the population increases with such rapidity, that all the ordinary means for providing facilities for thorough mental discipline, are entirely inadequate. Such being the condition of things in this country, it follows almost of consequence, that there will be a class of men such as I have described, — of firm nerve, of aspiring hope, of powerful understanding, but not in possession of the means of pursuing an uninterrupted course of mental improvement. If they have the benefit of teachers, it is only at intervals. If taught at all, they must in a great measure teach themselves. They are compelled to rely on their own resources. That this class of young men is large, and capable of conferring great benefits on the country, no one can doubt.

They possess some peculiar advantages over all other classes of men. They have confidence in their own power, Whatever of character they possess has been tried in the school of severe discipline. They have breasted the billows, in a great measure, alone. Others have had their doubts resolved by teachers. In the final resort, they have depended on foreign and auxiliary aid. Their own powers have been tasked for a while, but the last weight has been lifted up by the shoulders of others. A clearer eye has penetrated the dark cloud for them. It is sometimes the

fact, that an individual who has been taught by others, has more confidence in the opinion of every one else, than in his own. As a direct consequence, he is wavering, timid, pliable. His character is not compacted and assimilated, but yielding and capricious. His usefulness is of course greatly diminished. But the men of whom I speak, have measured their powers. They have depended very little on extraneous aid.

Another attribute of this class of individuals, is independence of purpose. They are accustomed to form opinions according to the decisions of their own judgments. They are like that description of lawyers, who have deeply studied the elementary principles of their profession, who have followed out these principles into all their ramifications, and who come to conclusions, which are, in a great measure, irrespective of particular facts — facts which may coincide, or may not, with an original principle. Such lawyers are independent, in a great degree, of precedents, or of the opinion of courts. By severe thought and well-directed study, they have formed an independent habit of judgment. Such is the fact with those individuals who have been self-instructors. They may err in opinion, and their purposes may be formed on insufficient grounds; but they are not accustomed to bow to human

authority, nor yield their free agency at the call of party or sect.

Many of this class have, moreover, an invincible perseverance. The resoluteness with which they resolve, has a counterpart in the untiring execution of their schemes. Difficulties only excite a more ardent desire to overcome them. Defeat awakens new courage. Affliction nourishes hope. Disappointment is the parent and precursor of success. A resolution so strong is sometimes formed, that it seems to enter into the nature of the soul itself. It swallows up the whole man, and produces a firmness of determination, an iron obstinacy of pursuit, which nothing but death can break down.

I have seen an individual commence a course of preparatory studies for a liberal education. Weakness of sight compelled him to suspend his labors. After a season of relaxation, he resumed his books, but the recurrence of the same disorder induced him to abandon the pursuit. He then assumed the duties of a merchant's clerk; but the same inexorable necessity followed him. He entered into the engagements of a third profession, with as little success as before. But he was not discouraged. An unconquerable determination took possession of his soul, that, come what would, he would not despair. In the merciful

providence of that Being who "helps those who help themselves," he was directed to the manufacturing of a certain article which was new in that part of the United States, and his labors were rewarded with entire success. In a few years, he became one of the most affluent individuals in his vicinity.

The following facts in relation to a gentleman, who is now a distinguished professor in one of the American colleges, will afford an excellent illustration for my purpose. The father of the individual alluded to, was a poor but intelligent man, gave his children a good common education, and also to some extent the privileges of an academy, which was situated in his native town. The occupation of the son was that of husbandry, especially during the summer months, being employed by some neighboring farmer, as his father did not own a farm. Early in life he acquired a taste for mathematics, and never afterwards did he advance so rapidly in geometry and the kindred studies, in the same number of hours' application to them, as in the evening after ten or twelve hours of hard labor in the field. Having obtained permission to see some of the astronomical instruments belonging to the academy, he became particularly attached to practical astronomy, though he could gain access only to elementary

books. Having made an observation upon an eclipse of the sun, for the purpose of determining the longitude of the place, he commenced the work of resolving the problem with only the general directions and tables in the common books of navigation; and although it cost him several months of severe study, he succeeded in obtaining a correct result, except the errors of the lunar tables. He did not engage in the study of Latin and Greek, until after he had been interested several years in mathematics, and then, mainly because he found that he could not otherwise become a teacher. While occupied in these studies, he supported himself in part by occasionally surveying land, and in part by undertaking the business of a carpenter, having discovered that this art depended on a few simple mathematical principles easily applied. The object which he now had in view, was to prepare himself to enter Harvard college two or three years in advance. He was for the most part his own instructor. The minister of the parish rendered him some assistance; but the whole amount of his recitations in Latin, Greek, Hebrew, French, philosophy, chemistry and natural history, during the whole course of his life thus far, has not been greater than the recitations in college for six months. Having looked forward with much pleasure to the

privileges of a college, and having been nearly prepared to enter a junior class, a sudden termination was put to his literary efforts, by the failure of his eyes, in consequence of applying too closely to the study of the Greek language, during a feeble state of health. For the following year, he was compelled to abandon reading and study almost wholly; and from that time to the present, — a period of sixteen years, — he has rarely been able to read steadily, for one hour, without experiencing much and often severe pain in his eyes, sometimes threatening apoplexy. This affliction, though highly beneficial in its moral influence, was apparently fatal to all his literary plans; yet he could not quite abandon them. In order to obtain a subsistence, he soon after accepted the office of a deputy or assistant to the sheriff of the county. Feeling confident that he must entirely renounce the idea of obtaining a subsistence by literary efforts, and seeing nothing before him but a life of servile labor, he was induced to write and publish a dramatic performance of considerable length, with the hope that it would excite some interest in his favor, wherever his lot might fall. The composition, though bearing the marks of inexperience, contains some passages of true poetic feeling, expressed in powerful language. Soon after this event, he was very unexpectedly

invited to teach the academy in his native village. To acquit himself in this new sphere of duty, he made great efforts. He now gave particular attention to classical literature. Finding that his health had suffered severely from previous efforts, and from the consequences of the dreadful despondency through which he had passed, he was compelled to abandon mathematical and astronomical studies, though it was a most painful sacrifice. Providence, however, furnished a delightful substitute. Natural history then first attracted his attention, and he soon found that he could pursue this study, without injury to his eyes, and with benefit to his health, in the intervals of severer engagements. These pursuits introduced him to the acquaintance of a number of distinguished gentlemen, in various parts of the country, who rendered him very valuable assistance. About this time, the honorary degree of Master of Arts was conferred on him by Yale college. The only pecuniary aid which he ever received, during the course of his education, was ten or twelve dollars. Notwithstanding, when he entered on his professional duties, he had obtained a respectable library, and was free from debt. He is now in a station of great usefulness, and has accomplished several undertakings, which have conferred lasting benefits on the country.

In the two words, **INDUSTRY** and **PERSEVERANCE**, is contained the secret of these results. With whatever original powers the Creator may have endowed him, they would have availed him nothing, without an unbending resolution, and severe and unremitted application. His history affords a remarkable instance of the energy of a self-taught man. Those events, in the providence of God, which would have presented insurmountable obstacles to other individuals, were only an excitement to him to urge, with fresh impulse, his onward course.

Another characteristic of self-taught men, is, that they commonly devote themselves to some important practical object. They do not waste their power in pursuing trifles. They do not generally engage in the departments of criticism and metaphysics, which are rewarded with little practical result. It is those who have ample means of subsistence and support, who are beguiled into merely speculative regions, or who devote themselves to undertakings of moderate or of doubtful utility. The case is different with those who are dependent on their own efforts for everything. The first direction of their minds is not so much to the sciences as to the arts. Carpentry in various forms, surveying of land, the manufacture of machinery, the construction of

hydraulic engines, originally offering themselves to their notice, gave a shape to their whole subsequent life. It is to be attributed to this fact, doubtless, that self-taught men are distinguished for *invention* in the arts. Their necessities have given a readiness to their minds, enabling them to seize on those combinations of thought, from which discoveries of great importance have sometimes followed. They have also that power of patient application, which is alike important to discovery. Causes, however, exist, in this description of men, unfavorable to the development of new truths in the abstract sciences.

Self-taught men have also the faculty of clearly communicating their knowledge to others. In this respect, they make excellent teachers. They have worked their own way up the steps of knowledge, and they can point out the path in which they came. Their attention was not absorbed by the movements of their guide, for they had none. The various objects which they met, they clearly marked and defined. Whatever were the general principles which they adopted, they were not taken upon trust, but were well considered. These individuals may not be able to explain their progress logically, or scientifically, but they can do it intelligently, and to good purpose. They have, also, in a striking degree, the ability to em-

ploy familiar illustrations. For the sake of throwing light upon their course, they have not searched for the images of poetry, nor listened to the personifications of the orator; they have collected the apposite and graphic illustrations and facts, which common people can apprehend and relish, and which are gathered from the rocks and the fields, and from all the incidents of ordinary life. Arthur Young, the self taught English agriculturist, was distinguished as an instructor, insomuch that La Fayette, and the Russian prince Galitzin, and the Russian emperor himself, intrusted lads to his guidance and care. No treatise on astronomy has ever been so popular, and deservedly too, among all descriptions of learners, as that of James Ferguson, who discovered some of the principles of mechanics before he knew that any treatises had been written on the subject. Sir Humphrey Davy was, perhaps, the most popular lecturer who ever addressed a British audience. This was owing not more to the enthusiasm of his character, and his perfect knowledge of his subject, than to the clearness of his expositions, and the transparency and beauty of his illustrations.

There are, notwithstanding these various excellences, several acknowledged deficiencies of character. There are blemishes, both of an intellectual and moral kind, which are almost inseparable

from a plan of self-education, and which are worthy of distinct consideration.

One of the most manifest defects is, want of comprehensiveness of mind. The special advantage of a teacher is, to point out the connections among the different arts and sciences, their relative importance, the natural order of studying them, and the evils of a disproportionate attention to any one of them. The general directions of a judicious teacher are invaluable. They are like a drawing of the heavens to direct the course of the youthful observer among the millions of stars. But a student, without the instructions of an experienced guide, will be liable to seize at once upon the *parts* of a subject, or upon the middle of a treatise, without ever having surveyed his ground, or marked its general bearings. He will thus expend his labor at unimportant points, or in a disproportionate degree. There will be little symmetry and scientific method in his studies. His labors will resemble those of a mechanic, who should place a well-finished door or window in the side of an old and dilapidated dwelling. He has an accurate acquaintance with one branch of a subject, while all around it is in disorder and deformity. And here it is not to be supposed that he will gain a more thorough knowledge of a specific topic, in consequence of giving an exclu-

sive attention to it; and that this will atone for the loss of a general acquaintance with the subject. The study of Webber's trigonometry will furnish as much discipline for the mind, if the student, before he commences his investigation, knows the general relations of the mathematical sciences, as if he had no such general knowledge. A greater amount of mental discipline can be acquired, by studying the sciences in their natural, scientific order, than by attending to them exclusively and at random. A self-taught man is frequently attached, with a kind of favoritism, to a particular study. It absorbs his whole attention, and all other arts or sciences are proportionably undervalued and slighted. The distinguished painter, Hogarth, affected to despise literature, and indeed every species of mental cultivation, except the knowledge of the art of painting; and he even professed himself to have little or no acquaintance with anything else. The celebrated, self-taught anatomist, Dr. John Hunter, was almost entirely ignorant of all learning, even with that connected with his own profession. It has been asserted, that it not unfrequently happened, that upon communicating a supposed discovery of his own to some one of his own more erudite friends, he had the mortification to learn that the same thing had already been discovered by some other well-

known anatomist. Michael Angelo could scarcely spell his name correctly. Benjamin West, the president of the Royal Academy for almost thirty years, never attained to a style of ordinary correctness in his orthography. The disadvantages of the want of an early education, can never, indeed, be entirely overcome. There will always be lingering traces of the deficiency. It is like the acquisition of the pronunciation of a foreign language at a late period in life. The nice peculiarities and shades of sound, cannot, by any effort, be acquired.

Self-taught men are specially liable to an exclusive attachment to pursuits which are obviously and immediately practical. There seems to be a general impression, that poetry, and the kindred branches of literature, furnish little else but amusement, and if read at all, can afford materials for recreation only in the intervals of imperious duty. The tendency to judge in this manner can be accounted for, without any difficulty, from the circumstances in which self-educated men are placed, but the effects are very pernicious. Poetry, in its best sense, is altogether a practical study. Its influence upon the whole mind of a reader, is, in the highest degree, favorable. As history is said to be philosophy teaching by example, so poetry is philosophy teaching by music.

It is good sense, pouring itself out in sweet sounds. It is powerful thought, uttering itself in the voices of angels. A true poet is a philosopher. Milton, and Wordsworth, and Coleridge, understand the phenomena of the human mind, as well as Malebranche, or Reid, or Brown. They have the same capacities of wide generalization, and accurate analysis, and faithful exposition. To read such poets, is as directly conducive to usefulness, as it is to read the ablest metaphysical treatise. We cannot avoid regretting that a man like Dr. Franklin, was not conversant with the best poets. It would have been no injury to his usefulness as a profound observer of human manners. Common sense and the loftiest imagination are perfectly coincident. The same man may condense his ideas into epigrams and proverbs, or pour them out in strains of the most vigorous and harmonious versification. It is recorded of him who "spake three thousand proverbs, that his *songs* were a thousand and five." He that was wiser than all the children of men, who so condensed and embodied his thoughts as to make nearly every word instinct with sentiment, could delightfully sing, "the winter is past, the rain is over and gone, the flowers appear on the earth, the time of the singing of birds is come, and the voice of the turtle is heard in the land." If

Benjamin West had read Chaucer, and Spenser, and Milton, it would not have subtracted in the least from his enthusiasm for his favorite art, while, in a thousand ways, it would have aided his power of conceiving and of delineating on the canvass, the varieties of human character. It would also have relieved the "American" president of the Royal Academy, of the charge of being an illiterate man. John Opie, and Professor Heyne, and Sir Humphrey Davy, showed their good sense in nothing more than by an earnest attention to various branches of literature and science. It is not pretended that every man ought to attempt to become a universal scholar; but that the highest excellence in any one pursuit, is inconsistent with entire ignorance of science and literature generally. Self educated men are peculiarly exposed to danger from this quarter; and instead of banishing works of taste and imagination from the farm-house, and the lyceum, and the manual-labor school, they are the very productions which ought to meet with a welcome reception. It has been said, that very few, if any, discoveries in the abstract sciences, have ever been made by men who have instructed themselves; that the general advancement of knowledge is almost entirely to be ascribed to men who have received a regular education. The labors of Franklin, Rit-

tenhouse, and others, may furnish some exceptions to this remark. Nevertheless, it is generally true, that prior to a particular discovery, an individual must take a wide, general survey of the fields of knowledge, else he may fondly imagine that he has elicited some new truth, which may at length appear to have been long before discovered and classified. Original conception and inventive genius, are in perfect harmony with extensive acquisitions. He, who would advance in any department of knowledge, must know what others have done before him. Instead of decrying the models of taste and genius of other ages and countries, it is the wisdom of every man to study them patiently and thoroughly. This is not a degrading subjection to other minds, which will cramp or annihilate genius. If ever there was an original author, it was John Milton — he who “chose early and began late.” But who does not know that *Paradise Lost* is the spoils of all times and of all countries? If ever there was a universal plunderer, if ever there was a boundless plagiarist, it was this same John Milton. He searched the Jewish records, and the Christian economy. He opened the Talmud, and he perused the Koran. He reveled in the fields of Achaia, and on the hill-sides of Judea. He listened to the sweet music under Italian skies, and

to the awful prophecies of the Druids. He drank alike of the Eurotas, and of that "stream which flows fast by the oracle of God."

Another evil to which men of this class are liable is, what may be expressed by the term *rigidness* of character. They sometimes acquire a fierceness of independence, an extreme hardihood of spirit, which nearly destroys their social sympathies, and greatly subtracts from their usefulness. They were themselves nursed in winds and storms. They trampled the most formidable difficulties under their feet, and smote into the dust every enemy which rose up against them. Some of them seemed to triumph over physical impossibilities, and to make the loss of one faculty or sense, the stimulus to push their remaining powers to the ultimate limit of perfection. Hence they infer that this same fortitude and fearlessness belongs, or should belong, to every other human being. Finding a deficiency of these stern qualities, they consider it as an offence almost unpardonable. They do not have compassion on the erring and ignorant. They do not make sufficient allowance for human infirmity. They do not recollect, perhaps, those favorable conjunctures in the providence of God, of which they took advantage, and which may not fall to the lot of others. Those, who have amassed large estates, by vigor-

ous personal effort, are sometimes disposed to carry habits of economy to absolute avarice. Misers are frequently found among this class of men. What is won with hardship is held with a tenacious grasp. Fortunes thus acquired will not be dissipated, at least till the second generation; a generation which knows not the habits of their fathers. An individual, who has become affluent by his own exertions, may acquire habits of genuine philanthropy, and in that case, is entitled to greater commendation, in consequence of the difficulties which he has overcome; still there is ground to apprehend that his charities will be confined to one or two favorite channels, and that, in the multiplicity of the smaller incidents and occasions of life, he will be far from exhibiting genuine greatness of soul, or real philanthropy of feeling. From the very nature of the case, he will be disposed to ascribe an undue importance to the various contrivances and systems, which are intended to enable an individual, without pecuniary resources, to rise, by personal exertion, to spheres of usefulness and honor.

Intimately connected with the deficiency of character just described, is the habit of over-estimating personal or other attainments. Self-confidence is frequently carried too far. A great change in external circumstances, is always at-

tended with imminent danger in the subject of it. Elevate a servant to a throne, impart at once large literary treasures to an ignorant and obscure individual, fill the house of the poor man with wealth; and you take a most effectual way to imbue him with the spirit of arrogance and vanity. Julius Cæsar Scaliger, the great critic, was a self-taught man, but guilty of the most excessive affectation and pride. He was contented to be called Bordonì, and the son of a miniature painter, till he was nearly fifty years old. He then composed an elaborate memoir of his own life, in which he pretended that he was the last surviving descendant of a princely house of Verona. Bandinelli, an Italian sculptor, the son of a goldsmith, and a grandson of a common coalman, having, in the course of his life, acquired great wealth, and having been created a knight by Charles V., is said to have repeatedly changed his name, in order to hide his parentage; and to have fixed at last upon that by which he is generally known, in order that he might appear to have sprung from a noble family. A similar anxiety to secure to himself the reputation of a name, was manifested by the great Spanish dramatist, Lopez de Vega.

One of the especial benefits of a regular education, is to wear away or cut off these excres-

cences of character. It is exceedingly difficult for an individual to retain in quiet possession, within the walls of a college, a great amount of self-conceit or vanity. He comes into contact with rough corners. He is speedily in collision with flint. Powerful minds will meet in fierce competition, and sad will be his lot who brings into debate an unusual share of self-importance. College is a great leveler. Hence it is, that in the last sessions of a collegiate course, the real advance can be measured by contrasting the accompanying modesty and docility, with the opposite qualities, which are frequently visible at the earlier periods. At college, an individual will be compelled to learn what his real talents and attainments are. There is scarcely the possibility of deceiving several keen-eyed equals. There is very rarely an undue degree of sympathy or compassion in a classmate. But in the case of an individual who has educated himself, there is no class of men anywhere in his neighborhood, with which he can compare himself. He grows up alone. An innate vigor is the sap which nourishes him. All the individuals of his acquaintance are, perhaps, clearly his inferiors. At the same time, his injudicious relatives may administer large draughts of flattery to his lips, till he becomes exceedingly wise in his own sight, and the wonder of the age which has

produced him. As correctives of this very obvious evil, our public institutions are admirably adapted, and are, in fact, indispensable.

To the numerous class of young men, in the United States, who are mainly dependent on their own resources for knowledge, or respectability, one of the most important counsels of wisdom, which can be addressed, is, **STUDY YOUR OWN CHARACTER AND PROSPECTS.** If you are just emerging from obscurity, and breathing the fresh air of an emancipated mind, and thirsting for improvement, and occasionally catching some gleams of light from that undiscovered land of promise which lies in the distant horizon; let not your fancy, nor your excited feelings, lead you captive. Be calm and considerate. A wrong step now may blast your hopes forever. An imperfect estimate of the deficiencies of your character, may impede your course through your whole subsequent life. Be willing to know all the wrong habits which you have cherished, and all the weaknesses of your mind. Study your excellences also, so that you may not cultivate them disproportionately, nor yield to the influence of depression or despair, when you are tempted to place too low an estimate on your powers or acquirements. Be solicitous especially to understand what your physical con-

stitution is, so that you may make it subservient, from the beginning, to the most perfect action of mind and heart, so that all your capacities, intellectual and moral, may be safely, and to the highest degree, developed. If there is an individual of your acquaintance, who knows your past history, and your mind, and who has gone through the course which you are commencing, let it be your object to gain from him a faithful analysis of your character, and an accurate chart of that path, of alternate storm and sunshine, which lies before you. If possible, find an experienced friend, who has an enlarged mind and a liberal heart, and who has no exclusive and favorite study or system of his own. The counsels of such a guide will be inestimable. Next to the blessing of the Almighty, they will ensure success. When all this is done, form a calm and deliberate determination that you will take that path, come what may, which will secure your highest happiness and usefulness. Nourish that inflexible, that iron determination in your heart, without which nothing will be achieved.

In the second place, you will have occasion to guard against underrating knowledge. Learning, if it be thoroughly apprehended and digested, cannot be too highly esteemed. Mere acquisition of facts, indeed, without analysis and reflection, is

positively injurious to the mind. Reading, unattended with contemplation, will produce habits of affectation and pedantry. Nevertheless, those, who are most exposed in this respect, are men of literary leisure, or scholars by profession. You are liable to fall into the opposite error. Compelled by your circumstances to think, relying on the native resources of your own mind, you will learn to look disparagingly on the scholar of comprehensive and ample attainment. But extensive acquisitions are perfectly consistent with profound original investigation. Reading the thoughts of others, will often awaken interesting and valuable trains of reflection. An active mind will assimilate, or correct, or transform the views of the author whom he is reading. The very ability to peruse certain books, implies that the reader himself has powers of reflection and arrangement.

Again, want of immediate success at the commencement of your studies, will, without great care, weaken your resolution, and interrupt your efforts. You have, perhaps, come from the toils of a shop or farm, to the hall of science, and to the pursuits of the scholar. Habits of close investigation cannot be acquired in a day. A wandering mind cannot be fixed without painful effort. Associations acquired in pursuits alien from science and taste, cannot be changed at the mere

bidding of the will. Those lands of beauty and joy, which shall at length open to your view, are at the commencement of your course, shrouded in impenetrable clouds. Algebra and Plato are invested with their full charms only to the practised eye, and to the disciplined intellect. You need to fortify your mind with the strong convictions of duty. Harkening invariably to the decisions of an enlightened conscience, and the dictates of sound reason, you will at length find that the path of enlarged thought, and of cultivated feeling, and of refined taste, is the path of pleasure.

You will be under the necessity, moreover, of rendering all your efforts at manual labor, and in procuring a supply for your physical wants, subservient to a certain purpose — advancement in mental and moral power. They must be means, not an end. If you are preparing for either of the learned professions, or to influence public influence in any way, you must make all things subordinate to your purpose. It is not your object to become an ingenious mechanic, an efficient merchant, or a practical farmer. Some individuals, who are in a course of education, take more pleasure in the shop or on the farm, than in the study, and are more solicitous to be accounted skilful workmen than powerful scholars. It is the grand design, or it ought to be, of all manual-labor

academies, to promote mental and moral improvement. The connection between the system of bodily exercise, in all its details, and literary progress, should be manifest and prominent. The high cultivation and valuable products of a farm, or a garden, should not be the boast of these institutions. They are but minor and secondary matters. It is the bearing of these things on the development of the mind, and of the heart, which should arrest the attention and be rewarded with the encouragement of every observer. If this object be overlooked, or manifestly neglected, manual-labor schools will be an utter failure, and there will be a universal return to the old systems of mere literary study, without any attention to the physical wants. These schools, to be successful, must furnish better scholars than any others—men of more vigorous understanding, and of more mental discipline. Bodies of perfect symmetry, and of gigantic muscular strength, are worthless in themselves alone. This is a subject of great practical importance. If these institutions fail on any one point, it will be on this; and for a very obvious reason. It is important to direct public attention prominently to the physical part of the arrangements, or that wherein the institution differs from those conducted on the former plan, in order to secure a sufficient amount of

public patronage. Consequently, the principal interest of the community will be concentrated upon that which is obviously of secondary importance. Besides, every individual who engages in physical exercise of any kind, must feel a considerable degree of attachment to this exercise, if he designs to derive from it material benefit. This attachment, by a very common law of the human mind, may increase and become the master passion of his soul.

In regard to such individuals, in the class of self-taught men, who devote their attention to any of the mechanic arts, or to either of the departments in common life and business, though their particular pursuit is to engross their chief attention, yet it is of great importance that they become thoroughly acquainted with the principles of their trade, and with the reasons of the rules according to which they daily practise. They should throw as much mind as possible into all which they undertake. The perfection of machinery, and the excellence of soils, are not the only objects of inquiry. The thorough acquaintance with the philosophy of the art, the means of its advancement, and the ways in which it can confer the greatest possible benefits on mankind — these are the topics which will command the attention of an individual, in proportion as his views are expanded, and his

feelings benevolent. No inconsiderable number of self-taught men have, in this way, conferred invaluable benefits upon mankind. Watt, Fulton, Whitney, Franklin and Davy, will be dear and cherished names, ages hence.

Another class of individuals to whom I have alluded, are pursuing a partial course of self-education, at lyceums. They can devote to literary and scientific pursuits only a limited portion of time, perhaps simply the evenings of the Winter months. By associating all the young men and others in the town, and statedly meeting for the consideration and discussion of important subjects, very great benefits may be derived, provided the association can be made to *exist* for a sufficient length of time. It needs a principle of vitality. To secure any great degree of usefulness, permanence must be given to it. It is a voluntary association, in the strictest sense of the term. But no object of much importance can be secured, without the feeling of responsibility, or accountability, in some of the individuals concerned. A few lectures on the common and familiar topics of science, or on matters of local history, will be of little service. There must be a plan to secure a permanent and enduring interest. As many individuals as possible must be brought into fervent coöperation. New arrangements of subjects must

be occasionally adopted. Foreign aid, whenever practicable, must be secured. A well chosen and constantly accumulating library must be obtained. And, what is, perhaps, of greater importance than anything else, *all the members must have something to do*. Personal participation is the great secret of exciting and maintaining a permanent interest in an undertaking.

To the individual who will even cursorily look at the state of this country, or the history of individual men, in comparison with the history or condition of any other country, it must appear strikingly obvious, that never were circumstances more favorable than among us for the development and employment of mind. In this country, character and influence can be gained by vigorous individual effort. The whole community are the spectators and judges of the advancement of every individual. No iron hand grasps a man as soon as he steps into the world, and shrivels him up, while another rises simply because he is kept down. No class in the community are raised by the condition of their birth, or by such adventitious circumstances, above one half the minds around them. Free and fresh as the air which he breathes, each individual may start in the career of improvement. Nearly all the circumstances which are calculated to depress and dishearten, arise from extreme

poverty and a very obscure parentage and birth-place, or else from personal considerations. But nothing short of absolute impossibility, in the providence of God, ought to deter any one from engaging in the pursuit of knowledge. Obstacles of fearful magnitude, and of almost every description, have been overcome in innumerable instances.

Have you been deprived of one of your senses? Not a few have vanquished this impediment. The instance of Mr. Nelson, the late learned and classical professor in Rutgers college, New Jersey, as detailed by Prof. McVicar, in his *Life of Griffin*, is admirably in point. Total blindness, after a long, gradual advance, came upon him about his twentieth year, when terminating his collegiate course. It found him poor, and left him to all appearance both penniless and wretched, with two sisters to maintain, without money, without friends, without a profession, and without sight. Under such an accumulation of griefs, most minds would have sunk; but with him it was otherwise. At all times proud and resolute, his spirit rose at once into what might be called a fierceness of independence. He resolved within himself to be indebted for support to no hand but his own. His classical education, which, from his feeble vision, had been necessarily imperfect, he now determined to complete, and immediately entered upon the

apparently hopeless task, with a view to fit himself as a teacher of youth. He instructed his sisters in the pronunciation of Greek and Latin, and employed one or other constantly in the task of reading aloud to him the classics usually taught in the schools. A naturally faithful memory, spurred on by such strong excitement, performed its oft-repeated miracles; and in a space of time incredibly short, he became master of their contents, even to the minutest points of critical reading. On a certain occasion, a dispute having arisen between Mr. Nelson and the classical professor of the college, as to the construction of a passage in Virgil, from which his students were reading, the professor appealed to the circumstance of a comma in the sentence, as conclusive of the question. "True," said Mr. Nelson coloring, with strong emotion; "but permit me to observe," added he, turning his sightless eyeballs towards the book which he held in his hand, "that in my *Heyne* edition it is a colon, and not a comma." He soon established a school for classical education. The boldness and novelty of the attempt attracted general attention; the lofty confidence he displayed in himself, excited respect; and soon his untiring assiduity, his real knowledge, and a burning zeal, which, knowing no bounds in his devotion to his scholars, awakened somewhat of a corresponding

spirit in their minds, completed the conquest. His reputation spread daily, scholars flocked to him in crowds, and in a few years he found himself in the enjoyment of an income superior to that of any college patronage in the United States. Fernandez Navarete, a distinguished Spanish painter, was seized with an illness, when only two years old, which left him deaf and dumb for life. Yet, in this state, he displayed, from his infancy, the strongest passion for drawing, covering the walls of the apartments with pictures of all sorts of objects, performed with charcoal; and having afterwards studied under Titian, he became eventually one of the greatest artists of his age. He could both read and write, and even possessed considerable learning. Nicholas Saunderson, one of the illustrious men who has filled the chair of Lucasian professor of mathematics at Cambridge, England, when only two years old, was deprived by small-pox, not only of his sight but of his eyes themselves, which were destroyed by abscess. He was sent to the school at Penniston, early in life, and soon distinguished himself by his proficiency in Greek and Latin. He acquired so great a familiarity with the Greek language, as to be in the habit of having the works written in it read to him, and following the meaning of the author as if the composition had been in English; while he showed

his perfect mastery over the Latin, on many occasions, in the course of his life, both by dictating and speaking it with the utmost fluency and command of expression. In 1728, he was created Doctor of Laws, on a visit of George II. to the university of Cambridge, on which occasion he delivered a Latin oration of distinguished eloquence. He published an able and well-known treatise on algebra, a work on fluxions, and a Latin commentary on Sir Isaac Newton's Principia. His senses of hearing and touch were carried to almost incredible perfection. The celebrated mathematician, Euler, was struck with blindness in his fifty-ninth year, his sight having fallen a sacrifice to his indefatigable application. He had literally written and calculated himself blind. Yet, after this calamity, he continued to calculate and to dictate books, at least, if not to write them, as actively as ever. His Elements of Algebra, a work which has been translated into every language of Europe, was dictated by him when blind, to an amanuensis. He published twenty-nine volumes quarto, in the Latin language alone. The mere catalogue of his published works extends to fifty printed pages. At his death, he left about a hundred memoirs ready for the press.

Have you wasted the early part of life, and are you now compelled to commence, if at all, a course

of self-education in the later period of youth, or in middle age? Let not this circumstance, in the least degree, weaken your resolution. Numerous are the instances in which this difficulty has been overcome. Cato, the celebrated Roman censor, showed his force of character very strikingly, by learning the Greek language in his old age. At that time, the study of this tongue was very rare at Rome; and the circumstance renders the determination of Cato, and his success, the more remarkable. It was the first foreign language, also, which he had acquired. Alfred the Great, of England, had reached his twelfth year before he had even learned his alphabet. An interesting anecdote is told of the occasion on which he was first prompted to apply himself to books. His mother, it seems, had shown him and his brothers a small volume, illuminated or adorned in different places with colored letters, and such other embellishments as was then the fashion. Seeing it excite the admiration of the children, she promised that she would give it to him who would first learn to read it. Alfred, though the youngest, was the only one who had the spirit to attempt to gain the prize on such conditions, at least it was he who actually won it; for he immediately, as we are told, went and procured a teacher for himself, and in a very short time was able to claim

the promised reward. When he came to the throne, notwithstanding all his public duties and cares, and a tormenting disease, which scarcely ever left him a moment of rest, it was his custom, day and night, to employ his whole leisure time, either in reading books himself, or in hearing them read by others. He, however, reached his thirty-ninth year before he began to attempt translating anything from the Latin tongue.

The French dramatist, Molière, could only read and write very indifferently when he was fourteen years of age. Dr. Carter, the father of the celebrated Miss Carter, had been originally intended for a grazier, and did not begin his studies till the age of nineteen or twenty. He eventually, however, became a distinguished scholar; and gave his daughters a learned education. Joannes Pierius Valerianus was fifteen years old before he began to learn to read; his parents, indeed, having been so poor, that he was obliged to commence life as a domestic servant. He became one of the most elegant scholars of his time. Van den Vondel, an honored name in Dutch poetry, and the author of works which fill nine quarto volumes, did not commence learning Latin till his twenty-sixth year, and Greek not till some years afterwards. Like many others of the literati of Holland, he began life as a commercial man, and originally kept a hosier's

shop at Amsterdam ; but he gave up the business to his wife, when he commenced his career as an author. He died in extreme old age, after having occupied, during a great part of his life, the very highest place in the literature of his country.

John Ogilby, the well known translator of Homer, was originally a dancing-master. He had apprenticed himself to that profession, on finding himself reduced to depend on his own resources, in consequence of the imprisonment of his father for debt. Having been prospered in this pursuit, he was very soon able to release his father, much to his credit, with the first money which he procured. When he had fairly established himself in Dublin, the rebellion of 1641 commenced, and not only swept away all his little property, but repeatedly put even his life in jeopardy. He at last found his way back to London, in a state of complete destitution ; notwithstanding he had never received any regular education, he had before this made a few attempts at verse-making, and in his extremity he bethought him of turning his talent in this way to some account. He immediately commenced his studies, which he was enabled to pursue chiefly through the liberal assistance of some members of the university of Cambridge ; and although then considerably above forty years of age, he made such progress in Latin,

that he was soon considered able to undertake a poetical translation of Virgil. This work made its appearance in the year 1650. A second edition of it was printed a few years afterwards, with great pomp of typography and embellishments. Such was its success, that the industrious translator actually proceeded, although now in his fifty-fourth year, to commence the study of Greek, in order that he might match his version of the *Æneid* by others of the *Iliad* and *Odyssey*. In due time both appeared. In 1666, he was left, by the great fire of London, once more entirely destitute. With unconquerable courage and perseverance, however, he rebuilt his house and re-established his printing-press. He was now appointed cosmographer and geographical printer to Charles II. He died at the age of seventy-six years.

In the United States, there have been numerous instances of great success in professional pursuits, which the individuals in question did not assume till a very late period in life. An eminent clergyman in a New England city, toiled in one of the most laborious mechanical professions, till he was far in advance of that age when study is generally commenced. He then pursued a regular academical and theological education, almost wholly dependent on his own resources. A gen-

tleman, who is now at the head of one of the most flourishing of the American colleges, was employed on a farm as a hired laborer, till he was beyond that period when most students have completed their collegiate education. The sudden rise of the waters of a neighboring river, which prevented him from proceeding to commence his labors on another farm, was the event, in the providence of God, which determined him to begin his preparation for college. A number of additional striking instances will be found in the course of this volume. A great amount of mind, and of usefulness, is undoubtedly wasted, by the belief that little can be accomplished, if an individual has suffered the first thirty years of his life to pass without improvement. Is it not an erroneous idea, that a man has reached the meridian of his usefulness, and the maturity of his powers, at the age of thirty-five or forty years? What necessity exists for prescribing a limit to the onward progress of the mind? Why set up a bound at a particular time of life more than at another time? Is there not a large number of men, in this country, whose history would prove the contrary doctrine, — who have actually exhibited more vigor of intellect at fifty years of age, than at forty? There are instances among the venerable dead, where the imagination even

gathered fresh power to the close of a long life. That a majority of facts show that maturity of intellect is attained at the age of thirty-five years, is unquestionably owing, in some degree at least, to the influence of the opinion itself. It has operated as a discouragement to effort.

Once more — are you called to struggle with the difficulties arising from obscure parentage and depressing poverty? Here multitudes have obtained most honorable triumphs, and have apparently risen in the scale of honor and usefulness in proportion to the depth of the penury or degradation of their origin. Laplace, a celebrated French mathematician and astronomer, and whom Dr. Brewster supposes posterity will rank next after Sir Isaac Newton, was the son of a farmer in Normandy. The American translator of his great work, the *Mécanique Céleste*, and who has added a commentary in which the amount of matter is much greater than in the original work, while the calculations are so happily elucidated, that a student moderately versed in mathematics, may follow the great astronomer with pleasure to his beautiful results — is entirely a self taught man. A distinguished benefactor of one of our principal theological seminaries, has risen from extreme poverty to the possession of great wealth and respectability. The same was the fact also

with a former lieutenant governor of Massachusetts, who, in the days of his highest prosperity, had none of that pride of fortune and haughtiness of demeanor, which are sometimes consequent upon the unexpected acquisition of a large estate. Several of the most useful and respected citizens of the capital of New England, in the early part of their lives, were entirely destitute of all resources, except the strength of their own unconquerable resolution, and the favor of Providence. The celebrated German metaphysical philosopher, Kant, was the son of a harness maker, who lived in the suburbs of his native city, Königsberg. He had hardly arrived at the age of manhood before he lost both his parents, who had never been able to afford him much pecuniary assistance. His own industry and economy, together with some assistance which he received from his relatives, enabled him to continue his studies. His application was uncommonly great, and the results of it, numerous and extraordinary. He published a work on the Universal Natural History and Theory of the Heavens, or an Essay on the Constitution and Mechanical System of the whole Globe, according to the Newtonian system. In this treatise he anticipated several of the discoveries of the astronomer Herschel. His principal metaphysical work, the "Critique of

Pure Reason," produced an astonishing sensation through all Germany. He was appointed, in 1778, professor of logic and metaphysics, in the university of Königsberg. James Logan, the friend of William Penn, and for some time chief justice and governor of Pennsylvania, was early in life apprenticed to a linen-draper. Previously to his thirteenth year, he had studied the Latin, Greek and Hebrew languages. In the sixteenth year of his age, having happily met with a small book on mathematics, he made himself master of it, without any manner of instruction. Having, also, further improved himself in Greek and Hebrew, he acquired the French, Italian and Spanish languages. Like William Penn, he was a warm and efficient friend of the Indians. He was a man of uncommon wisdom, moderation, prudence, of unblemished morals, and inflexible integrity. Lomonosoff, the father of Russian literature, was descended from a poor family in the government of Archangel. His father was a fisherman, whom he assisted in his labors for the support of his family. In Winter, a clergyman taught him to read. A poetical spirit and a love of knowledge were awakened in the boy, by the singing of the psalms at church, and the reading of the Bible. Without having received any instruction, he conceived the plan of

celebrating the wonders of creation, and the great deeds of Peter I., in songs similar to those of David. He died in 1765. The Russian academy have published his works in six volumes, quarto. He wrote several treatises on grammar, history, mineralogy and chemistry, besides some of the best poetry in the language. Winckelman, one of the most distinguished writers on classic antiquities and the fine arts, which modern times have produced, was the son of a shoemaker. His father, after vainly endeavoring, for some time, at the expense of many sacrifices, to give him a learned education, was at last obliged, from age and ill health, to retire to a hospital, where he was, in his turn, supported for several years in part by the labors of his son, who, aided by the kindness of the professors, continued to keep himself at college, chiefly by teaching some of his younger and less advanced fellow students. Bartholomew Arnigio, an Italian poet, of considerable eminence, who lived in the sixteenth century, followed his father's trade of a blacksmith, till he was eighteen years old, when he began, of his own accord, to apply to his studies; and by availing himself of the aid sometimes of one friend and sometimes of another, prepared himself at last for entering the university of Padua. Examples of this description it is unnecessary

to multiply. The records of all the learned professions will show many instances admirably in point. Every legislative hall would furnish marked and illustrious specimens. The last degree of penury, the most abject occupations of life, have not presented an insurmountable obstacle to improvement. The aspiring mind will pass over or break down every impediment. Prisons cannot chain it. Dungeons cannot immure it. Racking pains cannot palsy its energy. Opposition will only nurture its powers. The Pilgrim's Progress was written by a tinker in prison; the Saint's Rest, on a bed of excruciating pain; the Apology for the Freedom of the Press, and the Sermons upon Modern Infidelity, in the intervals of one of the fiercest diseases which ever preys upon man. Pascal, that sublime and universal genius, equally at home in the most accurate analysis and in the widest generalization, was visited with an inexorable malady during the greater part of his life. Dr. Watts, the sweet psalmist of ages yet to come, was as weak in body, as he was clear and powerful in intellect. On some occasions, it would seem, that the mind is conscious of its own independence, and asserts its distinct and unfettered existence, amidst the severest ills which can befall its frail and dying companion.

It is worthy of deep and careful consideration, whether our country does not demand a new and higher order of intellect, and whether the class, whose character I have been considering, cannot furnish a vast amount of materials. It is not piety alone which is needed, nor strength of body, nor vigor of mind, nor firmness of character, nor purity of taste ; but all these united. Ought not this subject to awaken the attention of our most philanthropic and gifted minds? Ought not social libraries to be collected with this main purpose — to furnish stimulant to call forth all possible native talents and hidden energies? Should not the lyceum lay hold of this subject in every village in our land? Ought not the systems of discipline and instruction at all our colleges, to be framed, and to be administered, with a distinct and declared regard to the benefits which self-taught genius, with the superadded effects of thorough instruction, can confer upon the millions of our country? Every parent, and every instructor, should employ special means to bring his children or his pupils into such circumstances, and place in their way such books and other means, as will develop the original tendencies of their minds, and lead them into the path of high attainment and usefulness. Every educated man is under great responsibilities to bring into the light and to

cherish all the talent which may be concealed in his neighborhood. Genius lies buried on our mountains and in our valleys. Vast treasures of thought, of noble feeling, of pure and generous aspirations, and of moral and religious worth, exist unknown — are never called forth to adorn human nature, and to bless and save mankind. Shall not an effort now be made to bring into action all the available intellect and piety in the country? In the lapse of a few years, more than one hundred millions of human beings, on this continent, will speak the English language. To provide intellectual and moral sustenance for such an amazing population, requires an enlargement of thought and an expansiveness of philanthropy, such as has never yet been exhibited on our earth. One division of this country is as large as that realm over which Augustus Cæsar swayed his sceptre, and which Hannibal tried in vain to conquer. What immense tides of immortal life are to sweep over this country, into the gulf of eternity. We are called to think and to act on a grander scale than ever fell to the lot of man. This nation needs what was conferred on Solomon, “wisdom and understanding exceeding much, and largeness of heart, even as the sand that is on the sea-shore.” How pitiable and how deplorable are all the contests between political parties,

and benevolent societies, and religious denominations. While thus contending with one another, we are losing forever the favorable moment for effort; and we are preparing to have heaped upon our heads the curses of an unnumbered posterity. We are the representatives of millions. We are acting for masses of human beings. To live simply as individuals, or as insulated beings, is a great error, and a serious injustice to our posterity. We must take our stand on fundamental principles. We must set those great wheels in motion, which, in their revolution, are to spread light, and life, and joy through the land. While we place our whole dependence on the goodness and the grace of the Ruler of the universe, we must act as those who recollect their origin at the Plymouth rock and from Saxon ancestry, and who are conscious of the high destiny to which Providence calls them.

Let us come up to our great and most interesting work. Let us lift our eyes on the fields, boundless in extent, and white already to the harvest. Here in this age, here in this new world, let the tide of ignorance be stayed; let the great mass of American sentiment be thoroughly purified; let human nature assume its renovated form; let the flame of human intellect rise, and sweetly mingle with the source of all mental light

and beauty ; let our character and labors be such, that we shall send forward to the most distant posterity, a strong and steady light. We must take no middle ground. We must bring to the great work of illuminating this country and of blessing mankind, every capability of mind and of heart, which we possess — every possibility of the power which God has given to us.

BIOGRAPHICAL SKETCHES.

ROGER SHERMAN.

"The self-taught Sherman urged his reasons clear."

Humphrey's Poems.

ROGER SHERMAN was born at Newton, Mass., April 19, 1721. His great-grandfather, Captain John Sherman, came from Dedham, England, to Watertown, Massachusetts, about the year 1635. His grandfather, William Sherman, was a farmer, in moderate circumstances. In 1723, the family removed from Newton to Stoughton. Of the childhood and early youth of Sherman, little is known. He received no other education than the ordinary country schools in Massachusetts at that time afforded. He was neither assisted by a public education nor by private tuition. All the valuable attainments which he exhibited in his future career, were the result of his own vigorous efforts. By his ardent thirst for knowledge, and his indefatigable industry, he attained a very commendable acquaintance with general science, the system of logic, geography, mathematics, the general principles of history, philosophy, theology, and particularly law and politics. He was early apprenticed to a shoemaker, and he continued to pursue that occupation for some time after he was twenty-two

years of age. It is recorded of him, that he was accustomed to sit at his work with a book before him, devoting to study every moment that his eyes could be spared from the occupation in which he was engaged. During the Revolutionary War, Mr. Sherman was placed on a Committee of Congress, to examine certain army accounts, among which was a contract for the supply of shoes. He informed the Committee that the public had been defrauded, and that the charges were exorbitant, which he proved by specifying the cost of the leather and other materials, and of the workmanship. The minuteness with which this was done, exciting some surprise, he informed the Committee that he was by trade a shoemaker, and knew the value of every article. He was sometimes accused, but without justice, of being vain of the obscurity of his origin. From the distinguished eminence which he reached, he probably contemplated with satisfaction, that force of mind and that industry, which enabled him to overcome all the obstacles which encompassed his path. For the gratification arising from such a contemplation, no one will be disposed to censure him.

When he was nineteen years of age, his father died. His eldest brother having previously removed to New Milford, Connecticut, the principal charge of the family devolved on him. At this early period of life, the care of a mother, who lived to a great age, and the education of a numerous family of brothers and sisters, brought into grateful exercise his warm, filial and fraternal affections. The assistance subsequently afforded by him to two of his younger brothers, enabled them to obtain the inestimable advantages of a

public education. He continued to reside at Stoughton about three years after the death of his father, principally employed in the cultivation of the farm, and in otherwise providing for the maintenance of the family. Before he was twenty-one, he made a public profession of religion. He thus laid the foundation of his character in piety. That unbending integrity which has almost made his name synonymous with virtue itself, was acquired in the school of Christ and his apostles. Mr. Sherman used to remark to his family, that before he had attained the age of twenty-one years, he had learned to control and govern his passions. His success in these efforts he attributed, in a considerable degree, to Dr. Watts' excellent treatise on this subject. His passions were naturally strong, but he had brought them under subjection to such a degree, that he appeared to be habitually calm and sedate, mild and agreeable. All his actions seem to have been preceded by a rigorous self-examination, and the answering of the secret interrogatories, What is right? — What course ought I to pursue? He never propounded to himself the questions, Will it be popular? — How will it affect my interest? Hence his reputation for integrity was never questioned.

In 1743, he removed with the family to New Milford, a town near New Haven, Connecticut. He performed the journey on foot, taking care to have his shoemaker's tools also transported. He there commenced business as a country merchant, and opened a store in conjunction with his elder brother, which he continued till after his admission to the bar, in 1754. He discontinued his trade as a shoemaker at the time this connection was formed.

In 1745, he was appointed surveyor of lands for the county in which he resided. Astronomical calculations of as early date as 1748, have been discovered among his papers. They were made by him for an almanac, then published in New York, and which he continued to supply for several successive years.

About this time, a providential circumstance led him to aspire after a higher station in life. He was requested by a friend to seek for him legal advice in a neighboring town. To prevent embarrassment and secure the accurate representation of the case, he committed it to paper as well as he could before he left home. In stating the facts, the lawyer observed that Mr. Sherman frequently recurred to a manuscript which he held in his hand. As it was necessary to make an application by way of petition, to the proper tribunal, he desired the paper to be left in his hands, provided it contained a statement of the case from which a petition might be framed. Mr. Sherman reluctantly consented, telling him that it was merely a memorandum drawn up by himself for his own convenience. The lawyer, after reading it, remarked, with an expression of surprise, that, with a few alterations in form, it was equal to any petition which he could have prepared himself, and that no other was requisite. Having then made some inquiries relative to Mr. Sherman's situation and prospects in life, he advised him to devote his attention to the study of the law. But his circumstances and duties did not permit him at once to follow this counsel. The numerous family, which the recent death of his father had made, in a considerable degree, dependent on him for sup-

port and education, required his constant exertions in other employments. But the intimation which he there received, that his mind was fitted for higher pursuits, no doubt induced him at that early period of life, to devote his leisure moments to those studies which led him to honor and distinguished usefulness.

At the age of twenty-eight years, he was married to Miss Elizabeth Hartwell, of Stoughton, Mass., by whom he had seven children. She died in October, 1760. Two of his children died in New Milford, and two after his removal to New Haven. In 1763, he was married to Miss Rebecca Prescott, of Danvers, Mass., by whom he had eight children.

In May, 1759, he was appointed one of the justices of the court of common pleas for the county. He was for many years the treasurer of Yale college. From that institution he received the honorary degree of Master of Arts. After success in some measure had crowned his efforts, he still continued to apply himself to his studies with the most unremitted diligence. Encouragement, instead of elating him, only prompted him to greater effort. In the profession which he had chosen, perhaps more than in any other, men are compelled to rely on their own resources. Such is the competition, so constant is the collision of various minds, that ignorance and incompetency will surely be detected and exposed.

In 1766, he was appointed a judge of the superior court of Connecticut. In the same year, he was chosen an assistant or member of the upper house of the legislature. The first office he sustained for twenty-three years, the last for

nineteen years; after which a law was enacted rendering the two offices incompatible, and he chose to continue in the office of judge. It is uniformly acknowledged by those who witnessed his conduct and abilities on the bench, that he discovered in the application of the principles of law and the rules of evidence to the cases before him, the same sagacity that distinguished him as a legislator. His legal opinions were received with great deference by the profession, and their correctness was almost universally acknowledged. During the last four years in which he was judge, the late Chief-Justice Ellsworth was an associate judge of the same court; and from the period of his appointment, in 1785, until the death of Mr. Sherman, a close intimacy subsisted between them. The elder president Adams remarks that, "It is praise enough to say that Mr. Ellsworth told me that he had made Mr. Sherman his model in his youth. Indeed, I never knew two men more alike, except that the chief-justice had the advantage of a liberal education, and somewhat more extensive reading."

The period of our Revolutionary struggle now drew near. Roger Sherman, as it might have been expected, was one of the few who, from the commencement of hostilities, foresaw what would be the probable issue. He engaged in the defence of our liberties with the deliberate firmness of an experienced statesman, conscious of the magnitude of the undertaking, and sagacious in devising the means for successful opposition.

In August, 1774, Mr. Sherman, in conjunction with Joseph Trumbull, Eliphalet Dyer and Silas Deane, was nominated delegate to the general

congress of the colonies. He was present at the opening of the first congress. He continued a member of this body for the long period of nineteen years, till his death, in 1793, whenever the law requiring a rotation in office admitted it. In his new post of duty he soon acquired distinguished reputation. Others were more admired for popular eloquence, but in that assembly of great men there was no one whose judgment was more respected, or whose opinions were more influential. His venerable appearance, his republican simplicity, the inflexibility of his principles and the decisive weight of his character, commanded universal homage. In the fatiguing and very arduous business of committees, he was indefatigable. He was always thorough in his investigations, and all his proceedings were marked by system. Among the principal committees of which Mr. Sherman was a member, were those to prepare instructions for the army in Canada; to establish regulations in regard to the trade of the United Colonies; to regulate the currency of the country; to furnish supplies for the army; to devise ways and means for providing ten millions of dollars for the expenses of the current year; to concert a plan of military operations for the campaign of 1776; to prepare and digest a form of confederation; and to repair to head-quarters at New York, and examine into the state of the army.

On the 11th of June, 1776, in conjunction with John Adams, Thomas Jefferson, Benjamin Franklin and Robert R. Livingston, Mr. Sherman was appointed on the committee to prepare the Declaration of Independence. The committee was elected by ballot. The Declaration, as it is well

known, was written by Jefferson. What amount of influence was exerted by Sherman, in carrying the measure through the congress, is not certainly known. The records of the proceedings of that illustrious assembly are very imperfect. John Adams says of him, that he was "one of the soundest and strongest pillars of the Revolution." While he was performing the most indefatigable labors in congress, he devoted unremitting attention to duties at home. During the War, he was a member of the governor's council of safety.

In 1784, he was elected mayor of New Haven, an office which he continued to hold during the remainder of his life. About the close of the War, the legislature of Connecticut assigned to a committee of two, the arduous service of revising the laws of the State. Mr. Sherman was one of this committee. In 1787, he was appointed, in conjunction with Dr. Samuel Johnson and Mr. Ellsworth, a delegate to the general convention to form the constitution of the United States. Among his manuscripts a paper has been found, containing a series of propositions, prepared by him for the amendment of the old articles of confederation, the greater part of which are incorporated, in substance, in the new constitution. In the debates in that convention, Mr. Sherman bore a conspicuous part. In a letter to Gen. Floyd, soon after, he says, "Perhaps a better constitution could not be made upon mere speculation. If, upon experience, it should be found to be deficient, it provides an easy and peaceable mode of making amendments. But, if the constitution should be adopted, and the several States choose some of their wisest and best men, from time to time, to

administer the government, I believe it will not want any amendment. I hope that kind Providence, which guarded these States through a dangerous and distressing war, to peace and liberty, will still watch over them, and guide them in the way of safety."

His exertions in procuring the ratification of the constitution in Connecticut, were conspicuous and successful. He published a series of papers, over the signature of "Citizen," which, Mr. Ellsworth says, materially influenced the public mind in favor of its adoption. After the ratification of the Constitution, he was immediately elected a representative of the State in congress. Though approaching the seventieth year of his age, he yet took a prominent part in the great topics of discussion which came before congress.

On the 11th of February, 1790, the Quakers presented an address to the house on the subject of the "licentious wickedness of the African trade for slaves." A long and violent debate occurred on the propriety of its being referred to a committee. Some of the southern members opposed it with great vehemence and acrimony. Mr. Scott, of Pennsylvania, replied, in an eloquent appeal to the justice and humanity of the house. Mr. Sherman, perceiving that opposition would merely serve to inflame the already highly excited feelings of members, with his usual calmness, remarked that it was probable the committee would understand their business, and they might, perhaps, bring in such a report as would be satisfactory to gentlemen on both sides of the house. Mr. Sherman and his colleagues were triumphant; forty-three members voting in favor of the commitment of the memorial, and eleven in opposition.

Mr. Sherman uniformly opposed the amendments to the constitution which were at various times submitted to the house. "I do not suppose," said he, "the constitution to be perfect, nor do I imagine, if congress and all the legislatures on the continent were to revise it, that their labors would perfect it." He maintained that the more important objects of government ought first to be attended to; that the executive portion of it needed organization, as well as the business of the revenue and judiciary.

In 1791, a vacancy having occurred in the senate of the United States, he was elected to fill that elevated station.

On the 23d of July, 1793, this great and excellent man was gathered to his fathers, in the seventy-third year of his age. He died in full possession of all his powers, both of mind and of body.

The most interesting lesson which the life of Mr. Sherman teaches us, is the paramount importance of religious principle. His undeviating political integrity was not the result of mere patriotism, or philanthropy. He revolved in a higher orbit. The volume which he consulted more than any other was the Bible. It was his custom to purchase a copy of the scriptures at the commencement of every session of congress, to peruse it daily, and to present it to one of his children on his return. To his familiar acquaintance with this blessed book, much of that extraordinary sagacity which he uniformly exhibited, is to be attributed. The second President Edwards used to call him his "great and good friend, senator Sherman," and acknowledged, that, in the general

course of a long and intimate acquaintance, he was materially assisted by his observations on the principal subjects of doctrinal and practical divinity. "He was not ashamed," says Dr. Edwards, "to befriend religion, to appear openly on the Lord's side, or to avow and defend the peculiar doctrines of grace. He was exemplary in attending all the institutions of the gospel, in the practice of virtue in general, and in showing himself friendly to all good men. With all his elevation and all his honors, he was not at all lifted up, but appeared perfectly unmoved.

"That he was generous and ready to communicate, I can testify from my own experience. He was ready to bear his part of the expense of those designs, public and private, which he esteemed useful; and he was given to hospitality." What an example is here presented for the youthful lawyer and statesman! Would he rise to the most distinguished usefulness, would he bequeath a character and an influence to posterity "above all Greek or Roman fame," let him, like Roger Sherman, lay the foundations in the fear of God, and in obedience to the gospel of Jesus Christ.

Another most important practical lesson which we derive from the life of Mr. Sherman, is the value of habits of study and meditation. He was not only distinguished for integrity, but for accurate knowledge of history and of human nature—the combined fruit of reading and reflection. "He was capable of deep and long investigation. While others, weary of a short attention to business, were relaxing themselves in thoughtless inattention, or dissipation, he was employed in prosecuting the same business, either

by revolving it in his mind and ripening his own thoughts upon it, or in conferring with others." While laboriously engaged in the public duties of his station, he had, every day, a season for private study and meditation.

The testimonials to his extraordinary worth have been singularly marked and unanimous.

Among his correspondents were Drs. Johnson, (of Stratford,) Edwards, Hopkins, Trumbull, Presidents Dickinson and Witherspoon. Fisher Ames was accustomed to express his opinion by saying, "That if he happened to be out of his seat [in congress] when a subject was discussed, and came in when the question was about to be taken, he always felt safe in voting as Mr. Sherman did, *for he always voted right.*" Dr. Dwight, while instructing the senior class at Yale college, observed, that Mr. Sherman was remarkable for not speaking in debate without suggesting something new and important. Washington uniformly treated Mr. Sherman with great respect and attention. Mr. Macon, a distinguished senator of the United States, once remarked to the Hon. William Reed, of Marblehead, that "Roger Sherman had more common sense than any man he ever knew." The late Rev. Dr. Spring, of Newburyport, was returning from the South, while congress was in session at Philadelphia. Mr. Jefferson accompanied him to the hall, and designated several distinguished members of that body; in the course of this polite attention, he pointed in a certain direction, and exclaimed, "That is Mr. Sherman, of Connecticut, a man who never said a foolish thing in his life." Mr. Sherman was never removed from a single office,

except by promotion, or by act of the legislature requiring a rotation, or rendering the offices incompatible with each other. Nor, with the restrictions alluded to, did he ever fail in his reëlection to any situation to which he had been once elected, excepting that of representative of New Haven in the legislature of the State;— which office, at that period, was constantly fluctuating.

It closing this biographical sketch, it is proper to add, that Mr. Sherman, in his person, was considerably above the common stature; his form was erect and well proportioned, his complexion fair, and his countenance manly and agreeable. In the relations of husband, father and friend, he was uniformly kind and faithful. He was naturally modest; and this disposition, increased, perhaps, by the deficiencies of early education, often wore the appearance of bashfulness and reserve. In conversation relating to matters of importance, he was free and communicative.

The legacy which Mr. Sherman has bequeathed to his countrymen, is indeed invaluable. The Romans never ceased to mention with inexpressible gratitude the heroism, magnanimity, contentment, disinterestedness, and noble public services of him who was called from the plough to the dictator's chair. His example was a light to all the subsequent ages. So among the galaxy of great men who shine along the tracts of our past history, we can scarcely refer to one, save Washington, whose glory will be more steady and unfading than that of Roger Sherman.

HEYNE OF GOTTINGEN.

CHRISTIAN GOTTLÖB HEYNE, a distinguished scholar, was born Sept. 25, 1729, at Chemnitz, in Saxony, whither his father, a poor linen-weaver, had fled from Silesia on account of religious persecutions. The family were often reduced to the miseries of the lowest indigence. In the Memoirs of his own life, Heyne says, "Want was the earliest companion of my childhood. I well remember the painful impressions made on my mind by witnessing the distress of my mother when without food for her children. How often have I seen her, on a Saturday evening, weeping and wringing her hands, as she returned home from an unsuccessful effort to sell the goods which the daily and nightly toil of my father had manufactured." His parents sent him to a child's school in the suburbs of the small town of Chemnitz. He soon exhibited an uncommon desire of acquiring information. He made so rapid a progress in the humble branches of knowledge taught in the school, that, before he had completed his tenth year, he was paying a portion of his school fees by teaching a little girl, the daughter of a wealthy neighbor, to read and write. Having learned everything comprised in the usual course of the school, he felt a strong desire to learn Latin. A son of the schoolmaster, who had studied at Leipzig, was willing to teach him at the rate of fourpence a week; but the difficulty of paying so

large a fee seemed quite insurmountable. One day he was sent to his godfather, who was a baker, in pretty good circumstances, for a loaf. As he went along, he pondered sorrowfully on the great object of his wishes, and entered the shop in tears. The good-tempered baker, on learning the cause of his grief, undertook to pay the required fee for him, at which Heyne tells us he was perfectly intoxicated with joy; and as he ran, all ragged and barefoot, through the streets, tossing the loaf in the air, it slipped from his hands and rolled into the gutter. This accident, and a sharp reprimand from his parents, who could ill afford such a loss, brought him to his senses. He continued his lessons for about two years, when his teacher acknowledged that he had taught him all which he himself knew. At this time, his father was anxious that he should adopt some trade; but Heyne felt an invincible desire to pursue his education. He had another godfather, who was a clergyman in the neighborhood; and this person, on receiving the most flattering accounts of Heyne from his last master, agreed to be at the expense of sending him to the principal seminary of his native town of Chemnitz. His new patron, however, doled out his bounty with the most scrupulous parsimony; and Heyne, without the necessary books of his own, was often obliged to borrow those of his companions, and to copy them over for his own use. At last he obtained the situation of tutor to the son of one of the citizens; and this for a short time rendered his condition more comfortable. But the period was come when, if he was to proceed in the career which he had chosen, it was neces-

sary for him to enter the university; and he resolved to go to Leipsic. He arrived, accordingly, in that city, with only about four shillings in his pocket, and nothing more to depend upon, except the small assistance which he might receive from his godfather, who had promised to continue his bounty. He had to wait, however, so long, for his expected supplies from this source, — which came accompanied with much grudging and reproach when they did make their appearance, — that, destitute both of money and books, he would even have been without bread, too, had it not been for the compassion of the maid-servant of the house where he lodged. “What sustained my courage in these circumstances,” he remarks, “was neither ambition, nor presumption, nor even the hope of one day taking my place among the learned. The stimulus which incessantly spurred me on, was the feeling of the humiliation of my condition, — the shame with which I shrank from the thought of that degradation which the want of a good education would impose upon me, — above all, the determined resolution of battling courageously with fortune. I was resolved to try whether, although she had thrown me among the dust, I should not be able to rise up by the vigor of my own efforts.” His ardor for study only grew the greater as his difficulties increased. For six months he only allowed himself two nights’ sleep in the week; and yet all the while, his godfather scarcely ever wrote to him but to inveigh against his indolence, — often actually addressing his letters on the outside “*To M. Heyne, Idler, at Leipsic.*”

In the meantime, while his distress was becom-

ing, every day, more intolerable, he was offered by one of the professors, the situation of a tutor in a family at Magdeburg. Desirable as the appointment would have been in every other respect, it would have removed him from the scene of his studies, and he declined it. He resolved to remain in the midst of all his miseries at Leipsic. Through the favor of Providence, he was in a few weeks recompensed for this sacrifice. The same professor procured for him a situation in the university, similar to the one he had refused in Magdeburg. This, of course, relieved, for a time, his pecuniary wants; but still the ardor with which he pursued his studies continued so great, that at last it brought on a dangerous illness, which obliged him to resign his situation, and very soon completely exhausted his trifling resources, so that on his recovery he found himself as poor and destitute as ever. In this extremity, a copy of Latin verses which he had written having attracted the attention of one of the Saxon ministers, he was induced by the advice of his friends to set out for the court at Dresden, where it was expected that this patronage would make his fortune; but he was doomed only to new disappointments. After having borrowed money to pay the expenses of his journey, all he obtained from the courtier was a few vague promises, which ended in nothing. He was obliged, eventually, after having sold his books, to accept the place of copyist in the library of the Count de Bruhl, with the miserable annual salary of seventy-five dollars. But he had not been idle at Leipsic. He had listened, with great benefit, to the lectures of Ernesti on the principles of interpretation; to

some valuable archæological and antiquarian lectures; and to the eloquent disquisitions of Bach on Roman antiquities and jurisprudence. At Dresden, besides performing the duties of his situation, he found time to do a little work for the booksellers. For a learned and excellent edition of the Latin poet, Tibullus, he received one hundred crowns. In this way he contrived to live a few years, all the while studying hard, and thinking himself amply compensated for the hardships of his lot, by the opportunities which he enjoyed of pursuing his favorite researches in a city so rich in collections of books and antiquities as Dresden. After he had held his situation in the library for above two years, his salary was doubled; but before he derived any benefit from the augmentation, the seven years' war had commenced. Saxony was overrun by the forces of Frederick the Great, and Heyne's place, and the library itself to which it was attached, were swept away at the same time. He was obliged to fly from Dresden, and wandered about, for a long time, without employment. At last he was received into a family in Wittenberg; but in a short time, the progress of the war drove him from this asylum, also, and he returned to Dresden, where he still had a few articles of furniture, which he had purchased with the little money which he had saved while he held his place in the library. He arrived just in time to witness the bombardment of that capital, in the conflagration of which his furniture perished, as well as some property which he had brought with him from Wittenberg, belonging to a lady, one of the family in whose house he had lived. For this lady he

had formed an attachment during his residence there. Thus left, both of them without a shilling, the young persons determined to share each other's destiny, and they were accordingly united. By the exertions of some common friends, a retreat was procured for Heyne and his wife in the establishment of a M. de Leoben, where he spent some years, during which his time was chiefly occupied in the management of that gentleman's property.

But Providence was now about to visit him with the smiles of prosperity. In 1763, he returned to Dresden. Some time before this, the Professorship of Eloquence in the University of Göttingen had become vacant by the death of John Mathias Gessner. The chair had been offered, in the first instance, to David Ruhnken, one of the first scholars of the age, who declined, however, to leave the University of Leyden, where he had lately succeeded the eminent Hemssterhuis as professor of Greek. But happily, Ruhnken had seen the edition of Tibullus, and another of Epictetus, which Heyne had some time previously published. Ruhnken ventured to suggest to the Hanoverian minister the extraordinary merits of Heyne, and he was accordingly nominated to the professorship. He was soon after appointed first librarian and counsellor. To discharge the functions of these posts required the most multiplied labors. He says of himself, with great candor, that, "till he was professor, he never learned the art it was his duty to teach." But he soon made himself at home in his new duties. By his lectures; by his connection with the Royal Society, founded at Göttingen by Hal-

ler; by his indefatigable participation in the Göttingen Literary Gazette; by the direction of the Philological Seminary, which, under his guidance, was a nursery of genuine philology, and has given to the schools of Germany a great number of good teachers; by all this, together with his editions and commentaries on classic authors, Heyne has deserved the reputation of being one of the most distinguished teachers and scholars which the literary world has seen. The centre of his activity was the poetic department of classical literature. His principal work, which employed him for eighteen years, was his unfinished edition of Homer. He brought the library of Göttingen to such excellence, that it is regarded as the first in Europe, because all the departments are methodically filled. Not merely the fame of his great learning, but the weight of his character and the propriety and delicacy of his deportment, procured him the acquaintance of the most eminent men of his time. George Forster, Huber, and Heeren became his sons-in-law. In dangerous times, the influence which he acquired, and his approved uprightness and wisdom, were of great service to the university. By his efforts, the university and city were spared the necessity of affording quarters to the soldiery, while the French had possession of Hanover, from 1804 to 1805.

An attack of apoplexy terminated his life, on the 14th of July, 1802. He was in the eighty-third year of his age.

WILLIAM WHIPPLE.

THE father of WHIPPLE was a native of Ipswich, Massachusetts, and was bred a maltster. He was, also, for some time, engaged in sea-faring pursuits. He married Mary, the eldest daughter of Robert Cutt. She was a lady of excellent sense, and of many pleasing accomplishments. WILLIAM WHIPPLE was born in Kittery, Maine, in the year 1730. He received his education in one of the public schools in that town, where he was taught reading, writing, arithmetic and navigation. When this deficient course of education was completed, he left school, and immediately embarked on board of a merchant vessel, for the purpose of commencing his destined profession as a sailor. Before he was twenty-one years of age, he obtained the command of a vessel, and performed a number of voyages to Europe, and the West Indies. He was afterwards engaged in the infamous slave traffic. This circumstance in his life admits of no justification. The fact that good men formerly participated in it, only proves how much avarice hardens the human heart and sears the natural conscience. In 1759, Mr. Whipple abandoned the sea, and engaged in mercantile business for some time, with his brother Joseph. He married his cousin, Catharine Moffat, daughter of John Moffat, Esq., a merchant of Portsmouth. At an early period of the revolutionary contest, Mr. Whipple took a decided part in favor of the colonies, and in oppo-

sition to the claims of the parent country. So much confidence was placed in his integrity and firmness, that his fellow citizens frequently placed him in highly important offices. In January, 1775, he was chosen one of the representatives of Portsmouth to the provincial congress, which met at Exeter. By that body he was elected one of the provincial committee of safety. In 1776, he was chosen a delegate to the general congress, which met at Philadelphia. He continued to be reëlected for the three following years. This appointment gave Mr. Whipple the opportunity to record his name among the memorable list of the signers of the Declaration of Independence. The cabin boy, who, thirty years before, had looked forward to the command of a vessel as the consummation of his hopes, now stood among a band of patriots, more illustrious than any which the world had yet seen. He was considered a very useful and active member. In the business of committees, he displayed a most commendable degree of perseverance, ability and application. In 1777, when Burgoyne was rapidly advancing from Canada, the assembly of New Hampshire was convened, and more decisive measures were adopted to defend the country. Two brigades were formed; the command of one of which was given to Gen. Stark, and of the other to Whipple. Whipple was present with his brigade at the battles of Stillwater and Saratoga. He was one of the commissioners appointed by Gates to treat with Burgoyne, and was afterwards selected to conduct the British troops to Boston.

He was accompanied on this expedition by a

negro servant, named Prince, whom he had imported from Africa. On his way to the army, he told his servant, that if they should be called into action, he expected that he would behave like a man of courage. Prince replied, "Sir, I have no inducement to fight; but if I had my liberty, I would endeavor to defend it to the last drop of my blood." The general emancipated him upon the spot. In 1778, he accompanied Gen. Sullivan in his expedition to Rhode Island. For more than two years he was receiver of finance, a most arduous and responsible office, under Robert Morris. About this period, Gen. Whipple began to be afflicted with severe strictures in the breast, which compelled him to decline any further military command. In 1782, he was appointed one of the judges of the superior court of New Hampshire, in which office he continued till his death. In November, 1785, he expired, in consequence of an ossification of the heart. He was in the fifty-fifth year of his age.

On the whole, he seems to have been a very useful man in a period abounding in distinguished talent. The variety of offices which he filled with propriety and ability, is not a little remarkable. Master of a vessel — merchant — leader of militia-men — an interpreter of the old confederation and of the laws of his native State, and a committee-man in congress. He had but little education in the schools. *He taught himself.* His powers of observation on men and things, were turned to the best account. In his manners, Gen. Whipple was courteous and affable, and he appears to have possessed an estimable character for integrity and general morality.

ALEXANDER MURRAY.

ALEXANDER MURRAY was born in the parish of Minnigaff, in the shire of Kircudbright, Scotland, on the twenty-second of October, 1775. His father was, at this time, nearly seventy years of age, and had been a shepherd all his life, as his own father, and probably his ancestors for many generations had been. Alexander's mother was also the daughter of a shepherd, and was the old man's second wife; several sons, whom he had by a former marriage, being all brought up to the same primitive occupation. His father died in 1797, at the age of ninety-one. He seems have been possessed of considerable natural sagacity, and of some learning.

Alexander received his first lessons in reading, from his father. "The old man," he tells us, "bought him a catechism, (which, in Scotland, is generally printed with a copy of the alphabet in large type prefixed;) but as it was too good a book for me to handle at all times, it was generally locked up, and my father, throughout the Winter, drew the figures of the letters to me, in his *written* hand, on the board of an *old wool card*, with the black end of an extinguished heather stem or root snatched from the fire. I soon learned all the alphabet in this form, and became writer as well as reader. I wrought with the board and brand continually. Then the catechism was presented, and in a month or two, I could

read the easier parts of it. I daily amused myself with copying, as above, the printed letters. In May, 1782, my father gave me a small psalm-book, for which I totally abandoned the catechism. I soon got many psalms by memory, and longed for a new book. Here difficulties arose. The Bible used every night in the family, I was not permitted to touch. The rest of the books were put up in chests. I at length got a New Testament, and read the historical parts with great curiosity and ardor. But I longed to read the Bible, which seemed to me a much more pleasant book; and I actually went to a place where I knew an old loose-leaved Bible lay, and carried it away in piece-meal. I perfectly remember the strange pleasure I felt in reading the histories of Abraham and David. I liked mournful narratives; and greatly admired Jeremiah, Ezekiel and the Lamentations. I pored on these pieces of the Bible in secret for many months, but I durst not show them openly; and as I read constantly and remembered well, I soon astonished all our honest neighbors with the large passages of scripture which I repeated before them. I have forgotten too much of my biblical knowledge, but I can still rehearse all the names of the patriarchs, from Adam to Christ, and various other narratives seldom committed to memory."

His father's whole property consisted only of two or three scores of sheep and four muirland cows. "He had no debts and no money." As all his other sons were shepherds, it was with him a matter of course that Alexander should be brought up the same way; and accordingly, as soon as he had strength for anything, that is, when he was

about seven or eight years of age, he was sent to the hills with the sheep. He however gave no promise of being a good shepherd, and he was often blamed by his father as lazy and useless. He was not stout, and he was near-sighted, which his father did not know. "Besides," says he, "I was sedentary, indolent, and given to books and writing on boards with coals." But his father was too poor to send him to school, his attendance upon which, indeed, was scarcely practicable, unless he boarded in the village, from which their cottage was five or six miles distant. About this time a brother of his mother's, who had made a little money, came to pay them a visit; and hearing such accounts of the genius of his nephew, whose fame was now the discourse of the whole glen, offered to be at the expense of boarding him for a short time in New Galloway, and keeping him at school there. As he tells us himself, he made at first a somewhat awkward figure on this new scene. "My pronunciation was laughed at, and my whole speech was a subject of fun. But I soon gained impudence; and before vacation in August, I often stood *dux* of the Bible class. I was in the mean time taught to write copies, and use paper and ink. But I both wrote and printed, that is, imitated printed letters, when out of school."

His attendance at school, however, had scarcely lasted for three months, when he fell into bad health, and was obliged to return home. For nearly five years after this, he was left again to be his own instructor, with no assistance whatever from any one. He soon recovered his health, but during the long period we have mentioned, he

looked in vain for the means of again pursuing his studies under the advantages which he had for a short time enjoyed. As soon as he became sufficiently well, he was put to his old employment of assisting the rest of the family as a shepherd-boy. "I was still," says he, "attached to reading, printing of words, and getting by heart ballads, of which I procured several.

About this time and for years after, I spent every sixpence, that friends or strangers gave me, on ballads and penny histories. I carried bundles of these in my pockets, and read them when sent to look for cattle on the banks of Loch Greanoch, and on the wild hills in its neighborhood." And thus passed away about three years of his life. All this time the Bible and these ballads seem to have formed almost his only reading; yet even with this scanty library he contrived to acquire, among the simple inhabitants of the glen, a reputation for unrivalled erudition. "My fame for reading and a *memory*, was loud, and several said that I was a 'living miracle.' I puzzled the honest elders of the church with recitals of scripture, and discourses about Jerusalem, &c." Towards the close of the year 1787, he borrowed from a friend L'Estrange's translation of Josephus, and Salmon's Geographical Grammar. This last work had no little share in directing the studies of his future life. "I got immense benefit from Salmon's book. It gave me an idea of geography and universal history, and I actually recollect at this time almost everything which it contains."

A grammar of geography was almost the first thing which James Ferguson studied; although the minds of the two students, differing as they

did in original character, were attracted by different parts of their common manual; the one pondering its description of the artificial sphere, the other musing over its accounts of foreign lands, and of the history and languages of nations inhabiting them. Murray, however, learned also to copy the maps which he found in the book; and, indeed, carried the study of practical geography so far, as to make similar delineations of his native glen, and its neighborhood.

He was now twelve years of age; and as there seemed to be no likelihood that he would ever be able to gain his bread as a shepherd, his parents were probably anxious that he should attempt something in another way to help to maintain himself.

Accordingly, in the latter part of the year 1787, he engaged as teacher in the families of two of the neighboring farmers; for his services in which capacity, throughout the winter, he was remunerated with the sum of sixteen shillings! He had probably, however, his board free in addition to his salary, of which he immediately laid out a part in the purchase of books. One of these was Cocker's Arithmetic, "the plainest of all books," says he, "from which, in two or three months, I learned the four principal rules of arithmetic, and even advanced to the rule of three, with no additional assistance, except the use of an old copy-book of examples made by some boy at school, and a few verbal directions from my brother Robert, the only one of all my father's sons, by his first marriage, that remained with us." He borrowed, about the same time, some old magazines from a country acquaintance. "My memory, now," says he,

“contained a very large mass of historical facts and ballad-poetry, which I repeated with pleasure to myself, and the astonished approbation of the peasants around me.” At last, his father having been employed to *herd* on another farm, which brought him nearer the village, Alexander was once more permitted to attend school at Minnigaff, for three days in the week. “I made the most,” says he, “of these days; I came about an hour before the school met; I pored on my arithmetic, in which I am still a proficient; and I regularly opened and read all the English books, such as the ‘Spectator,’ ‘World,’ &c., brought by the children to school. I seldom joined in any play at the usual hours, but read constantly.” This second period of his attendance at school, however, did not last so long as the former. It terminated at the autumn vacation, that is to say, in about six weeks.

In 1790, he again attended school, during the summer, for about three months and a half. It seems to have been about this time that his taste for learning foreign languages first began to develop itself, having been excited by the study of Salmon’s Geography. “I had,” he writes, “in 1787 and 1788 often admired and mused on the specimens of the Lord’s Prayer, in every language, found in Salmon’s Grammar. I had read in the magazines and Spectator that Homer, Virgil, Milton, Shakspeare and Newton were the greatest of mankind. I had been early informed, by some elders and good religious people, that Hebrew was the first language. In 1789, at Drigmore, an old woman, who lived near, showed me her psalm-book, which was printed with a

large type, had notes on each page, and likewise, what I discovered to be the Hebrew alphabet, marked letter after letter in the 119th Psalm. I took a copy of these letters, by printing them off in my old way, and kept them." Meantime, as he still entertained the notion of going out as a clerk to the West Indies, he took advantage of a few leisure weeks to begin the study of the French language. He used to remain in school during the middle of the day, while his companions were at play, and compare together the different grammars used in the class.

"About the fifteenth of June," says he, "Kerr, one of my class-fellows, told me that he had once learned Latin for a fortnight, but had not liked it, and still had the Rudiments beside him. I said, Do lend me them; I wish to see what the nouns and verbs are like, and whether they resemble our French. He gave me the book. I examined it for four or five days, and found that the nouns had changes on the last syllables, and looked very singular. I used to repeat a lesson from the French Rudiments every forenoon in school. On the morning of the midsummer fair of Newton Stewart, I set out for school, and accidentally put into my pocket the Latin Grammar instead of the French Rudiments. On an ordinary day, Mr. Cramond would have chid me for this; but on that festive morning he was *mellow*, and in excellent spirits,—a state not good for a teacher, but always desired in him by me, for then he was very communicative. With great glee, he replied, when I told him my mistake, and showed him the Grammar, 'Gad, Sandy, I shall try thee with Latin;' and accordingly read over to me no less

than two of the declensions. It was his custom with me to permit me to get as long lessons as I pleased, and never to fetter me by joining me to a class. There was at that time in the school a class of four boys, advanced as far as the pronouns in Latin Grammar. They ridiculed my separated condition; but before the vacation, in August, I had reached the end of the Rudiments, knew a good deal more than they, by reading, at home, the notes on the foot of each page; and was so greatly improved in French, that I could read almost any French book at opening of it. I compared French and Latin, and riveted the words of both in my memory by this practice. When proceeding with the Latin verbs, I often sat in the school all mid-day and pored on the page of Robert Cooper's [another of his school-fellows,] Greek Grammar, — the only one I had ever seen. He was then reading Livy and learning Greek. By the help of his book I mastered the letters, but I saw the sense of the Latin rules in a very indistinct manner. Some boy lent me an old Corderius, and a friend made me a present of Eutropius. There was a copy of Eutropius in the school, which had a literal translation. I studied this last with great attention, and compared the English and Latin. When my lesson was prepared, I always made an excursion into the rest of every book; and my books were not like those of other school-boys, opened only in one place, and where the lesson lay."

All this was the work of about two months and a half before the vacation, and a fortnight after it. During the winter, he employed every spare moment in pondering upon some Latin books. "I

literally read," says he, "Ainsworth's Dictionary throughout. My method was to revolve the leaves of the letter A; to notice all the principal words and their Greek synonymes, not omitting a glance at the Hebrew; to do the same by B, and so on through the book; I then returned from X and Z to A. And in these winter months I amassed a large stock of Latin and Greek vocables. From this exercise I took to Eutropius, Ovid and Cæsar, or at times, to Ruddiman's Grammar. Here I got another book, which from that time has influenced and inflamed my imagination. This was *Paradise Lost*, of which I had heard, and which I was eager to see. I cannot describe the ardor, or various feelings, with which I read, studied and admired this first-rate work. I found it as difficult to understand as Latin, and soon saw that it required to be parsed, like that language. I account my first acquaintance with *Paradise Lost* an era in my reading." The next summer was spent still more laboriously than the preceding. He again attended school, where he found a class reading Ovid, Cæsar and Virgil. "I laughed," says he, "at the difficulty with which they prepared their lessons; and often obliged them by reading them over, to assist the work of preparation." He employed his time at home in almost incessant study. "My practice was," he remarks, "to lay down a new and difficult book, after it had wearied me, to take up another, then a third, and to resume this rotation frequently and laboriously. I always strove to seize the sense, but when I supposed that I had succeeded, I did not weary myself with analyzing every sentence." Having introduced himself to Mr. Maitland, the clergyman of the parish, by writing letters to him

in Latin and Greek, he obtained from that gentleman a number of classical books, which he read with great diligence. He was soon so privileged as to obtain a copy of a Hebrew Grammar and of the Hebrew Bible. "I made good use," says he, "of this loan; I read the Bible throughout, and many passages and books of it a number of times." It would appear that he had actually made himself familiar, and that chiefly by his own unassisted exertions, with the French, Latin, Greek and Hebrew languages, and perused several of the principal authors in all of them, within about a year and a half from the time when they were all entirely unknown to him; for it was at the end of May, 1790, that he commenced, as we have seen, the study of French, and all this work had been done by the end of November, in the following year. There is not, perhaps, on record a more extraordinary instance of youthful ardor and perseverance. It may serve to show what is possible to be accomplished.

He was again engaged in teaching during the winter, and received for his labor, as he states, about thirty-five or forty shillings. Every spare hour was devoted to the study of Latin, Greek, Hebrew and French. In the summer of 1792 he returned to school for the last time. The different periods of his school attendance, added together, make about thirteen months, scattered over the space of nearly eight years. Having obtained a copy of Bailey's Dictionary, he found in it the Anglo-Saxon alphabet, and many words in the same dialect. This was his introduction to the study of the northern languages. He also made himself acquainted with many Welsh phrases,

from a small religious treatise in the language, without any dictionary or grammar. This was done by minute observation and comparison of words, terminations and phrases. He also made himself acquainted with the Arabic and Abyssinian alphabets. He was also guilty of writing several thousand lines of an epic poem, "which was not without obligations to Ossian, Milton and Homer." Before he completed the seventh book he threw the unfinished epic into the fire.

Murray was now in his nineteenth year. His most intimate school-companion had gone to the university, for which, no doubt, Murray felt that he was far better qualified, if his utter want of resources had not opposed an insurmountable barrier. He had happened to purchase a volume of the manuscript lectures of a German professor on Roman literature, written in Latin. Having translated these lectures, he carried his translation to Dumfries, but neither of the two booksellers would print them. He then concluded to print some poems by subscription. From this design he was fortunately induced to depart by the advice of the celebrated Robert Burns. "Burns," says he, "treated me with great kindness, and told me if I could get out to college without publishing my poems, it would be much better, as my taste was young and not formed, and I should be ashamed of my productions, when I could write and judge better."

It so happened, that there was in the neighborhood an itinerant tea-merchant, by the name of M'Harg, who knew Murray well, and had formed so high an idea of his genius and learning, that he was in the habit of sounding his fame wherever

he went. Among others to whom he spoke of him, was Mr. James Kinnear, of Edinburgh, then a journeyman printer in the king's printing-office. Mr. Kinnear, with a zeal which does him great credit, immediately suggested that Murray should transmit an account of himself, and some evidence of his attainments, to Edinburgh, which he undertook to lay before some of the literary men of that city. This plan was adopted. Murray was examined by the principal and several of the professors. He so surprised them by the extent and accuracy of his acquaintance with the languages, that measures for his admission to the university, and his maintenance, were immediately taken. These arrangements were principally effected by the exertions of principal Baird. His ardent and most efficient patronage of one, thus recommended to him only by his deserts and his need of patronage, entitles him to the lasting gratitude of all the friends of learning. Murray was, indeed, soon able to support himself. All his difficulties may be said to have been over as soon as he found his way to the university.

For the next ten or twelve years of his life, he resided principally at Edinburgh. No man that ever lived, probably, not excepting Sir William Jones himself, has prosecuted the study of languages to such an extent as Murray. By the end of his short life scarcely one of the oriental or northern tongues remained uninvestigated by him, so far as any sources for acquiring a knowledge of them were accessible. Of the six or seven dialects of the Abyssinian or Ethiopic language, in particular, he made himself much more completely master than any European had been

before. This led to his being selected by the booksellers, in 1802, to prepare an edition of Bruce's Travels, which appeared in 1805, in seven volumes, octavo, and at once placed him in the first rank of the oriental scholars of the age. In 1806, he left Edinburgh, in order to officiate as clergyman in the parish of Urr, in Dumfriesshire. All his leisure moments were devoted to the composition of his stupendous work on the languages of Europe.

In 1812, the professorship of oriental languages in the university of Edinburgh became vacant. Mr. Murray's friends immediately seized the opportunity of endeavoring to obtain for him the situation, of all others, which he seemed destined to fill. The contest was, eventually, carried on between Murray and a single opponent. The result was very doubtful, as the election depended on the town-council, a corporate body of thirty-three individuals. Extraordinary exertions were made by the friends of both candidates. Mr. Salt, the distinguished orientalist, stated that Mr. Murray was the only man in the British dominions, in his opinion, capable of translating an Ethiopic letter which he had brought into the country. Among those who exerted themselves in his behalf, were Dr. James Gregory, Professors Leslie, Playfair, Dugald Stewart, Mr. Jeffrey, Sir Walter Scott, &c. Well was Mr. Murray entitled to say, before he learned the result of the election, "If the efforts of my friends have been exerted for an unsuccessful candidate, they will not be forgotten, *for we have perished in light.*" He was elected by a majority of two votes. On the thirty-first of October. Mr. Murray entered on the discharge

of his duties, though, alas, near the grave. His excessive labors had prostrated his strength. On the thirteenth of April he retired to the bed from which he never rose; before the close of another day he was among the dead. He was in the thirty-eighth year of his age.

His History of European Languages, though left by him in a very imperfect state, is still a splendid monument of his ingenuity and erudition.

STEPHEN HOPKINS.

STEPHEN HOPKINS was born in that part of the then town of Providence, R. I., which now forms the town of Scituate, on the seventh of March, 1707. His great grandfather, Thomas Hopkins, was one of the primitive settlers of Providence. With the first dawns of active life, Stephen Hopkins was esteemed for his worth, and his regular and useful habits. As an evidence of the propriety of his conduct when only nineteen years of age, his father gave him a deed of gift for seventy acres of land, and his grandfather bestowed on his "loving grandson," an additional tract of ninety acres. He received nothing more than a plain country education, by which he acquired an excellent knowledge of penmanship, and became conversant in the practical branches of the mathematics, particularly surveying. Being the son of a farmer, he continued the occupation of his father, after the death of the latter, and, in 1731, increased his estate in Scituate, by the purchase of adjoining lands. He continued this mode of life until his removal to Providence, in 1748, when he sold his farm, and built a mansion in that town, in which he continued to reside until his death.

In March, 1731-2, Mr. Hopkins made his first appearance in the public service in the humble station of town-clerk of Scituate, from which he rose through almost every gradation of office

to the highest dignity of the State. In May, 1739, he was appointed chief justice of the court of common pleas. He was extensively employed, till an advanced age, in the business of surveying lands. The nicety of his calculations is attested by the following circumstances. In taking the survey of a tract of land, he passed over a plain thickly set with shrubbery. Soon after, he found that his watch, which cost twenty-five guineas in London, was missing. Supposing that the chain had become entangled in the bushes, and the watch thereby pulled from his pocket, he set the course back, and found it hanging on a bush.

In May, 1751, he was appointed, for the fourteenth time, a representative in the assembly. In May, 1756, he was chosen Governor of the State, and continued to occupy this station, at intervals, for seven years.

In 1767, when the politics of the colony were carried to a great excess, Mr. Hopkins magnanimously retired from his office, and a third person was elected. By this measure, harmony was in a great degree, restored.

When the difficulties between the colonies and Great Britain began to grow alarming, Gov. Hopkins took an active, early, and determined part in favor of the colonies. In August, 1774, in connection with the Hon. Samuel Ward, he was appointed to represent Rhode Island, in the general congress.

In the same year, Mr. Hopkins was a member of the assembly of the state. Principally by his influence and exertions, an act was passed, prohibiting the importation of negroes into the colony. In the year before, he emancipated a

number of people of color, whom he had held as slaves.

In May, 1776, Mr. Hopkins was, for the third time, elected to congress. His name is attached to the Declaration of Independence. His signature indicates, on the parchment, a very tremulous hand, and is in perfect contrast to that of the President, John Hancock; this was caused by a nervous affection, with which he had been for many years afflicted, and which compelled him, when he wrote at all, to guide his right hand with his left. He discharged his public duties with great ability and faithfulness. Mr. Hopkins was one of those strong-minded men, who, by indefatigable personal effort, overcome the deficiencies of early education. A common country school, at that period, afforded little more than a knowledge of reading and writing. Upon this foundation, Mr. Hopkins established a character for literature. It is stated that he perused the whole of the great collection of ancient and modern history, compiled about a half century since, by some distinguished scholars in Europe, and that he also read Thurtow's collection of State Papers. As an instance of the retentiveness of his memory, it is mentioned that Mr. Hopkins, on one occasion, sat down and made out his account as the owner of a vessel, without any reference whatever to his books, though many small items were necessarily included. He was esteemed as an excellent mathematician. He was one of the principal observers on the celebrated transit of Venus over the Sun's disc, in June, 1769. He was a member of the American Philosophical Society, and for many years, chancellor of the College of Rhode Island.

In his personal and domestic character, he was an eminent pattern of kindness and affability. A visit, which Gen. Washington made, unattended, to Gov. Hopkins, is stated, by a living witness, to have strongly exhibited the simple, easy, and artless manners of those illustrious men. Mr. Hopkins died calmly, on the 13th of July, 1785, in the 79th year of his age.

PROFESSOR LEE.

OF the attainments and character of this extraordinary man, we can furnish but a very imperfect outline. Even the year of his birth we have not been able to ascertain. His native place is Longnor, a small village, eight miles from Shrewsbury, England. The only education which he received was that of a village school, where nothing more was taught than reading, writing, and arithmetic. This school he left at twelve years of age, to learn the trade of a carpenter and builder, under the care of an ingenious and respectable relative, Mr. Alderman Lee, of Shrewsbury. Here he underwent great hardships. It was not till he was about seventeen years of age that he first conceived the idea of studying a foreign language. His application to the Latin tongue, the first which he acquired, originated in his inability to understand that language, as quoted in English authors. Poverty obstructed his progress, but did not prevent it. A thirst for information created economy; and out of the scanty pittance of his weekly earnings, he purchased, at a book stall, a volume, which, when read, was exchanged for another; and, so by degrees, he advanced in knowledge. Oppressed with cares, without any living assistant whatever, without much stimulus either from hope or fear, seeking concealment rather than the smile of approbation, and very scantily supplied with the

necessary materials, he still pressed on in his course. He had not the privilege of balancing between reading and relaxation; he had to pass from bodily fatigue to mental exertion. During six years, previous to his twenty-fifth year, he omitted none of the hours usually appropriated to manual labor; he retired to rest, regularly, at 10 o'clock at night. He also suffered, during this time, from a disorder in his eyes. As his wages increased, and thereby his abilities to make larger purchases, he attended to the Greek, Hebrew, Chaldee, and Syriac tongues. The loss, by fire, of the tools of his trade, blasted his earthly prospects in that direction, and led him to consider how far his literary acquirements might be employed for the support of himself, and of the partner whom he had recently married. His situation being made known to the Reverend Archdeacon Corbett, of Shrewsbury, that liberal and enlightened clergymen afforded him, not only immediate aid, but a happier introduction to his favorite pursuits. He now exchanged his carpenter's shop for the superintendency of a charity school. Here, however, his hours were not much more at his own disposal. It was about this time that that well known and highly respected oriental scholar, Dr. Jonathan Scott, Persian Secretary to Hastings, Governor General of India, furnished Mr. Lee with an Arabic Grammar, and he had then, for the first time in his life, the pleasure of conversing upon the study in which he was engaged; and it is to this auspicious circumstance, improved, as it was, by the wonderful proficiency of Mr. Lee, on the one hand, (for in a few months, he was capable of reading, writing, and composing

kindness of Dr. Scott, on the other, that we may attribute Mr. Lee's subsequent engagement with the Church Missionary Society, as Orientalist, his admission at Queen's College, Cambridge, and his ordination as a minister of the Established Church. At the age of thirty-one years, fourteen from the time he had opened a Latin Grammar, he had actually himself *taught seventeen* different languages; viz. Latin, Greek, Hebrew, Chaldee, Syriac, Samaritan, Arabic, Persic, Hindostanee, French, German, Italian, Ethiopic, Coptic, Malay, Sanscrit, and Bengalee. When Mr. Lee entered at Cambridge, he was unacquainted with the mathematics; but in one fortnight, he qualified himself to attend a class which had gone through several books in Euclid; and he soon after discovered an error in the Spherical Trigonometry, usually bound up with Simpson's Euclid, the fourteenth proposition of which Mr. Lee disproved. Simpson's Edition of Euclid is a text book at both Universities, and is the only one usually put into the hands of students, and to which the lectures of the tutors apply. Before he went to college he was conversant with the works of Plato, had made translations into English blank verse from the works of Boethius; and he went through the Golden Verses, bearing the name of Pythagoras. He contented himself with a competent knowledge of mathematics, lest further attention to that seducing science should interfere with those studies in which the highest interests of mankind are involved. He has exhibited a most laudable desire to know the word of God himself, and to impart it to others. The following are some of his efforts for the spiritual good of mankind.

The Syriac New Testament, edited by Mr. Lee, and published, is not a continuation of that begun by Dr. Buchanan; but an entire new work, for which Mr. Lee collated three ancient Syrian MSS., the Syrian Commentary of Syrius, and the texts of Ridley, Jones, and Wetstein.

An edition of the Malay New Testament, from the Dutch edition of 1733; the Old Testament has since been published.

An enlarged and corrected edition of Mr. Martyn's Hindostanee Prayer Book, in conjunction with Mr. Corrie.

A Tract translated into Persian and Arabic, and printed, entitled "The way of Truth and Life," for the use of Mohammedans.

A Malay Tract, for the London Missionary Society; and some Tracts in Hindostanee, for the Society for instructing the Lascars.

A Tract in Arabic, on the new system of education, written by Dr. Bell, and first translated by Michael Sabag, for the Baron de Sacy of Paris.

Dr. Scott having translated the service for Christmas day from the Prayer Book of the Church of England, into Persic, Mr. Lee has added to it the rest of the Liturgy.

A new translation of the Old Testament into Persian. in conjunction with Mirza Khaleel.

An Hindostanee New Testament.

He was some time since preparing an Ethiopic Bible and other works. Mr. Lee has also made a new fount of letter for Hindostanee and Persian printing; and a new fount for an edition of the Syriac Old Testament, for which he collated nine ancient MSS. and one ancient commentary. He has also published in Persian and English the

whole controversy of Mr. Martyn with the Persian literati, with considerable additions of his own.

On a certain occasion, a Memoir of Mr. Henry Kirke White was lent to him ; Mr. Lee returned it shortly after with a Latin Poem in praise of Mr. White, a dialogue in Greek on the Christian religion, and a pious effusion in Hebrew ; all compiled by himself, when he was upon permanent duty as a member of the local militia for the county. He taught himself to play upon the flute, with almost intuitive readiness. When the Shrewsbury volunteers were raised, he qualified himself, with almost equal readiness, to be one of their military band, all which time he was a member of a ringing society, and also gave lectures upon Gothic architecture. He was no sooner in holy orders than he accepted invitations to preach to the largest congregations. He manifested in the pulpit the ease and self-possession of one long used to the station. Notwithstanding these high attainments, he is a very humble and unassuming man. The resources of his mind are unapparent till called out. He does not seek refined society, but mingles in it, when invited, without effort or embarrassment ; and without losing any of his humility, sustains his place in it with ease and independence. His sermons are said to exhibit an air of logical dryness, unfavorable to the unction which should pervade pulpit exercises.

Sometime in the year 1819, on the resignation of Rev. J. Palmer, Mr. Lee was elected Professor of Arabic in the University of Cambridge, and not having been at college the usual time for

taking the degree requisite to standing for the chair, a grace passed the senate of the University to supplicate for a mandamus, which was granted by his Majesty. Most honorable and ample testimonials were given by Lord Teignmouth, Dr. Scott, Mohammed Sheeraz, a learned Persian, Alexander Nicol, librarian of the Bodleian library, Oxford, Mirza Khaleel, a learned Persian, Dr. Wilkins, of the East India-house Library, and others. Mr. Lee has lately been chosen to succeed Dr. Lloyd, as Regius Professor of Hebrew at Cambridge. He has published one edition of an Hebrew Grammar, and has another in the press, as also an Hebrew Lexicon. A work on the interpretation of Scripture generally, and of prophecy in particular, has lately appeared from his pen. He has issued a prospectus of an extensive course of lectures on Hebrew Literature and Philology.

WILLIAM GIFFORD.

WILLIAM GIFFORD was born in Ashburton, Devonshire, England, in April, 1757. His father was a seaman, and was, for some time, engaged in the service of his country, as the second in command of a large armed transport. His manner of life was very dissipated. An attempt to excite a riot in a Methodist chapel was the occasion of his being compelled to flee from the country. His mother was the daughter of a carpenter. Her resources were very scanty. They arose from the rent of three or four small fields, which had belonged to her husband's father. "With these, however," says Gifford, "she did what she could for me; and as soon as I was old enough to be trusted out of her sight, sent me to a schoolmistress of the name of Parret, from whom, in due time, I learned to read. I cannot boast much of my acquisitions at this school; they consisted merely of the contents of the 'Child's Spelling Book;' but from my mother, who had stored up the literature of a country town, — which about half a century ago, amounted to little more than what was disseminated by itinerant ballad singers, or rather readers, — I had acquired much curious knowledge of Catskin, and the Golden Bull, and the Bloody Gardener, and many other histories equally instructive and amusing." Young Gifford's father returned from sea in 1764. He had acquired considerable prop-

erty, but his habits of dissipation were such that he soon lost nearly the whole of it. He commenced business as a glazier and house-painter. William, now about eight years old, was put to a free school, to learn to read and write and cypher. Here he continued three years, "making most wretched progress," when his father fell sick and died. He died of a ruined constitution, induced by habits of drinking. Unfortunately, the mother of William, in order to support her two children, determined to prosecute her husband's business; for which purpose she engaged a couple of journeymen, who, finding her ignorant of every part of it, wasted her property and embezzled her money. What the consequence of this double fraud would have been, there is no opportunity of knowing, as, in somewhat less than a twelvemonth, she followed her husband to the grave. "She was," says her affectionate son, "an excellent woman, bore my father's infirmities with patience and good humor, loved her children dearly, and died at last, exhausted with anxiety and grief, more on their account than on her own."

"I was not quite thirteen when this happened; my little brother was hardly two; and we had not a relation nor a friend in the world." His brother was now sent to the work-house, and he was himself taken home to the house of a person named Carlile, who was his godfather, and had seized upon whatever his mother had left, under the pretence of repaying himself for money which he had advanced to her. By this person, William, who had before learned reading, writing, and a little arithmetic, was sent again to school, and was beginning to make considerable progress in

the last branch of study; but in about three months his patron grew tired of the expense, and took him home with the view of employing him as a ploughboy. An injury, however, which he had received some years before, on his breast, was found to unfit him for this species of labor; and it was next resolved that he should be sent out to Newfoundland, to assist in a storehouse. But upon being presented to the person who had agreed to fit him out, he was declared to be "too small" — and this scheme had also to be abandoned. "My godfather," says he, "had now humbler views for me, and I had little heart to resist anything. He proposed to send me on board one of the Torbay fishing boats. I ventured, however, to remonstrate against this, and the matter was compromised, by my consenting to go on board a coaster. A coaster was speedily found for me at Brixham, and thither I went, when a little more than thirteen."

In this vessel he remained for nearly a twelve-month. "It will be easily conceived," he remarks, "that my life was a life of hardship. I was not only a ship-boy on the 'high and giddy mast,' but also in the cabin, where every menial office fell to my lot; yet, if I was restless and discontented, I can safely say it was not so much on account of this, as my being precluded from all possibility of reading; as my master did not possess, nor do I recollect seeing, during the whole time of my abode with him, a single book of any description, except the 'Coasting Pilot.'"

While in this humble situation, however, and seeming to himself almost an outcast from the world, he was not altogether forgotten. He had

broken off all connection with Ashburton, and where his godfather lived; but the "women of Brixham," says he, "who travelled to Ashburton twice a week with fish, and who had known my parents, did not see me without kind concern, running about the beach in a ragged jacket and trowsers." They often mentioned him to their acquaintances at Ashburton, and the tale excited so much commiseration in the place, that his godfather at last found himself obliged to send for him home. At this time he wanted some months of fourteen.

"After the holidays," continues the narrative, "I returned to my darling pursuit — arithmetic; my progress was now so rapid, that in a few months I was at the head of the school, and qualified to assist my master, Mr. E. Furlong, on any extraordinary occasion. As he usually gave me a trifle, at such times, it raised a thought in me that, by engaging with him as a regular assistant, and undertaking the instruction of a few evening scholars, I might, with a little additional aid, be enabled to support myself. I had besides another object in view. Mr. Hugh Smerdon, my first master, was now grown old and infirm; it seemed unlikely that he should hold out above three or four years; and I fondly flattered myself that, notwithstanding my youth, I might possibly be appointed to succeed him. I was in my fifteenth year when I built these castles; a storm, however, was collecting, which unexpectedly burst upon me, and swept them all away.

"On mentioning my little plan to Carlile, he treated it with the utmost contempt; and told me, in his turn, that, as I had learned enough,

and more than enough at school, he must be considered as having fairly discharged his duty (so indeed he had); he added, that he had been negotiating with his cousin, a shoemaker of some respectability, who had liberally agreed to take me without fee, as an apprentice. I was so shocked at this intelligence, that I did not remonstrate; but went in sullenness and silence, to my new master, to whom, on the 1st of January, 1772, I was bound till I should attain the age of twenty-one."

Up to this period his reading had been very limited; the only books he had perused, beside the Bible, with which he was well acquainted, having been a black letter romance called *Paris-mus and Parismenes*, a few old magazines, and the *Imitation of Thomas á Kempis*. "As I hated my new profession," he continues, "with a perfect hatred, I made no progress in it, and was consequently little regarded in the family, of which I sank, by degrees, into the common drudge; this did not much disquiet me, for my spirits were now humbled. I did not, however, quite resign my hope of one day succeeding to Mr. Hugh Smerdon, and therefore secretly prosecuted my favorite study, at every interval of leisure. These intervals were not very frequent; and when the use I made of them was found out, they were rendered still less so. I could not guess the motives for this at first, but at length I discovered that my master destined his youngest son for the situation to which I aspired.

"I possessed, at this time, but one book in the world; it was a treatise on algebra, given to me by a young woman who had found it in a lodging-

house. I considered it as a treasure ; but it was a treasure locked up ; for it supposed the reader to be well acquainted with simple equations, and I knew nothing of the matter. My master's son had purchased 'Fenning's Introduction ;' this was precisely what I wanted — but he carefully concealed it from me, and I was indebted to chance alone for stumbling upon his hiding place. I sat up for the greatest part of several nights successively, and, before that he suspected that his treatise was discovered, had completely mastered it ; I could now enter upon my own, and that carried me pretty far into the science. This was not done without difficulty. I had not a farthing on earth, nor a friend to give me one ; pen, ink, and paper, therefore, (in despite of the flippant remark of Lord Orford,) were for the most part as completely out of my reach, as a crown and sceptre. There was, indeed, a resource ; but the utmost caution and secrecy were necessary in applying to it. I beat out pieces of leather as smooth as possible, and wrought my problems on them with a blunted awl ; for the rest, my memory was tenacious, and I could multiply and divide by it to a great extent."

No situation, it is obvious, could be more unfavorable for study than this ; and yet we see how the eager student succeeded in triumphing over its disadvantages, contriving to write and calculate even without paper, pens, or ink, by the aid of a piece of leather and a blunted awl. Where there is a strong determination to attain an object, it is generally sufficient of itself to create the means ; and almost any means are sufficient.

At last, however, Gifford obtained some allevia-

tion of his extreme poverty. He had scarcely, he tells us, known poetry even by name, when some verses, composed by one of his acquaintances, tempted him to try what he could do in the same style, and he succeeded in producing a few rhymes. As successive little incidents inspired his humble muse, he produced several more compositions of a similar description, till he had collected about a dozen of them. "Certainly," says he, "nothing on earth was ever so deplorable;" but such as they were, they procured him not a little fame among his associates, and he began at last to be invited to repeat them in other circles. "The repetitions of which I speak," he continues, "were always attended with applause, and sometimes with favors more substantial; little collections were now and then made, and I have received sixpence in an evening. To one who had long lived in the absolute want of money, such a resource seemed a Peruvian mine. I furnished myself, by degrees, with paper &c., and what was of more importance, with books of geometry, and of the higher branches of algebra, which I cautiously concealed. Poetry, even at this time, was no amusement of mine; it was subservient to other purposes; and I only had recourse to it when I wanted money for my mathematical pursuits."

But even this resource was soon taken from him. His master, having heard of his verse-making, was so incensed both at what he deemed the idleness of the occupation, and especially at some satirical allusions to himself, or his customers, upon which the young poet had unwisely ventured, that he seized and carried away all his books and papers, and even prohibited him, in the

strictest manner, from ever again repeating a line of his compositions. This severe stroke was followed by another, which reduced him to utter despair. The master of the free school, to which he had never given up the hope of succeeding, died, and another person was appointed to the situation, not much older than Gifford, and who, he says, was certainly not so well qualified for it as himself. "I look back," he proceeds, "on that part of my life which immediately followed this event, with little satisfaction; it was a period of gloom and savage unsociability; by degrees I sunk into a kind of corporeal torpor; or, if roused into activity by the spirit of youth, wasted the exertion in splenetic and vexatious tricks, which alienated the few acquaintances which compassion had yet left me."

His discontent and peevishness seem, however, to have gradually given way to the natural buoyancy of his disposition; some evidences of kindly feeling from those around him tended a good deal to dispel his gloom; and, especially, as the term of his apprenticeship drew towards a close, his former aspirations and hopes began to return to him. He had spent, however, nearly six years at his uncongenial employment before any decided prospect of deliverance opened before him. "In this humble and obscure state," says he, "poor beyond the common lot, yet flattering my ambition with day-dreams which perhaps would never have been realized, I was found, in the twentieth year of my age, by Mr. William Cookesley — a name never to be pronounced by me without veneration. The lamentable doggerel which I have already mentioned, and which had passed from mouth to

mouth among people of my own degree had, by some accident or other, reached his ear, and given him a curiosity to inquire after the author." Mr. Cookesley, who was a surgeon, and not rich, having learnt Gifford's history from himself, became so much interested in his favor, that he determined to rescue him from his obscurity.

"The plan," says Gifford, "that occurred to him was naturally that which had so often suggested itself to me. There were, indeed, several obstacles to be overcome. My hand-writing was bad, and my language very incorrect; but nothing could slacken the zeal of this excellent man. He procured a few of my poor attempts at rhyme, dispersed them among his friends and acquaintance, and, when my name was become somewhat familiar to them, set on foot a subscription for my relief. I still preserve the original paper; its title was not very magnificent, though it exceeded the most sanguine wishes of my heart. It ran thus: "A subscription for purchasing the remainder of the time of William Gifford, and for enabling him to improve himself in writing and English grammar." Few contributed more than five shillings, and none went beyond ten and sixpence, — enough was however collected to free me from my apprenticeship, (the sum my master received was six pounds,) and maintained me for a few months, during which I assiduously attended the Rev. Thomas Smerdon."

The difficulties of the poor scholar were now over, for his patrons were so much pleased with the progress he made during this short period, that upon its expiration they renewed their bounty, and maintained him at school for another year.

“Such liberality,” he remarks, “was not lost upon me; I grew anxious to make the best return in my power, and I redoubled my diligence. Now, that I am sunk into indolence, I look back with some degree of skepticism to the exertions of that period.” In two years and two months from what he calls the day of his emancipation, he was pronounced by his master to be fit for the university; and a small office having been obtained for him, by Mr. Cookesley’s exertions at Oxford, he was entered of Exeter college, that gentleman undertaking to provide the additional means necessary to enable him to live till he should take his degree. Mr. Gifford’s first patron died before his protégé had time to fulfil the good man’s fond anticipations of his future celebrity; but he afterwards found in Lord Grosvenor, another much more able friend, though it was impossible that any other man could have shown more zeal in advancing his interests. A long and prosperous life was an ample compensation for the toils and hardships of his youth. While at the university, he undertook a poetical translation of the satires of Juvenal, but which was not published till several years afterwards. It is highly creditable to his ability as a satirist and critic. After leaving Oxford, he travelled on the continent for some years, with Lord Belgrave. On his return, he settled in London, and devoted himself to literary pursuits. In 1791, he published *The Baviad*, a poetical satire; and, in 1794, *The Maeviad*, a severe animadversion on the degraded state of the drama. These works were virulent and coarse, but display much critical power. In 1797, he became editor of the *Anti-Jacobin* newspaper.

He soon published an edition of the plays of Massinger; afterwards the plays of Ben Jonson, Ford and Shirley, — all accompanied with notes, and with the lives of the dramatists. In 1809, he commenced the publication of the Quarterly Review, in opposition to the Edinburgh. He conducted it till 1824, when the infirmities of age compelled him to retire. He was the writer of many of the articles in this Review, and generally performed his work with great judgment and ability. He seems, however, to have been wanting in candor and liberal feeling. Probably the circumstances of his early youth, as well as his connection with the tory party in politics, and the high church party in religion, will account for the harshness and ungenerousness of some articles, which appeared in his Review, in relation to the United States. If he had kind feelings, they certainly forsook him when the religion and literature of this country came before his consideration. Mr. Gifford was thoroughly a literary man. Besides the works already mentioned, he was author of a translation of the Satires of Persius. He enjoyed an annuity from Lord Grosvenor, and held the office of paymaster of the board of gentlemen-pensioners, with a salary of £300 a year. He was also, for a time, comptroller of the lottery, with a salary of £600 a year. His death took place at his residence near London, December 31, 1826, and he was interred on the 8th of January following, in Westminster Abbey. He had no family. He left the greater part of his fortune to the son of his first kind and most disinterested patron, Mr. Cookesley.

THOMAS BALDWIN.

AMONG the most numerous and prosperous of the Christian denominations in this country, are the Calvinistic Baptists. In numerical strength they are superior to any other division of the church, with the exception of the Methodists. Their growth, especially in some of the more recently settled portions of the country, has been extremely rapid. This prosperity has been owing very much to the energy and wisdom of a few individuals. The Baptists have not, to a great extent, placed their reliance upon associated effort; their organization, as a denomination, is far less complete than that of any other. Their churches have exhibited, perhaps, more conspicuously even than the Congregational, the republican, or rather democratic principles of equality of rights and community of privileges. Such a state of things is eminently calculated to bring out individual effort, to cherish and develop personal character. Men must have a rallying point. Scattered talent must have a place of convergence. Nothing important can be accomplished in morals and religion, any more than in war and politics, without leaders. If there be no organization on which to recline, some master-spirit will arise. If there be no marshalled host, the people will flock to David in the wilderness. If there be no college or theological seminary, to concentrate public attention and discipline collected talent, some patriarch will

draw around his tent the sons of science or the disciples of Jesus.

Such have been, in the Baptist community, Williams, Backus, Stillman and Baldwin. With great and striking difference as to talent and acquirement, each of those men attained a distinguished rank and exerted an extensive and an enduring influence. Upon each devolved the care, not simply of a church or congregation, but, in an important sense, the care of all the churches in the connection. With no theological seminary, and with not more than one college, the last three named, particularly, labored to supply, so far as unwearied personal effort could do it, the acknowledged deficiency.

THOMAS BALDWIN was born in Bozrah, in the State of Connecticut, December 23, 1753, and was the only son of Thomas and Mary Baldwin, both natives of the same place. Of the early history of his family but little is known. It may, however, be observed, that his father was attached to the military service, and rose to distinction in the then colonial army. He died while his son was a youth. His mother was a woman of talent and piety, and to her faithful and affectionate instructions her son was greatly indebted.

Not much is known of his early history. The traits of character for which he was in manhood remarkable, were, however, very early developed. From infancy his temper was noticed for its unruffled serenity. His mother used to observe that she never knew him, but in a single instance, to betray any signs of impatience; and when, on this occasion, she expressed her surprise, he instantly replied, "Mother, I am not angry."

He very early discovered a taste for reading. Not only did he devote every leisure moment to the improvement of his mind, but also consecrated to this object the hours of labor. Whenever his employments were of such a nature that one of his hands was disengaged, it was occupied with a book. By these habits of incessant application, he very early acquired a stock of valuable though miscellaneous information, which, combined with strong powers of original thinking, seemed in youth to mark him out for distinguished usefulness.

At that time the advantages of education were much less extensively enjoyed in New England than at present. Schools were very rare, and the general modes of instruction palpably defective. As a proof of this it need only be remarked, that when Mr. Baldwin removed to Canaan, N. H., where he afterwards resided, he was generally selected on the Sabbath to read a sermon to the people, who assembled for public worship, because he was the only young man in the town who was sufficiently educated to perform this service acceptably. The mention of this fact is sufficient to show how strong must be his early bias towards intellectual improvement.

When Mr. Baldwin was about sixteen years of age, his mother, who was now a second time married to a very worthy and pious man by the name of Eames, removed to Canaan, New Hampshire. He removed with the family; and this became, for several years, the place of his residence. In September, 1775, he was married to Miss Ruth Huntington, of Norwich, Connecticut. Before he was thirty years of age, Mr. Baldwin was elected to represent the town of Canaan in the General

Court of the State. To this office he was repeatedly reëlected.

In the year 1780, an interesting change took place in the character of Mr. Baldwin. After a season of deep religious anxiety he was enabled joyfully to devote himself to the service of his Redeemer. His views of truth were clear and impressive; his sense of the evil of sin and of the purity of God's law, were such as to lead him to deep humiliation, and to an entire and cordial reliance on the mediation and atonement of the Lord Jesus Christ. Of this period of mental solicitude, Mr. Baldwin has left an interesting and particular memoir. Mr. Baldwin was educated in the principles of the Congregationalists, but about this time, after much deliberation, he united himself to the Baptists. He was ordained as an evangelist, in June, 1783. The following extracts from his journal, show his spirit and manner of life. "I continued my labors with the church in Canaan seven years, during which time, though principally at home on the Sabbath, I spent much of the intervening time in visiting and preaching in the destitute parts of the surrounding country. There were few towns within the space of fifty miles round, in which I did not occasionally preach. In this warfare I went chiefly at my own charges. Some few churches, however, which I visited by appointment of the Association, made me some compensation, and some individuals made me small presents; but I do not recollect that, during the whole of this period, in all my journeyings, I ever received a public contribution. My mode of travelling was on horseback. In pursuing my appointments, I had often to climb the

rugged mountain and descend the deep ravine. These exchanges from rocky steeps to dismal swamps were far from unfrequent at that early period of the settlement of this part of our country. The roads are since so improved, that it would be difficult to persuade the traveller, now-a-days, that they have ever been so bad as the early settlers represent. The people were not, however, so much wanting in kindness as in the means of assisting a travelling minister. As for silver and gold, the greater part of them had none. The cause of this scarcity of money arose from the peculiar circumstances of the times. At the close of the Revolutionary War, the continental currency, which had before depreciated to almost nothing, ceased. The little silver that remained in the coffers of the rich was, with much reluctance, permitted to be drawn from its long sequestered concealment. It hence often happened that the travelling preacher must either beg or go hungry, if he happened to travel where he was not known."

On one occasion, in March, 1790, Mr. Baldwin was called to visit a remote part of New Hampshire, about one hundred miles distant, to assist in the establishment of a church. He left home with only a few shillings, but before the first night the whole was lost. The journey was chiefly through a wilderness, with a few log-cottages to relieve the solitude of the gloomy forest. The snow was more than three feet deep, and the travelling was, consequently, very difficult and dangerous. At length Mr. Baldwin and his friends reached home in safety, after having subsisted on such casual entertainment as they could procure in the wilderness.

During the seven years which he passed in Canaan, the whole of his salary would not average *forty dollars* a year! "Hence," says Mr. Baldwin, "I may say with the apostle, 'These hands have ministered to my necessities, and those that were with me.' I would gladly have devoted myself wholly to the work of the ministry, could I have seen any way in which my family might have been supported."

In the year 1790, Mr. Baldwin received a unanimous invitation to settle in the ministry from Sturbridge, Mass., Hampton, Conn., and from the Second Baptist Church in Boston. He was installed over the latter church in November, 1790. This removal brought him into an almost entirely new sphere of action. From the frontier settlements of New Hampshire, he was removed to the centre of polished and literary society in New England, and placed by the side of such men as the Rev. Drs. Lathrop, Eliot, Howard, Belknap and Thacher, of the Congregational churches, and of the excellent Dr. Stillman, of the First Baptist Church; several of whom were eminent and finished classical scholars. The pulpits of Boston were, perhaps, never more ably filled.

These circumstances added a powerful stimulus to Mr. Baldwin's efforts, and, in fact, created a new era in his life. His early advantages for education, as has been seen, were but scanty. Constant labor had left him but little opportunity to improve them. He was now thirty-eight years of age; a time of life beyond which men do not generally make great advancement in knowledge. Says his biographer, "All the resources upon which, depending on the grace of God, he could

rely in this arduous situation, were sincere desires to be useful, native vigor of mind, a fixed resolution to prepare himself for the duties to which Providence called him, a considerable store of sound reflection on theology, and knowledge of human nature." He saw his deficiencies, and gave himself to his work with great and unrelaxing diligence. He commenced a course of judicious theological and critical study, which enabled him better to serve the church in the pulpit, and more extensively to illustrate and defend her doctrines from the press. The standard of preaching rose in his own denomination every where around him. He assisted his younger brethren in their attempts to acquire the advantages of education. He set before them an example of simple, unaffected piety.

In 1803, Mr. Baldwin commenced the publication of the Massachusetts Baptist Magazine, (afterwards the American Baptist Magazine.) From its commencement to the year 1817, he was its sole editor, and from 1817 to his death he was the senior editor. For many years this was the only Baptist religious periodical in America. To its influence, and to the labors of Mr. Baldwin, by its means, may be ascribed, in a considerable degree, the progress which has been made in his own denomination in acquaintance with each other, in missionary enterprise, and religious knowledge. In 1802, he was appointed to deliver the annual sermon before the Legislature of Massachusetts, on the day of General Election. Three editions of this discourse were published. It was pronounced by the American Review an able and interesting sermon.

In 1803, Union college, at Schenectady, N. Y., conferred on Mr. Baldwin the honorary degree of Doctor of Divinity. He was a trustee, and afterwards a fellow of Brown University, at Providence, R. I., a trustee of Columbia college, at Washington, D. C., and of Waterville college, in Maine. He was also president, at the time of his death, of the Baptist Board of Managers for Foreign Missions. He was a member of the convention for amending the constitution of the Commonwealth of Massachusetts, in the year 1821, and he occasionally addressed the convention with ability and effect.

Dr. Baldwin died suddenly at Waterville, Me., August 29, 1825, whither he had gone to attend the annual commencement of the college. His remains were conveyed to Boston, and interred with every mark of respect and veneration. He had been aware, for some time, that he was drawing near to the grave. "Dr. Baldwin," remarks his biographer, "was not afraid to die. His faith was firm, his hope was unclouded. Like the sun at his setting, what was wanting in meridian splendor, was more than supplied by the mild radiance on which the eye delighted to dwell, and which threw abroad its rich and mellow glories more profusely the nearer it approached to the moment of its departure."

The number of Dr. Baldwin's publications, besides his numerous contributions to periodical works, amounted to thirty-seven. Most of them were single occasional sermons. As a proof of the extent of his labors, it is mentioned that the number of individuals whom he had baptized in Boston and other places, amounted to seven hundred and eighty-eight. The number of marriages

which he solemnized in Boston, was two thousand six hundred and sixty-one.

Much of the excellence of Dr. Baldwin's character is, doubtless, to be attributed to the circumstances in which he was thrown in the providence of God. His residence in the wilds of New Hampshire imparted an energy and decision to his character which never forsook him. The circle of clergymen with whom he associated in the metropolis of New England would naturally tend to correct his taste and enlarge his views. Still it was his own patient, self-denying, vigorous effort, which principally, under God, was the cause of his eminent usefulness. His various controversies sharpened and invigorated his reasoning powers, but they did not create or essentially modify those powers.

It is a most interesting fact in the history of Dr. Baldwin, that he almost commenced anew his literary life at the age of thirty-eight. His success furnishes strong encouragement to that class in the community whose early education has been neglected, and who find themselves in middle life in a state of comparative and humiliating ignorance. It is never too late to read; it is never too late to think. It is always a duty and a privilege to cultivate those noble powers of reasoning and judgment, which our benevolent Creator has given to us. Why may not the intellect be kept burning brightly to the last moment of life? Why may not the stores of knowledge be enlarged beyond the age of sixty? Why may not even the imagination retain, up to the farthest limit of human existence, the freshness and vigor of earlier flights? Why may not the soul spring into a

renovated and immortal life, with unimpaired and unwasted energies? Is not much of that *senility* in intellect, which we frequently observe in old age, to be attributed, not to the constitution of the mind, not to any law of the Creator, but to habits of bodily indulgence; because the individual quietly acquiesced in what he ought to have vigorously met and vanquished? because he tamely submitted to the suggestions of indolence, or to the seductive charms of domestic life? Why not approach the territories of death as Dr. Dwight and Robert Hall did, with firm step and clear-sighted vision, with intelligent humble faith, and with intellect too strong and elastic for the frail earthly tenement any longer to imprison.

DAVID RITTENHOUSE.

See the sage Rittenhouse, with ardent eye,
Lift the long tube and pierce the starry sky;
Clear in his view the circling systems roll,
And broader splendors gild the central pole.
He marks what laws the eccentric wanderers bind,
Copies creation in his forming mind,
And bids, beneath his hand in semblance rise,
With mimic orbs, the labors of the skies.

Vision of Columbus.

DAVID RITTENHOUSE was born near Germantown, Pennsylvania, April 8th, 1732. The family originally came from Guelderland, a province in Holland. They settled in the State of New York, while it was a Dutch colony, and were the first who engaged in the manufacture of paper in this country. The father of David Rittenhouse abandoned the occupation of a paper-maker, when about twenty-nine years of age, and commenced the business of a farmer, on a piece of land which he had purchased in the township of Norriton, about twenty miles from the city of Philadelphia. It seems that he very early designed his son for this useful and respectable employment. Accordingly, as soon as the boy arrived at a sufficient age to assist in conducting the affairs of the farm, he was occupied as an husbandman. This kind of occupation appears to have commenced at an early period of his life. About the fourteenth

year of his age, he was employed in ploughing in his father's fields. His brother Benjamin relates, that while David was thus engaged at the plough, he, (the informant,) then a young boy, was frequently sent to call him to his meals; at which times he repeatedly observed, that not only the fences at the head of many of the furrows, but even his plough and its handles, were covered over with chalked numerical figures. Astronomy was a favorite pursuit. He also applied himself industriously to the study of optics, the mechanical powers, &c. without the advantage of the least instruction. About the seventeenth year of his age, he made a wooden clock of very ingenious workmanship; and soon after, he constructed one of the same materials that compose the common four-and-twenty hour clock, and upon the same principles. He had, much earlier in life, exhibited proofs of his mechanical genius, by making, when only seven or eight years old, a complete water-mill in miniature.

With many valuable traits of character, old Mr. Rittenhouse had no claims to what is termed genius. Hence he did not properly appreciate the early specimens of talent which appeared in his son David. He was, for some time, opposed to the young man's earnest desire to renounce agricultural employments, for the purpose of devoting himself altogether to philosophical pursuits, in connection with some such mechanical profession as might best comport with useful objects of natural philosophy, and be most likely, at the same time, to afford him the means of a comfortable subsistence. At length, however, the father yielded his own inclinations, in order to

gratify what was manifestly the irresistible impulse of his son's genius. He supplied him with money to purchase, in Philadelphia, such tools as were more immediately necessary for commencing the clock-making business, which the son then adopted as his profession. About the same time, young Mr. Rittenhouse erected, on the side of a public road and on his father's land, in the township of Norriton, a small but commodious workshop; and after having made many implements of the trade with his own hands, to supply the deficiency in his purchased stock, he set out in good earnest, as a clock and mathematical instrument maker. From the age of eighteen or nineteen to twenty-five, Mr. Rittenhouse applied himself unremittingly, both to his trade and his studies. Employed throughout the day in his attention to the former, he devoted much of his nights to the latter. Indeed, he deprived himself of the necessary hours of rest; for it was his almost invariable practice, to sit up at his books, until midnight, sometimes much later.

When Mr. Rittenhouse's father established his residence at Norriton, and during the minority of the son, there were no schools in the vicinity at which anything more was taught, than reading and writing in the English language, and the simplest rules of arithmetic. Young Rittenhouse's school education was therefore necessarily bounded by very narrow limits. He was in truth *taught* nothing beyond those very circumscribed studies, which have been named, prior to his nineteenth year. The zeal with which he pursued his studies will be seen from the following extract of a letter, written in September, 1756, be-

ing then little more than twenty-four years of age. "I have not health for a soldier," (the country was then engaged in war,) "and as I have no expectation of serving my country in that way, I am spending my time in the old trifling manner, and am so taken with optics, that I do not know whether, if the enemy should invade this part of the country, as Archimedes was slain while making geometrical figures on the sand, so I should die making a telescope."

An incident now occurred which served to make known more extensively, the extraordinary genius of Rittenhouse. His mother had two brothers, David and Lewis Williams (or William,) both of whom died in their minority. David, the elder of these, pursued the trade of a carpenter, or joiner. Though, like his nephew and namesake, he was almost wholly an uneducated youth, he also, like him, early discovered an unusual genius and strength of mind. After the death of this young man, on opening a chest containing the implements of his trade, which was deposited at Mr. M. Rittenhouse's, (in whose family it is presumed he dwelt,) a few elementary books, treating of arithmetic and geometry were found in it. With these, there were various calculations and other papers, in manuscript; all the productions of David Williams himself, and such as indicated not only an uncommon genius, but an active spirit of philosophical research. To this humble yet valuable coffer of his deceased uncle, Rittenhouse had free access, while yet a very young boy. He often spoke of this acquisition as a treasure, inasmuch as the instruments belonging to his uncle, afforded him the means of gratifying

and exercising his mechanical genius, while the books and manuscripts early led his mind to those congenial pursuits in mathematical and astronomical science, which were ever the favorite objects of his studies. This circumstance, probably, occurred before his twelfth year. "It was during the residence of Rittenhouse with his father at Norriton," says his eulogist, Dr. Rush, "that he made himself master of Sir Isaac Newton's Principia, which he read in the English translation of Mr. Motte. It was here, likewise, that he became acquainted with the science of fluxions; of which sublime invention, he believed himself for a while to be the author, nor did he know for some years afterwards, that a contest had been carried on between Sir Isaac Newton and Leibnitz, for the honor of that great and useful discovery." Mr. Rittenhouse's early zeal in his practical researches into astronomy, prompted him to desire the greatest possible accuracy in the construction of time-pieces adapted to astronomical purposes; and uniting, as he did, operative skill with a thorough knowledge of the principles upon which their construction depends, he was enabled, by his own mechanical ingenuity, to gain a near approach to the perfection to which the pendulum-chronometer may be brought.

"There is nothing peculiar in the mechanism of this time-piece, which requires to be mentioned, except the pendulum; especially the apparatus for counteracting the effects of temperature. For this purpose, there is fastened on the pendulum-rod (which is of iron or steel) a glass tube about thirty-six inches long; bent in the middle into two parallel branches, at the distance of about an

inch from each other; the bend being placed downwards, immediately above the bob of the pendulum. The tube is open at one end, and closed at the other; the arm which is closed at the top is filled, within about two inches of the lower end or bend, with alcohol, and the rest of the tube, within about one half of an inch of the upper extremity, or open end, with mercury; a few inches of the tube, at this extremity, being about twice the width of the rest of the tube.

“Now when the heat of the air increases, it will expand the pendulum-rod and would thus lower the centre of oscillation, and cause the clock to go slower; but this effect is completely counteracted, by the expansion of the alcohol chiefly, and of the mercury in part; which equally raises the centre of oscillation, and thus preserves an equable motion in all the variable temperatures of the atmosphere.”

The great accuracy and exquisite workmanship displayed in everything belonging to the profession which Mr. Rittenhouse pursued, that came through his hands, soon became extensively known, in that portion of the United States where he lived. This knowledge of his mechanical abilities, assisted by the reputation which he had already acquired as a mathematician and astronomer, in a short time procured him the friendship and patronage of some eminent scientific men. In mechanics he was entirely *self-taught*. He never received the least instruction from any person, in any mechanic art whatever. If he were to be considered merely as an excellent artist, in an occupation intimately connected with the science of mechanics, *untutored* as he was in

any art or science, he would deservedly be deemed an extraordinary man.

In the bosom of his father's family he long continued to enjoy the tranquil scenes of rural life, amidst the society of an amiable and very intelligent family circle, and surrounded by many estimable neighbors, by whom he was both loved and respected. His chief occupation was that of the profession which he had chosen, but the occasional intervals of leisure from his business, which his assistant workmen enabled him to obtain, he devoted to philosophical and abstract studies.

In February, 1766, Mr. Rittenhouse was married to Miss Eleanor Colston, the daughter of a respectable member of the Society of Friends, who lived in the neighborhood. After her death he married Miss Hannah Jacobs.

In the 1767, among other things, he contrived and made a very ingenious thermometer, constructed on the principle of the expansion and contraction of metals by heat and cold, respectively. This instrument had, under glass, a face upon which was a graduated semi-circle; the degrees of heat and cold corresponded with those of Fahrenheit's thermometer; and these were also correspondingly designated by an index moving on the centre of the arch. Its square, or rather parallelogramical form, its flatness and thinness, and its small size, together with its not being liable to the least sensible injury or irregularity, from any position in which it might be placed, rendered it a very convenient thermometer to be carried in the pocket.

About this time Mr. Rittenhouse made a very ingenious orrery. Though no description in

words, can give an adequate idea, yet we subjoin a part of the philosopher's own account of it. "This machine is intended to have three faces, standing perpendicular to the horizon; that in the front to be four feet square, made of sheet brass, curiously polished, silvered and painted, in proper places, and otherwise properly ornamented. From the centre arises an axis, to support a gilded brass ball, intended to represent the sun. Round this ball move others, made of brass or ivory, to represent the planets. They are to move in elliptical orbits, having the central ball in one focus; and their motions to be sometimes swifter, and sometimes slower, as nearly according to the true law of an equable description of areas as possible, without too great a complication of wheel work. The orbit of each planet is likewise to be properly inclined to those of the others; and their aphelia and nodes justly placed; and their velocities so accurately adjusted, as not to differ sensibly from the tables of astronomy in some thousands of years.

"For the greater beauty of the instrument, the balls representing the planets are to be of considerable bigness; but so contrived that they may be taken off at pleasure, and others, much smaller, and fitter for some purposes, put in their places.

"When the machine is put in motion, by the turning of a winch, there are three indices which point out the hour of the day, the day of the month, and the year answering to that situation of the heavenly bodies which is there represented; and so continually, for a period of five thousands years, either forwards or backwards.

"The two lesser faces are four feet in height,

and two feet three inches in breadth. One of them will exhibit all the appearances of Jupiter and his satellites, their eclipses, transits, and inclinations; likewise all the appearances of Saturn, with his ring and satellites. And the other will represent all the phenomena of the moon, particularly, the exact time, quantity, and duration of her eclipses, — and those of the sun occasioned by her interposition; with a most curious contrivance for exhibiting the appearance of a solar eclipse, at any particular place on the earth, likewise the true place of the moon in the signs, with her latitude, and the place of her apogee in the nodes; the sun's declination, equation of time, &c. It must be understood that all these motions are to correspond exactly with the celestial motions; and not to differ several degrees from the truth, in a few revolutions, as is common in orreries."

Some general idea, perhaps, of this instrument, may be derived from the preceding description; at least it will afford sufficient evidence of the extraordinary philosophical and mechanical powers of Rittenhouse.

Another most important service, which he rendered for the world, was the observation of the *transit of Venus* over the sun's disc, which took place on the third of June, 1769. There had been but one of these transits of Venus over the sun, during the course of about one hundred and thirty years preceding that of 1769; and, for upwards of seven centuries, antecedently to the commencement of that period, the same planet had passed over the sun's disc no more than thirteen times. The next transit of Venus will take place on the 8th of December, 1874, which but few

if any persons then on the stage of life, will have an opportunity of observing. From 1874, down to the 14th of June, A. D. 2984, inclusively, — a period of upwards of eleven centuries, — the same planet will pass over the sun's disc only eighteen times.

The great use of the observation of the transit of Venus is to determine the sun's parallax.* Only two of these phenomena had been *observed* since the creation of the world, and the first had been seen by only two persons — Jeremiah Horrox and William Crabtree, two Englishmen. As the time approached when this extraordinary phenomenon was to manifest itself, the public expectation and anxiety were greatly excited. The American Philosophical Society appointed thirteen gentlemen, to be distributed into three committees, for the purpose of making observations. Rev. Dr. Ewing had the principal direction of the observatory in the city of Philadelphia; Mr. Owen Biddle had the charge of superintending the observations at Cape Henlopen, and Mr. Rittenhouse those at Norriton, near his own residence, on an elevated piece of ground, commanding a good range of horizontal view. It was completely furnished with the necessary instruments, owing very much to the liberality of some scientific gentlemen in England.

* A parallax denotes a change of the apparent place of any heavenly body, caused by being seen from different points of view; or it is the difference between the true and apparent distance of any heavenly body from the zenith. The fixed stars are so remote as to have no sensible parallax; and even the sun and all the primary planets, except Mars and Venus when nearest the earth, are at so great distances from the earth, that their parallax is too small to be observed.

“We are naturally led,” says Dr. Rush, in his eulogium, “to take a view of our philosopher, with his associates, in their preparations to observe a phenomenon, which had never been seen but twice before by any inhabitant of our earth, which would never be seen again by any person then living, and on which depended very important astronomical consequences. The night before the long expected day, was probably passed in a degree of solicitude which precluded sleep. How great must have been their joy, when they beheld the morning sun; and the ‘whole horizon without a cloud,’ for such is the description of the day, given by Mr. Rittenhouse, in his report to Dr. Smith. In pensive silence and trembling anxiety, they waited for the predicted moment of observation; it came, — and brought with it all that had been wished for and expected by those who saw it. In our philosopher, in the instant of one of the contacts of the planet with the sun, there was an emotion of delight so exquisite and powerful, as to induce fainting; — such was the extent of that pleasure, which attends the discovery or first perception of truth.”

The observations of Mr. Rittenhouse were received with favor by the whole philosophical world. Mr. Ludlam, one of the vice presidents of the Philosophical Society of London, and an eminent astronomer, thus writes: “No astronomers could better deserve all possible encouragement; whether we consider their care and diligence in making their observations, their fidelity in relating what was done, or the clearness and accuracy of their reasoning on this curious and difficult subject. The more I read the trans-

actions of your Society, (the American Philosophical,) the more I honor and esteem the members of it. *There is not another Society in the world, that can boast of a member such as Mr. RITTENHOUSE*; theorist enough to encounter the problems of determining, from a few observations, the orbit of a comet; and also mechanic enough to make with his own hands, an equal-altitude instrument, a transit-telescope, and a time-piece. I wish I was near enough to see his mechanical apparatus. I find he is engaged in making a curious orrery."

Dr. Maskelyne, Astronomer Royal at Greenwich, says, the "Pennsylvania Observations of the transit were *excellent* and *complete*, and do honor to the gentleman who made them, and those who promoted the undertaking." Dr. Wrangel, an eminent and learned Swedish clergyman, speaking of the Transactions of the American Philosophical Society, says: "Your accurate observations of the transit of Venus, have given infinite satisfaction to our Swedish astronomers."

On the 9th of November, following, Mr. Rittenhouse, in connection with several others, observed a transit of Mercury over the sun's disc.

In the autumn of 1770, Mr. Rittenhouse removed with his family to the city of Philadelphia.

A new phenomenon in the heavens soon after engaged his attention; this was the comet which appeared in June and July, 1770. "Herewith I send you," says Mr. Rittenhouse, writing to Dr. Smith, "the fruit of three or four days' labor, during which I have covered many sheets, and literally drained my ink-stand several times." In another letter he remarks, "I told you that some

intricate calculation, or other, always takes up my idle hours, (he seems to have considered all his hours 'idle' ones which were not taken up in some manual employment,) that I cannot find time to write to my friends as often as I could wish; a new object has lately engrossed my attention. The comet which appeared a few weeks since was so very extraordinary, that I could not forbear tracing it in all its wanderings, and endeavoring to reduce that motion to order and regularity which seemed void of any. This, I think, I have accomplished, so far as to be able to compute its visible place for any given time; and I can assure you that the account from York, of its having been seen again near the place where it first appeared, is a mistake. Nor is Mr. Winthrop of Boston happier, in supposing that it yet crosses the meridian, every day, between twelve and one o'clock, that it has already passed its peripelion, and that it may, perhaps, again emerge from the southern horizon. This comet is now to be looked for nowhere but a little to the north of, and very near to the ecliptic. It rises now a little before day-break; and will continue to rise sooner and sooner every morning."

In March, 1771, the Legislature of Pennsylvania bore the following honorable testimony to the worth of Mr. Rittenhouse.

"The members of assembly, having viewed the orrery constructed by Mr. David Rittenhouse, a native of this province, and being of opinion that it greatly exceeds all others hitherto constructed, in demonstrating the true situations of the celestial bodies, their magnitudes, motions, distances, periods, eclipses, and order, upon the principles of the Newtonian system :

“*Resolved*, That the sum of three hundred pounds be given to Mr. Rittenhouse, as a testimony of the high sense, which this house entertain of his mathematical genius and mechanical abilities, in constructing the said orrery.”

In January, 1771, Mr. Rittenhouse was elected one of the Secretaries of the American Philosophical Society. In 1789, the honorary degree of Doctor of Laws was conferred upon Mr. Rittenhouse by the college of New Jersey. In January, 1791, on the death of Dr. Franklin, Dr. Rittenhouse was, with great unanimity, elected President of the American Philosophical Society. In 1795, he was elected a member of the Royal Society of London. This high honor had been previously conferred upon only three or four Americans.

But he did not live long to enjoy his distinguished honors. Soon after his entrance upon the sixty-fifth year of his age, in June, 1796, he died.

The Rev. Dr. Ashbel Green, being pastor of the congregation in which Dr. Rittenhouse had often attended divine worship during the latter years of his life, pronounced an appropriate address at his interment. “This,” says Dr. Green, “is emphatically the tomb of genius and science. Their child, their martyr is here deposited,—and their friends will make his eulogy in tears. I stand not here to pronounce it; the thought that engrosses my mind is this; how much more clear and impressive must be the views, which the late spiritual inhabitant of that lifeless corpse now possesses of GOD,—of his infinite existence, of his adorable attributes, and of that eternal blaze of glory which emanates

from Him, — than when she was blinded by her veil of flesh! Accustomed as she was to penetrate far into the universe, — far as corporeal or mental vision here can reach, — still what new and extensive scenes of wonder have opened on her eyes, enlightened and invigorated by death! The discoveries of RITTENHOUSE, since he died, have already been more, and greater, than while he lived. Yes, and could he address us from the spiritual world, his language would be —

‘ All, all on earth is shadow, all beyond
Is substance. — ’ ”

In a conversation with the Rev. Dr. Sproat, Dr. Rittenhouse, a short time before his death, declared that “ he could with truth say, that ever since he had examined Christianity and thought upon the subject, he was a firm believer in it; and that he expected salvation *only* in the way of the gospel.” He had not attached himself to any particular church. The members of his family were mostly of the Society of Friends. In the last years of his life he read many books on natural and revealed religion. He was much pleased with the “ Thoughts of Pascal.”

He was a very modest and unassuming man, and in this strikingly resembled Sir Isaac Newton, for whose character and works, he had the highest veneration. His usefulness, though great, was considerably circumscribed by his want of an early education. In consequence of this, he felt an unbecoming diffidence in his own powers, and failed to commit his discoveries and thoughts to writing, which, in a published form, would, doubtless, have eminently increased his usefulness, and the honor of the country which gave him birth,

SAMUEL HUNTINGTON.

SAMUEL HUNTINGTON was born in Windham, in the State of Connecticut, July 3, 1732. The family of Huntingtons emigrated into this country at an early period. Nathaniel Huntington, the father of Samuel, was a plain but estimable man, who followed the occupation of farming, in the town of Windham. His wife was distinguished for piety and native talent, and their numerous children, of whom three devoted themselves to the Christian ministry, were endued with an unusual share of mental vigor. Samuel, however, did not participate in the invaluable benefits which a collegiate education conferred upon his brothers. Being the eldest son, he was destined to pursue the humble but honorable course of his father—the cultivation of the soil. His opportunities for acquiring knowledge were extremely limited, and he received no other education than the common schools of Connecticut at that time afforded. He was gifted, however, with a fine understanding, and with a strong taste for mental improvement. He employed all his leisure hours in reading and study. But even in this limited and imperfect course he was compelled to struggle with great difficulties. Books were then exceedingly rare. We, who live in the nineteenth century, can hardly conceive the extent of the destitution of books, which prevailed even in the time of the Revolutionary war. The whole

library of which some most respectable families were possessed, consisted of a Psalter, one large Bible, and two or three of smaller size, Dilworth's Spelling Book, an Almanac, and perhaps one volume of the Berry Street (London) Sermons. Some families contrived to obtain a few additional works, but the scarcity everywhere was very great. A curious proof of this is found in the Life of President Edwards, in which he acknowledges repeatedly, his great obligations to his foreign correspondents for books and pamphlets, which would not now be considered worth a transmission across the Atlantic. Social or public libraries were almost unknown, especially in the smaller towns.

The labors of the farm, which young Huntington continued to perform until the twenty-second year of his age, necessarily occupied the greater portion of his time, yet his strong mind and unwearied industry enabled him to acquire considerable scientific information upon various subjects. At the age of twenty-two years, when he abandoned his agricultural pursuits to engage in the study of the law, he had acquired, principally from his own unassisted exertions, an excellent common education. He attained considerable acquaintance with the Latin language, but it does not appear that he directed his attention to any other foreign tongue.

He early manifested a strong desire to study the legal profession; he resolved "to thread the maze of the law," with no other guide than his own judgment and perseverance, and to attain to distinguished usefulness by industry and self-denial. It is probable that the method adopted

by him arose from pecuniary difficulties. He did not attempt to seek the benefits of legal tuition in the office of a lawyer, but borrowed the necessary books from colonel Jedediah Elderkin, a member of the profession, residing in Norwich. Having attained a competent knowledge of the general principles of law, he commenced his professional career in the town of Windham. In 1760, he removed to Norwich. His reputation as an advocate and a man of talents was soon established. Aided by a candid and deliberate manner, which appeared in some degree constitutional, few lawyers commanded a more extensive practice. He was known to be a man of good sense, integrity and punctuality. In 1774, Mr. Huntington was appointed an associate judge of the superior court. In 1775, in conjunction with Roger Sherman, Titus Hosmer, Oliver Wolcott and William Williams, Mr. Huntington took his seat in the general congress. In July, 1776, he affixed his name to the immortal instrument which declared our independence. He retained his seat in congress till 1780.

His stern integrity and inflexible patriotism rendered him a prominent member, and attracted a large portion of the current business of the house, especially that which was assigned to committees. On the 28th of September, 1779, on the resignation of John Jay, Mr. Huntington was chosen to the highest civil dignity of the country — that of president of congress. In 1781, he declined a re-appointment, on account of ill health. He then resumed his judicial functions in the supreme court of Connecticut. In 1783, he again took his seat in congress. In 1784, he was appointed chief-

justice of the supreme court of Connecticut. He presided on the bench with great ability, integrity and reputation. In 1786, he succeeded governor Griswold as chief magistrate of the State, and continued to be reëlected with singular unanimity till his death. He closed his life at Norwich, on the 5th of January, 1796, in the sixty-fourth year of his age. His death was tranquil and exemplary, and his religious confidence generally firm and unwavering.

For many years he had been a professor of religion, and appeared to derive great delight from the doctrines and ordinances of the gospel. When the congregation with which he worshipped was destitute of preaching, he officiated as a reader and conductor of the services.

Perhaps no man ever possessed greater mildness and equanimity than governor Huntington. A living witness attests, that during a residence of twenty-four years in his family, he never, in a single instance, exhibited the slightest symptom of anger, nor spoke one word calculated to wound the feelings of another, or to injure an absent person. Notwithstanding his elevation, he had none of that false pride, which dignity and honors are so apt to create. After performing the business of his office and instructing numerous students in the principles of law he was accustomed, if any garden or household utensils had been broken, to repair them with his own hands; and rather than require the attendance of a servant for any trivial services, he would perform them himself. Being a man of great simplicity and plainness of manners, he maintained that it was a public duty to exhibit such an example as might,

so far as his individual efforts could avail, counteract the spirit of extravagance, which had begun to appear. He was very economical, though not parsimonious, in his personal habits and domestic arrangements. His distinguishing characteristics, both in conversation and in epistolary correspondence, were brevity and caution.

In 1762, he was married to Miss Martha Devotion, a daughter of the very respectable clergyman of the town of Windham. Having no children of their own, they adopted two children of their brother's, the Rev. Joseph Huntington. The late Samuel Huntington, governor of Ohio, and Mrs. Griffin, the lady of the venerable president of Williams college, were the individuals who supplied the deficiency in his family, and were privileged with his excellent example and instructions.

WILLIAM EDWARDS.

WILLIAM EDWARDS, the celebrated Welsh engineer, was born in 1719, in the parish of Eglwysan, in Glamorganshire. He lost his father, who was a farmer, when he was only two years old; but his mother continued to hold the farm, and was in this manner enabled to bring up her family, consisting of two other sons and a daughter, besides William, who was the youngest. Her other sons, indeed, were soon old enough to take the chief part of the charge from her hands. William was taught in the mean time to read and write Welsh; and this was all the education which he seems to have received. When about the age of fifteen, he first began to employ himself in repairing the stone fences of the farm; and in this humble species of masonry he soon acquired uncommon expertness. The excellent work he made, and the despatch with which he finished it, at last attracted the notice of the neighboring farmers; and they advised his brothers to keep him at this business, and let him employ his skill, when wanted, on other farms, as well as their own. After this he was for some time constantly engaged; and he regularly added his earnings to the common stock of the family.

Hitherto, the only sort of building which he had practised or had seen practised, was merely stone-masonry without mortar. But at length it happened that some masons came to the parish to

erect a shed for shoeing horses, near a smith's shop. William contemplated the operations of these architects with the liveliest interest, and he used to stand by them for hours while they were at work, taking note of every movement which they made. A circumstance, which at once struck him, was that they used a different description of hammer from what he had been accustomed to employ; and perceiving its superiority, he immediately procured one of the same kind for himself. With this he found he could build his walls much more neatly than he had been wont to do.

But it was not long after he had, for the first time in his life, an opportunity of seeing how houses were erected, that he undertook to build one himself. It was a workshop for a neighbor; and he performed his task in such a manner as gained him great applause. Very soon after this, he was employed to erect a mill, by which he still further increased his reputation. He was now accounted the best workman in that part of the country, and being highly esteemed for integrity and fidelity to his engagements, as well as for his skill, he had as much employment in his line of a common builder as he could undertake.

In his twenty-seventh year, however, he was induced to engage in an enterprise of a much more difficult and important character than anything which he had hitherto attempted. Through his native parish runs a river, called the Taff, which flows into the estuary of the Severn. It was proposed to throw a bridge over this river, at a particular spot, where it crossed the line of an intended road; but to this design difficulties of a somewhat formidable nature presented themselves,

owing both to the great breadth of the river, and the frequent swellings to which it was subject. Mountains, covered with wood, rose to a considerable height from both its banks; which first attracted and detained every approaching cloud, and then sent down its contents in torrents to the river. Edwards, undertook the task of constructing the proposed bridge, though it was the first work of the kind in which he ever engaged.

Accordingly, in the year 1746, he set to work; and in due time completed a very light and elegant bridge, of three arches, which, notwithstanding that it was the work of both an entirely self-taught and an equally untravelled artist, was acknowledged to be superior to anything of the kind in Wales. So far his success had been as perfect as anything which could be desired. But his undertaking was far from being yet finished. He had, both through himself and his friends, given security that the work should stand for seven years; and for two and a half years of this term all went on well. There then occurred a flood of extraordinary magnitude; not only the torrents came down from the mountains, in their accustomed channels, but they brought along with them trees of the largest size, which they had torn up by the roots; and these detained, as they floated along by the middle piers of the bridge, formed a dam there; the waters accumulating behind, at length burst from their confinement, and swept away the whole structure.

This was no light misfortune in every way to poor Edwards; but he did not suffer himself to be disheartened by it, and he immediately proceeded, as his contract bound him to do, to the erection of

another bridge. He now determined, however, to span the whole width of the river by a single arch of the unexampled magnitude of one hundred and forty feet from pier to pier. He finished the erection of this stupendous arch in 1751, and had only to add the parapets, when he was doomed once more to behold his bridge sink into the water over which he had raised it, — the extraordinary weight of the masonry having forced up the key-stones, and, of course, at once deprived the arch of what sustained its equipoise.

Heavy as was this second disappointment to the hopes of the young architect, it did not shake his courage any more than the former had done. The reconstruction of his bridge for the third time was immediately begun with unabated spirit and confidence. Still determined to adhere to his last plan of a single arch, he had now thought of an ingenious contrivance for diminishing the enormous weight which had formerly forced the key-stone out of its place. In each of the large masses of masonry, called the *haunches* of the bridge, being the parts immediately above the two extremities of the arch, he opened three cylindrical holes, which not only relieved the central part of the structure from all overpressure, but greatly improved its general appearance in point of lightness and elegance. This bridge was finished in 1755; the whole undertaking having occupied the architect about nine years in all; and it has stood ever since. This bridge, at the time of its erection, was the largest stone arch known to exist in the world.

Since that time, stone arches of extraordinary dimensions have been built, — such as the five

arches composing the splendid Pont de Neuilly, over the river Seine, near Paris, the span of each of which is one hundred and twenty-eight feet;—the island-bridge, over the Liffey, near Dublin, which is a single arch one hundred and six feet in width;—the bridge over the Tees, at Winston in Yorkshire, which is also a single arch one hundred and eight feet nine inches in width, was built by John Johnson, a common mason, at a cost of only five hundred pounds;—and the nine elliptical arches, each of one hundred and twenty feet span, forming the magnificent Waterloo bridge, over the Thames, at London. A bridge has recently been built at Chester, which is the largest single arch in the world, being two hundred feet span. At Bishop's Wearmouth, in the county of Durham, there is a cast-iron bridge over the river Wear, the chord of the arch of which is two hundred and forty feet long. The Southwark or Trafalgar bridge, over the Thames, at London, is at present the finest iron bridge in the world. It consists of three arches; the chord of the middle arch is two hundred and forty feet long. There is a *timber* bridge over the Delaware, near Trenton, N. J., which is the segment of a circle three hundred and forty-five feet in diameter. The wooden bridge over the Schuylkill, at Philadelphia, was of the extraordinary span of three hundred and forty feet; but having been destroyed by fire, a few years since, it is now replaced by a splendid one of *wire*. The bridge over the Piscataqua, near Portsmouth, N. H., is the segment of a circle six hundred feet in diameter.

The bridge built by Edwards, over the Taff, buttressed as it is at each extremity by lofty moun-

tains, while the water flows in full tide beneath it at the distance of thirty-five feet, presents an aspect very striking and magnificent. This bridge spread the fame of Edwards over all the country. He afterwards built many bridges in South Wales, having their arches formed of segments of much larger circles, and consequently much more convenient. He found his way to this improvement entirely by his own experience and sagacity; as indeed he may be said to have done in regard to all the knowledge which he possessed in his art. Even his principles of common masonry, he used himself to declare, he learned chiefly from his studies among the ruins of an old gothic castle in his native parish.

Edwards was, likewise, a farmer to the end of his days. Such, moreover, was his unwearied activity that, not satisfied with his weekday labors in these two capacities, he also officiated on the Sabbath as pastor of an Independent congregation, having been regularly ordained to that office when he was about thirty years of age, and holding it till his death. He accepted the usual salary from his congregation, considering it right that they should support their minister; but instead of putting the money into his own pocket, he returned it all, and often much more, in charity to the poor. He always preached in Welsh, though early in life he had made himself acquainted with the English language, having acquired it under the tuition of a blind old schoolmaster, in whose house he once lodged for a short time, while doing some work at the county-town of Cardiff. In this effort he showed all his characteristic assiduity.

He died in 1789, in the seventieth year of his

age. His eldest son, David, became also an eminent architect and bridge-builder, though he had no other instruction in his profession than what his father had given him. David's eldest son, also, inherited the genius of his father and grandfather.

THOMAS SCOTT.

It is not our object to write the life, or even to abridge the interesting Memoir of this venerated man. We shall simply collect such facts as bear on the design of our present undertaking, incorporating such remarks as may seem timely and important.

“My father,” says Dr. Scott, “was a grazier; a man of a small and feeble body, but of uncommon energy of mind and vigor of intellect; by which he surmounted, in no common degree, the almost total want of education. His circumstances were very narrow, and for many years he struggled with urgent difficulties. But he rose above them, and, though never affluent, his credit was supported, and he lived in more comfortable circumstances to the age of seventy-six years. He had thirteen children, ten of whom lived to maturity; and my eldest brother was twenty-three years older than my youngest sister. Having been taught, principally by my mother, to read fluently and to spell accurately, I learned the first elements of Latin at Burgh, two miles off, at a school to which, for a while, I went as a day scholar. But at eight years of age I was sent to Bennington, a village about four miles north of Boston, where my father had a grazing farm, that I might attend a school in the parish kept by a clergyman. Here I continued about two years; and, in addition to writing, and the first rudiments

of arithmetic, I learned a little Latin, at my master's desire, who thought he saw in me a turn for that kind of learning. He had, as I recollect, no other Latin scholar."

About this time his eldest brother, who was a surgeon in the navy, died. "My father," continues the narrative, "felt this event, as, in every way, a most heavy affliction. He determined, however, if possible, to have a son in the medical profession; and, as I was thought of the proper age, and seemed capable of readily learning Latin, I was selected. From this time my attention was almost entirely directed to that language; and, at different places, I got a superficial knowledge of several books generally read at schools; which gave the appearance of far greater proficiency than I had actually made. At ten years of age I was sent to Scorton, where my brother had been before me; and there I remained five years, without returning home, or seeing any relation or acquaintance. The whole expense of boarding and clothing me amounted to £14 a year; two guineas were paid for teaching, books being found; there were some extra charges for writing, arithmetic, and French, and some expenses for medical assistance; but I have often heard my father mention that I cost him £17 a year for five years. I think he must have underrated the sum, but I am fully satisfied that £100 more than covered all the charges of the five years; and this was all the cost of my education.

"The Rev. John Noble was head-master of the school at Scorton. He had been, in his day, indisputably, an able teacher of the learned languages; but at this time he was old and leth-

argic ; and though still assiduous, was most grossly imposed upon by the boys, and by none more than by myself. When I arrived at Scorton, I was asked what Latin books I had read ; and my answer induced the usher to overrate my proficiency, and to place me in a class much beyond my superficial attainments. This, however, stimulated me to close application, and it was not very long before I overtook my class-mates, and with ease accompanied them. Had I then been again pushed forward, I might have been excited to persevering diligence ; but as I could appear with laudable credit, without much application ; partly by actual proficiency, and partly by imposing on Mr. Noble, under whose care I now came ; my love of play, and my scarcity of money for self-indulgent expenses, induced me to divide a great proportion of my time between diversion and helping other boys in their exercises, for a very scanty remuneration, which I lost in gaming, or squandered in gratifying my appetite. One thing is remarkable, considering what has since taken place, that, while I could translate Latin into English, or English into Latin, perhaps more readily and correctly than any other boy in the school, I never could compose themes. I absolutely seemed to have no *ideas*, when set to work of this kind, either then or for some years afterwards ; and was even greatly at a loss to write a common letter. As for verses, I never wrote any except *nonsense* verses, of one kind or other ; which has perhaps been the case also of many more prolific versifiers. God had not made me a poet, and I am very thankful that I never attempted to make myself one."

Soon after leaving school, he was bound apprentice to a surgeon and apothecary at Alford, about eight miles from Braytoft, his father's residence. His master, it appears, was entirely *unprincipled*, and young Scott followed closely in his steps. At the end of two months, he was sent home in deep disgrace for gross misconduct. Though this was a severe mortification to his father and to the whole family, yet the course pursued towards him seems to have been unjustifiably severe, and even cruel.

"Immediately on my return home," continues Mr. Scott, "I was set to do, as well as I could, the most laborious and dirty parts of the work belonging to a grazier. On this I entered at the beginning of winter; and as much of my father's farm consisted of low land, which was often flooded, I was introduced to scenes of hardship, and exposed to many dangers from wet and cold, for which my previous habits had not prepared me. In consequence I was frequently ill, and, at length, suffered such repeated and obstinate maladies that my life was more than once despaired of. Yet a kind of indignant, proud self-revenge, kept me from complaining of hardship; though of reproach and even of reproof, I was impatient to the greatest degree of irascibility. After a few unsuccessful attempts, my father gave up all thoughts of placing me out in any other way; and for above nine years I was nearly as entire a drudge as any servant or laborer in his employ; and almost as little known beyond the circle of immediate neighbors. My occupation was generally about the cattle, and particularly in the spring season. In this service I learned

habits of hardiness in encountering all sorts of weather, (for the worse the weather, the more needful it was that I should be with the sheep,) which have since proved useful to me ; and though I was not kept from learning many vices, I was out of the way of acquiring habits of ease and indulgence, as I should otherwise, probably, have done. My situation, however, led me to associate with persons of the lowest station of life, and wholly destitute of religious principle — in all ranks the grand corrective, and in this rank almost the sole restraint upon character and manners. These persons tried to please me with flatteries, and to inflame still more the indignancy of spirit with which I rebelled against the supposed degradation that I suffered.”

Still he entertained thoughts of the University and of the clerical profession. He fondly cherished the hope of one day rising from the degradation to which he was condemned. Hence, in some of the winter evenings he used to read whatever books he could procure. But strange to say, his father, though himself a studious and inquisitive man, was wholly opposed to the gratification of the literary propensity of his son, judging it to be wholly inconsistent with diligence in his business. He used to say frequently that he foresaw that his son would come to be a charge to the parish.

This conduct of his father greatly strengthened him to spend his leisure time from home, and often in low and abandoned company. Another impediment was the almost entire want of books. A few torn Latin books, a small imperfect Dictionary, and an Eton Greek Grammar, composed his whole stock in the languages.

Mr. Scott had only one surviving brother, and he was well situated on a farm. His father was far advanced in life, and not of a strong constitution. It was generally supposed that Thomas would succeed to the estate. "But at length," says the narrative, "it was discovered that the lease of this farm was left by will to my brother; and that I was merely to be under-tenant to him for some marsh-grazing lands, which were without a house, and on which I knew a family could not be decently maintained. On this discovery, I determined to make some effort to extricate myself; and I only waited for an opportunity to declare my determination. Without delay my Greek Grammar was studied through and through; and I made what use I could of my Latin books; my father, in the mean time, expressing his astonishment at my conduct.

"At length, in April, 1772, in almost the worst manner possible, after a long wet day of incessant fatigue, I deemed myself, and perhaps with justice, to be causelessly and severely blamed, and I gave full vent to my indignant passions; and throwing aside my shepherd's frock, declared my purpose no more to resume it. That night I lodged at my brother's, at a little distance; but, in the morning, I considered that a large flock of sheep had no one to look after them, who was competent to the task; I therefore returned and did what was needful; and then set off for Boston, where a clergyman resided, with whom I had contracted some acquaintance, by conversing with him on common matters, when he came to do duty in my brother's village, and took refreshments at his house.

“To this clergyman I opened my mind with hesitancy and trepidation ; and nothing could exceed his astonishment when he heard my purpose of attempting to obtain orders. He knew me only as a shepherd, somewhat more conversable, perhaps, than others in that station, and immediately asked, ‘Do you know anything of Latin and Greek?’ I told him I had received an education, but that for almost ten years, I had not seen a Greek book, except the Grammar. He instantly took down a Greek Testament, and put it into my hands ; and without difficulty I read several verses, giving both the Latin and English rendering of them, according to the custom of our school. On this, having strongly expressed his surprise, he said, ‘Our visitation will be next week ; the archdeacon, Dr. Gordon, will be here ; and if you will be in the town I will mention you to him, and induce him, if I can, to send for you.’ This being settled, I returned immediately to my father for the intervening days ; knowing how much, at that season, he wanted my help, for services which he could no longer perform himself, and was not accustomed to entrust to servants.”

In a letter to his sisters, which he wrote about this time, he says, “My aunt Wayet endeavored to rally me out of my scheme, but I must own I thought her arguments weak. She urged the ridicule which *poor parsons* meet with ; but surely, those who ridicule any one on account of his poverty, if he behaves in a manner worthy of his situation, are themselves persons whose opinion I despise. She said she would not be of any profession, unless at the head of it ; but this can be no rule for general practice, as some must

be subordinate. She mentioned my not being brought up in a regular manner; but it is the end, not the means, which is of the greatest consequence; and if a man be qualified, it matters not where he procured his qualifications. It sometimes humbles my vanity to hear them all account of me as one of the lowest order of the profession, not only in point of fortune, but also in other particulars. If I know myself, I am not deficient in abilities, though I am in the art of rendering them conspicuous; my vanity prompts me to say, that I am not without hopes of making friends in this way of life, as I shall be more conversant with men of letters, who are the companions I most delight in, and for whose company I shall spare no pains to qualify myself. But let my condition in life be what it will, I will endeavor to suit myself to it. Pray heaven preserve me independent on any other for a livelihood, and I ask no more. The happiest hours I ever spent, have been in your company, and the greatest reluctance I feel at this change of my situation is, the being separated from a set of sisters, for whom I have the most sincere regard.

“At the appointed time,” continues the narrative, “I returned to Boston, where my family was well known, and readily found access to the archdeacon, who was also examining chaplain to the Bishop of Lincoln, Dr. Green. Before him I repeated, in another part of the Greek Testament, what I had done at the clergyman’s house; and was asked many questions, which I answered without the least disguise. The archdeacon concluded the interview, by assuring me that he would state my case to the bishop, and saying

that he thought it probable his lordship would ordain me.

“Thus encouraged, I expended all the little money which I could raise on books; went to live at Boston; and applied diligently to study—especially to improve my knowledge of the Greek Testament, (the Gospels in particular,) and to recover, or rather to acquire the ability of composing in Latin. I had now for some years been ready in expressing my thoughts, and had even been, in some instances, a writer in newspapers and magazines. I daily, therefore, wrote in Latin, on texts of Scripture, a sort of short sermons, which my friend, the clergyman, revised; and, in return, I afforded him very seasonable and welcome assistance in a grammar school which he taught.”

His first attempt to gain ordination was, however, unsuccessful. His papers had not reached the ordaining bishop in season, and other circumstances were unsatisfactory. This repulse induced in the bosom of the applicant, a kind of despair. The bishop had said that he should probably admit him at the next ordination, provided he would procure his father's consent to the measure, and a letter from any beneficed clergyman in the neighborhood. But he was not personally known to half a dozen clergymen of the description required; and his attempt was utterly reprobated by every one of them as in a high degree presumptuous. He was now in the twenty-sixth year of his age, wholly without the prospect of a decent subsistence, and to complete the appalling prospect, his father was most decidedly set against the design.

But an energy, such as Thomas Scott had, could not be repressed. The fire, which was burning in his bosom, no adverse circumstances could extinguish. He had made up his mind to accomplish the work, and it would seem that no human power could stay him.

He travelled to his home from London, by a circuitous route, and a great part of the way on foot, and the rest in various vehicles. At length he reached Braytoft, after walking twenty miles in the forenoon; having dined, and divested himself of his clerical dress, he resumed his shepherd's clothes, and in the afternoon, sheared eleven large sheep!

“This, however,” he observes, “was my last labor of the kind. My attempt to obtain orders had been widely made known in the neighborhood, even much beyond the sphere of my personal acquaintance; and it had excited much attention and astonishment, with no small degree of ridicule. This raised the spirit of my relations; and the sentiment expressed by my brother, was that of the other branches of the family. ‘I wish,’ said he, ‘my brother had not made the attempt; but I cannot bear to have it said, that one of our name undertook what he was unable to accomplish.’”

“In consequence of this sensation, my brother and all my sisters met by appointment at my father's house; and, with my mother, urged it in the most earnest manner, as his indispensable duty, either to consent to my ordination, or to fix me on a farm on my own account. I apprehend it was clearly foreseen what his concession would be, if he could be induced to concede at all; and

accordingly, after much debate, he gave his consent in writing to my entering into orders.

“As the difficulty, which I regarded as insuperable, was in a most unexpected manner, surmounted; and my hopes reviving, I was prepared to struggle over other obstacles, if possible. Despairing of obtaining a letter to the bishop from any of the beneficed clergymen, to whom, as living within a few miles, I was in some degree known, I applied without delay, to the vicar of Boston, Dr. Calthorp, who was well acquainted with my mother and her family, though he had seldom, if ever, seen me, till I met the archdeacon at his house. He behaved in the most candid manner; yet as a truly conscientious man, (which I believe he really was,) he said justly that he could not sign my testimonial, or state anything concerning me from his own knowledge, except for the short time which had passed since I first came to his house; but that he could give a favorable account as to that time; and if I could procure attestations from any respectable persons, though not clergymen, he would transmit them with his own letter to the bishop. Thus encouraged, I went again to reside at Boston, where I applied diligently to my studies; but I was greatly frowned on by many of my relations; and I frequently heard the laugh of the boys, as I walked about the street in a brown coat, and with lank hair, pointing me out as the ‘parson!’—if this were a species of persecution, it was certainly not for *Christ’s sake*, or *for righteousness’ sake*, for I was estranged from both at this time.”

It is proper here to remark, that however valuable the traits of character were, which were

exhibited by Mr. Scott, it is evident, and it is what he many times, and sorrowfully acknowledged in subsequent life, that he had not *that* character which is essential in the Christian ministry. He approached this sacred work as he would have approached either of the other professions. No spirit can be more foreign from the ministry of reconciliation than ambition, or disappointed pride, or that zeal which is enkindled by a sense of degradation, and a desire to rise superior to our fellow creatures, in order to show them the strength of our character, and the energy of our purpose. The Great Shepherd was meek and lowly, and those only are accepted by him, who are willing to tread in his steps.

“At the ensuing ordination, I was admitted a candidate,” continues Mr. Scott, “without objection, and was examined at Buckden, by Dr. Gordon. After examination on other matters, he asked me numerous questions concerning the nature of miracles; how real miracles might be distinguished from counterfeit ones; and how they proved the truth of the doctrine in support of which they were wrought. This was, indeed, almost the only theological topic which I had studied with any tolerable attention. He, however, perceived that I began to be alarmed, and kindly said, ‘You need not be uneasy; I only wished to try of what you were capable; and I perceive that Christianity has got an able advocate in you.’ I could not find myself at liberty to suppress this remarkable attestation, which is, I believe, expressed exactly in the words he used; but had he known either my creed, and the state of my heart at that time, or whither my subse-

quent inquiries would ultimately lead me, I am persuaded he would not have spoken as he did."

Mr. Scott, immediately after his ordination, entered on his duties as a curate for Stoke, and for Weston Underwood, in Buckinghamshire. "No sooner," says Mr. Scott, "was I fixed in a curacy, than with close application I sat down to the study of the learned languages, and such other subjects as I considered most needful in order to lay the foundation of my future advancement. I spared no pains, I shunned, as much as I well could, all acquaintance and diversions, and retrenched from my usual hours of sleep, that I might keep more closely to this business."

In a period of nine months he read through the entire works of Josephus in the original Greek. In a letter to one of his sisters, dated September 18, 1773, he remarks, "I have, for some time, pursued my studies with assiduity, but I have only lately got to pursue them with method. I am now about three hours in the day engaged in Hebrew. The books I use are a Hebrew Bible, Grammars, and Lexicons, the noted Septuagint, or Greek translation, and a Commentary. I began at the first chapter of Genesis, and I intend to go through the whole Bible in that manner. You will see the manifold advantages of thus reading the Scriptures. The original text, a Greek translation two thousand years old and above, our translation, and comments, read carefully, and compared together word by word, cannot fail to give a deep insight into the sense of the Scriptures; and at the same time, two languages are unitedly improving. The same I am doing in the Greek and profane history. I am reading

old Herodotus, in the original, in Latin, and in English. For each book read, whether ancient or modern history, I have my maps laid before me, and trace each incident by the map; and in some degree also fix the chronology. So that the languages seem my principal study; history, geography, and chronology, go hand in hand. Neither is logic neglected. I find my taste for study grow every day. I only fear I shall be like the miser, too covetous. In fact I really grudge every hour that I employ otherwise. Others go out by choice, and stay at home by constraint; but I never stay at home by constraint, and go out because it is necessary. In every other expense I am grown a miser; I take every method to save, but here I am prodigal. No cost do I in the least grudge, to procure advantageous methods of pursuing my studies. Of the Hebrew, some twenty weeks ago I knew not a letter; and I have now read through one hundred and nineteen of the Psalms, and twenty-three chapters of Genesis; and commonly now read two chapters in the time above mentioned, tracing every word to its original, unfolding every verbal difficulty."

At the same time the more appropriate duties of his calling were not neglected. He generally wrote two sermons in a week, and in one instance, in the course of three weeks, wrote seven sermons, each thirty-five minutes long.

For a few of the following years, Mr. Scott was employed on subjects of an exclusively religious nature, and deeply affecting his personal feelings and character. At length he became established in the hopes of the gospel of Christ,

and thenceforward his path was illuminated with the light of eternal life. But there was no change in the vigor of his mind, and the unconquerable perseverance of his character. His reading became as various as he had the opportunity of making it. No book that furnished knowledge, which might be turned to account, was uninteresting to him. As an example, he read repeatedly Mr. Henry Thornton's work on Paper Credit, having in some measure been prepared for the subject, by his former study of Locke's Treatises on Money, &c. At a much later period also he felt himself deeply interested in reading the Greek Tragedians, and other classic authors, with his pupils. He earnestly desired to see the branches of literature rendered subservient to religion; and thought that, while too much perhaps, was published directly upon theological subjects, there was a lamentable deficiency of literary works conducted upon sound Christian principles.

The following extract exhibits an interesting trait in his character. "After I had written my sermons for the Sunday, I, for a long time, constantly read them to my wife before they were preached. At her instance, I altered many things, especially in exchanging words, unintelligible to laborers and lace-makers, for simpler language."

Between the year 1807, and 1814, Dr. Scott was the tutor of persons preparing to go out as missionaries, under the Church Missionary Society. The individuals who came under his instruction, were in general German Lutheran clergymen. All of them went forth as mission-

aries in the heathen world ; and most of them are now usefully employed in that character. The progress which they made in their studies was highly creditable ; in some instances, remarkable. " With all my other engagements," says Dr. Scott, " I am actually, in addition to what I before taught the missionaries, reading Susoo and Arabic with them. The former we have mastered without difficulty, so far as the printed books go ; and hope soon to begin translating some chapters into the language. But as to the latter, we make little progress ; yet so far, that I have no doubt of being able to read the Koran with them, should they continue here. It is in itself a most difficult language, but my knowledge of the Hebrew gives me an advantage."

This labor was accomplished when Dr. Scott was more than sixty years old. Perhaps there is hardly on record an instance of more vigorous application to the study of very difficult languages, — the student threescore years old, and suffering severely from chronic complaints. It is one of the proofs (would that they were far more numerous,) of a successful effort to withstand the effects of age. The Hebrew, likewise, which was his auxiliary on this occasion, had been entirely resumed, and almost learned since his fifty-third year.

The history of the life of Dr. Scott teaches us a number of important lessons. It shows us that a resolute heart can vanquish many difficulties. Dr. Scott had a great variety of depressing and adverse circumstances with which to meet. He had strong and ungovernable passions. He was compelled to spend some of the best years of his

life in an employment most uncongenial to mental improvement. He had very little of the ease and leisure, delightful associations and poetry of a shepherd's life. He had the storms, the incessant anxiety, and the exhausting labors of the occupation. He fed his flocks, not among the green hills and valleys, but in low marshy regions, altogether unfriendly to intellectual effort. He had also the disheartening remembrance of an early failure constantly before his mind. Of this failure his own misconduct, too, was a principal cause. His father, with many valuable qualities, was stern and inexorable. His son had commenced an honorable profession, and had been disgraced, and he determined to keep him thenceforward in a condition where neither his good nor bad conduct would be known, where at least the pride of the family would not again be wounded.

Dr. Scott had also a rough and unpolished exterior. He had native vigor of mind, but little that was prepossessing in his first appearance, even after a long and familiar intercourse with enlightened society. But he urged his way over all these difficulties; the number of obstacles only called forth a more determined energy. He set his face forward, and all the appalling forms of discouragement could not divert him. Victory over one enemy gave him additional power to attack another. A servile employment, degraded companions, the pertinacious opposition of a father, the goading recollection of the past, a forbidding personal exterior, severe bodily infirmity, advancing age, the pressure of domestic duties, a miserable stipend for support,—all, all could not dampen that ardor which engrossed and fired his soul.

Another valuable lesson which we are taught by Dr. Scott's history is, that the highest possible motives of action, a regard to the will of our Maker, and the well-being of mankind, are, at least, as operative and influential as any selfish and personal considerations. In the commencement of his intellectual career, Dr. Scott was laboring for himself. Personal aggrandizement was the prize which he set before him, and which fixed his eye, quickened his step, filled his mind. But ere long the current of his desires was changed. The emotions and purposes which had gone abroad only to bring back to himself a fresh harvest of applause and reputation, went outward to the ends of the earth, and upward to the throne of God. Personal ambition gave place to the most expansive benevolence. Instead of living for himself and for his own times, he lived for other and future ages. But this change did not repress the ardor of his soul. It did not freeze up the living current there. He was as avaricious of time, when that time was devoted to the interests of his Redeemer, as when it was employed in gathering tributes of human admiration. He grappled as strongly and as perseveringly with the difficulties of a foreign language, when the hope of heaven and the honor of his Saviour were before his eye, as when splendid church preferment or literary reputation were the idols to which he bowed in worship. This fact is one of great interest. It shows that the highest development of the intellectual powers is in perfect accordance with the most disinterested and godlike benevolence; that human duty and human interest are perfectly coincident.

Dr. Scott furnishes a most remarkable instance of severe mental application till the very close of life. Amidst the pressure of disease and of pain, which were almost unintermitted, his mind maintained a very vigorous and healthy action. At the age of *seventy-two* years, he remarks, "I never studied each day more hours than I now do. Never was a manufactory more full of constant employment than our house; five proof-sheets of my Commentary a week to correct, and as many sheets of copy (quarto) to prepare." For about forty-six years he studied eight, ten, and sometimes fourteen hours a day. After thirty-three years' labor bestowed on his Commentary on the Scriptures, he was as assiduous in correcting and improving it as ever. The marginal references cost him seven years of hard labor. When seventy years old, he engaged in a controversy with a Jew on the fundamental questions in dispute between the Jews and Christians, and produced an original and highly interesting work in defence of the Christian faith. At the age of sixty, a period at which it would generally be thought impracticable to acquire a foreign tongue, Dr. Scott studied Arabic and Susoo, — the latter an African dialect, and both exceedingly difficult languages to be mastered. We rejoice in this instance of a man bearing fruit in old age, triumphing over the pains and weakness of mortality, and retaining full mental power to the last moment of life. It shows what is possible to be done in numerous other cases. Many individuals intend to be useless, intend to gather themselves into a corner in inglorious ease, if God sees fit to spare their life beyond the age of threescore years. Dr. Scott

reasoned and acted differently. His sun was almost as bright at setting as in the morning or at the meridian. It sent forth the same powerful heat and the same mild and steady light.

It is also very gratifying to see that the unconquerable energy and noble aim of this self-taught man were not in vain. All this energy was expended on praiseworthy objects. He labored not for the sake of showing his decision of character, but of doing good with it. If he wasted little intellect by idleness, he wasted as little by misapplication. He brought the whole of his judgment, discrimination, strong sense, fearless piety and unsleeping mental power to the promotion of human happiness. He was certainly one of the most useful men that ever lived.

The sale of his works, of plain didactic theology, during his life time, amounted to two hundred thousand pounds sterling. Probably an equal sum has been expended for these same works since his death. Of his Commentary on the Scriptures, not less than thirty-five thousand copies have been sold in the United States alone, at a sum of at least seven hundred thousand dollars. Two stereotype editions of it have been published. The work is now, at the distance of thirty years from its publication, as popular and acceptable to the religious public as ever. The annual sale is now, in this country, not less than fifteen hundred copies. What an amount of good has been accomplished by a single effort of this entirely self-taught man. At least one hundred thousand families gathering their views of the meaning of the Christian revelation from the comments of a single mind. This already amazing amount of

good is but a tithe of what will yet be seen. Wherever, on all the continents of this earth, the English language shall be spoken and the English Bible shall be found, there the name of THOMAS SCOTT will be hailed as one of the most important benefactors of mankind.

LOTT CARY.

OH, Afric! what has been thy crime!
That thus, like Eden's fratricide,
A mark is set upon thy clime,
And every brother shuns thy side.
Yet are thy wrongs, thou long distressed,
Thy burden, by the world unweighed,
Safe in that UNFORGETFUL BREAST
Where all the wrongs of earth are laid.
The sun upon thy forehead frowned,
But man more cruel far than he,
Dark fetters on thy spirit bound.
Look to the mansions of the free!
Look to that realm where chains unbind,
Where powerless falls the threat'ning rod,
And where the patient sufferers find
A friend, a father, in their God!

Mrs. Sigourney.

SOME events which have recently taken place in this country, have given a fresh interest to the cause of African colonization. In the county of Southampton, Virginia, about sixty white persons fell victims in a negro insurrection, which occurred during the summer of 1831. A very serious alarm has been communicated in consequence, to various portions of the southern country, and many apprehensions have been entertained of the repetition of similar tragedies. A practical, though fearful proof has thus been given to the people of the United States, of the evil of the slave system. The danger has been shown to be real. It

is no fictitious terror which has led the inhabitants of Virginia to consider more maturely and earnestly the plans of the American Colonization Society. Something must be done. An outlet for a part of the colored population must be provided at all hazards. By the recent awful events, the providence of God is speaking to us most distinctly, to weigh well this subject, and to act promptly in regard to it.

It seems to us that the American Colonization Society has now come to a most important period of its history, when a great movement can and ought to be made onward, when, to fulfil the palpable indications of Providence, it should lay aside all hindrances, and proceed to its great work with all the promptitude and wisdom possible. Such a course would furnish the best of all arguments wherewith to meet the numerous opposers of the Society. Plant on the African coast high and broad monuments of the feasibility of colonization; erect along all the shore living confutations of the calumnies and of the grave objections which have been urged against this infant enterprise; show practically that the well-being of the free-colored population of this country is one great object of the scheme, that when the African steps upon the Liberian shore he is elevated in the scale of being and rises into the dignity of true freedom. Write the eulogy of the Society in Africa, on her shores, in her spreading commerce, up her long rivers. When the voice of ignorance or ill-will assails this noble enterprise, let a thousand happy voices come over the Atlantic and deny the charge.

We do not, ourselves, place much confidence in the opposition or the indifference which is mani-

fested towards the Colonization Society. It is not a selfish, cold-hearted policy, designed to remove the colored people against their inclinations and interest. It is an enterprise conceived in the most exalted benevolence and in the most comprehensive regards to the interests of mankind. It is not a plan of the North or the South. It looks to the well-being of *two whole continents*. In lawful and proper ways, it would purify this land from a fearful and blighting curse. It would help to pour the light of eternal life on the whole of forlorn and lost Africa.

Looking at the principal friends of the American Colonization Society, we see no reason to impugn their motives. Were not Harper, and Caldwell, and Fitzhugh, men of sagacious minds, and of most expansive charity? Did not pity, real pity for the woes of the African race, fill the bosom of Mills, and Ashmun, and Sessions, and Randall and Anderson? To call in question the benevolence of such men, does nothing more than to bring into doubt that of the objector. Examine the public documents, try the public measures of the Society with the most rigid scrutiny, and they will not be found wanting. Equally without foundation, is the objection urged against the unhealthiness of the African climate. Not one half the mortality has been experienced at Liberia which ravaged and almost desolated the early colonies of Virginia, New Plymouth and Massachusetts. Let the forests be levelled, and pure air circulate, let all the marshes and stagnant waters be drained, let all the colonists avoid unnecessary exposure and fatigue, and let them utterly abandon all use of ardent spirits and other stimulants, and we

should hear little more of the mortality of Liberia. Temperate men can live, and do live, at Havana, Batavia, at Calcutta, and at any other alleged unhealthy spot on the globe. Those places are the graves of Europeans, because a miserable police and intemperance have made them to be so. To these causes we unhesitatingly ascribe the greater part of the mortality which has prevailed at Liberia. Remove the cause and the effect will cease.

The plan of colonizing the colored people is not a chimerical one. There are abundant means for this purpose. An appropriation of *one million* of dollars annually to this purpose, would transport such a number as would speedily accomplish the great work. This country has several hundred millions of acres of land at her disposal. How perfectly within the compass of her ability to assist in the deliverance and return of the African race! The right, constitutionally, to render this assistance will hardly be denied, after the *Indian* precedent which has been given, after the liberal and lavish offers which have been made, to induce the aboriginal inhabitants of this country to remove to an El Dorado in the wilderness.

The great, the fundamental difficulty, want of intellectual and moral preparation in the colored people, is not an insuperable one. There has been, indeed, a long process of degradation. Servile habits have been worn into the soul. The intellect of the Africans has been muffled and *bandaged* by law. Still they have minds. The spark of immortal life has been kindled in them by their beneficent Creator. They have the im-

material, responsible, expansive, ever-aspiring principle. Remove the pressure of adverse circumstances, lay before them the proper motives, and they will spring into the path which leads to honor, and knowledge, and glory. The Creator has not doomed one portion of his intellectual offspring to everlasting seclusion from improvement. He has not buried them in one vast grave, where the light of truth and joy and immortal hope will never reach them. Africa has had an Hanno, an Hannibal, a Juba, a Cyprian, an Augustine. Did not Africaner, who has been termed the South African Bonaparte, exhibit noble traits of character? Has not slavery itself furnished specimens of genius which would have done honor to the native hills and pure air of freedom? Who has not heard of the generous and affectionate strains of the self-taught Phillis Wheatley; of the noble spirit of Citizen Granville of Hayti, and of the magnanimity of Prince Abdul Rahahhman?

In the year 1739, and for several years afterwards, Benjamin Banneker, a colored man of Maryland, furnished the public with an almanac, which was extensively circulated through the Southern States. He was a self-taught astronomer, and his calculations were so thorough and exact, as to excite the approbation and patronage of such men as Pitt, Fox, Wilberforce, and other eminent men, by whom the work was produced in the British House of Commons, as an argument in favor of the mental cultivation of colored people, and of their liberation from their wretched thralldom.

Another interesting instance of self-taught Afri-

can genius, was LOTT CARY. He was born a slave, in Charles City County, about thirty miles below Richmond, Virginia, on the estate of Mr. William A. Christian. His father was a pious and much respected member of the Baptist church, and his mother, though she made no public profession of religion, died, giving evidence that she relied for salvation upon the merits of the Son of God. He was their only child, and though he had no early instruction from books, the admonitions and prayers of illiterate parents may have laid the foundations of his future usefulness. In 1804, he was sent to Richmond, and hired out by the year, as a common laborer, at the Shockoe warehouse. A strong desire to be able to read, was excited in his mind, by a sermon which he heard, and which related to our Lord's interview with Nicodemus; and having obtained a Testament, he commenced learning his letters, by trying to read the chapter in which this interview is recorded. He was occasionally instructed by young gentlemen at the warehouse, though he never attended a regular school. In a little time he was able to read, and also to write so as to make *dray* tickets, and superintend the shipping of tobacco. Shortly after the death of his first wife, in 1813, he ransomed himself and two children for \$850, a sum which he had obtained by his singular ability and fidelity in managing the concerns of the tobacco warehouse. Of the real value of his services there, it has been remarked, "no one but a dealer in tobacco can form an idea." Notwithstanding the hundreds of hogsheads, which were committed to his charge, he could produce any one the moment it was called for; and the shipments were made

with a promptness and correctness, such as no person, white or colored, has equalled in the same situation. The last year in which he remained in the warehouse his salary was \$800. For his ability in his work he was highly esteemed and frequently rewarded by the merchant with a five dollar bank note. He was also allowed to sell, for his own benefit, many small parcels of damaged tobacco. It was by saving the little sums obtained in this way, with the aid of subscriptions by the merchants to whose interests he had been attentive, that he was enabled to purchase the freedom of his family. When the colonists were fitted out for Africa, he was enabled to bear a considerable part of his own expenses. He also purchased a house and some land in Richmond. It is said that while employed at the warehouse, he often devoted his leisure time to reading, and that a gentleman, on one occasion, taking up a book which he had left for a few moments, found it to be "Smith's Wealth of Nations." He remained, for some years after his removal to Richmond, entirely regardless of religion, and much addicted to profane and vicious habits. But God was pleased to convince him of the guilt and misery of a sinful state, and in 1807, he publicly professed his faith in the Saviour, and became a member of the Baptist church. Soon after this period, he commenced the practice of conducting the services at religious meetings. Though he had scarcely any knowledge of books, and but little acquaintance with mankind, he would frequently exhibit a boldness of thought, and a strength of intellect which no acquirement could have ever given him. A distinguished minister

of the Presbyterian church made the following remark. "A sermon, which I heard from Mr. Cary, shortly before he sailed for Africa, was the best extemporaneous sermon which I ever heard. It contained very original and impressive thoughts, some of which are distinct in my memory, and never can be forgotten." The following sentences form the closing part of an extemporaneous address which he uttered on the eve of his departure. "I am about to leave you; and expect to see your faces no more. I long to preach to the poor Africans the way of life and salvation. I do not know what may befall me, or whether I may find a grave in the ocean, or among the savage men, or more savage wild beasts on the coast of Africa; nor am I anxious what may become of me. I feel it my duty to go; and I very much fear that many of those who preach the gospel in this country, will blush when the Saviour calls them to give an account of their labors in his cause, and tells them, 'I commanded you to go into all the world, and preach the gospel to every creature,' and with the most forcible emphasis he exclaimed, 'the Saviour may ask, 'Where have you been? What have you been doing? Have you endeavored to the utmost of your ability to fulfil the commands I gave you; or have you sought your own gratification and your own ease, regardless of my commands?'"

As early as the year 1815, he began to feel special interest in the cause of the African missions, and contributed, probably, more than any other person, in giving origin and character to the African Missionary Society, established during that year in Richmond, and which has, for thirteen

years, collected for the cause of missions in Africa, from one hundred to one hundred and fifty dollars. His benevolence was practical, and whenever and wherever good objects were to be effected, he was ready to lend his aid.

Mr. Cary was among the earliest emigrants to Africa. Here he saw before him a wide and interesting field, demanding various and powerful talents, and the most devoted piety. His intellectual ability, firmness of purpose, unbending integrity, correct judgment, and disinterested benevolence, soon placed him in a conspicuous station, and gave him wide and commanding influence. Though naturally diffident and retiring, his worth was too evident, to allow of his remaining in obscurity. It is well known, that great difficulties were encountered in founding a settlement at Cape Montserado. So appalling were the circumstances of the first settlers, that soon after they had taken possession, it was proposed that they should remove to Sierra Leone. The resolution of Mr. Cary to remain, was not to be shaken, and his decision had no small effect towards inducing others to imitate his example. In the event, they suffered severely. More than eight hundred natives attacked them in November, 1822, but were repulsed; and a few weeks after, a body of fifteen hundred attacked them again at day-break; several of the colonists were killed and wounded; but with only thirty-seven effective men and boys, and the aid of their six pounder, they again achieved a victory over the natives. In these scenes Mr. Cary necessarily bore a conspicuous part. In one of his letters he remarks, that like the Jews in rebuilding their city, they had to toil

with their arms beside them, and rest upon their arms every night; but he declared after this, in the most emphatic terms, that "there never had been an hour or a minute, no, not even when the balls were flying around his head, when he could wish himself back to America again."

The peculiar exposure of the early emigrants, the scantiness of their supplies, and the want of adequate medical attentions, subjected them to severe and complicated sufferings. To relieve, if possible, these sufferings, Mr. Cary obtained all the information in his power, concerning the diseases of the climate, and the proper remedies. He made liberal sacrifices of his property, in behalf of the poor and distressed; and devoted his time almost exclusively to the relief of the destitute, the sick, and the afflicted. His services as physician to the colony were invaluable, and were, for a long time, rendered without hope of reward. But amid his multiplied cares and efforts for the colony, he never forgot or neglected to promote the objects of the African Missionary Society, to which he had long cherished and evinced the strongest attachment. Most earnestly did he seek access to the native tribes, and endeavor to instruct them in the doctrines and duties of that religion, which had proved so powerful and precious in his own case. Many of his last and most anxious thoughts were directed to the establishment of native schools in the interior. One such school, distant seventy miles from Monrovia, and of great promise, was established through his agency, about a year before his death, and patronized and superintended by him till that mournful event.

In September, 1826, Mr. Cary was elected

Vice Agent of the Colony, and discharged the duties of that important office till his death. In his good sense, moral worth, decision, and public spirit, Mr. Ashmun, the Agent, had the most entire confidence. Hence, when compelled to leave the colony, he committed the administration of affairs into the hands of the Vice Agent, in the full belief that no interest would be betrayed, and no duty neglected. The conduct of Mr. Cary, while for six months he stood at the head of the colony, added to his previously high reputation.

On the evening of the 8th of November, 1828, while Mr. Cary, and several others, were engaged in making cartridges in the old agency house at Monrovia, in preparation to defend the rights of the colony against a slave-trader, a candle appears to have been accidentally overturned, which caught some loose powder, and almost instantaneously reached the entire ammunition, producing an explosion, which resulted in the death of eight persons. Mr. Cary survived for two days.

“The features and complexion of Mr. Cary’s character were altogether African. He was diffident, and showed no disposition to push himself into notice. His words were simple, few, direct, and appropriate. His conversation indicated rapidity and clearness of thought, and an ability to comprehend the great principles of religion and government.

“To found a Christian colony, which might prove a blessed asylum to his degraded brethren in America, and enlighten and regenerate Africa, was an object with which no temporal good, not even life could be compared. The strongest sympathies of his nature were excited in behalf of

his unfortunate people, and the divine promise cheered and encouraged him in his labors for their improvement and salvation. His record is on high. His memorial shall never perish. It shall stand in clearer light, when every chain is broken, and Christianity shall have assumed her sway over the millions of Africa."

JOHN OPIE.

JOHN OPIE was born in the parish of St. Agnes, about seven miles from Truro, in the county of Cornwall, England, in 1761. His father and grandfather were carpenters. John appears to have been regarded among his rustic companions as a kind of parochial wonder, from his early years. At the age of twelve, he had mastered Euclid, and was considered so skilful in arithmetic and penmanship, that he commenced an evening school for the instruction of the peasants of the parish of St. Agnes. His father, a plain mechanic, seems to have misunderstood all these indications of mental superiority, and wished him to leave the pen for the plane and saw; and it would appear that his paternal desires were for some time obeyed, for John at least accompanied his father to his work; but this was when he was very young, and it seems probable that he disliked the business, since his father had to chastise him for making ludicrous drawings, with red chalk, on the *deals* which were planed for use.

His love of art came upon him early. When he was ten years old, he saw Mark Oates, an elder companion, and afterwards captain of marines, draw a butterfly; he looked anxiously on, and exclaimed, "I think I can draw a butterfly; as well as Mark Oates;" he took a pencil, tried, succeeded, and ran breathless home to tell his

mother what he had done. Soon afterward he saw a picture of a farmyard in a house in Truro, where his father was at work; he looked and looked — went away — returned again and looked — and seemed unwilling to be out of sight of this prodigy. For this forwardness, his father gave him a sharp chastisement — but the lady of the house interposed, and gave the boy another sight of the picture. On returning home, he procured cloth and colors, and made a copy of the painting, from memory alone. He likewise attempted original delineation from life; and, by degrees, hung the humble dwelling round with likenesses of his relatives and companions, much to the pleasure of his uncle, a man with sense and knowledge above his condition, but greatly to the vexation of his father, who could not comprehend the merit of such an idle trade.

He was employed for some time, in the family of Dr. Wolcot, the satirist, as a menial servant. How long he remained in that employment is not known. He commenced portrait painting, by profession, very early in life. He used to wander from town to town in quest of employment. "One of these expeditions," says his biographer, "was to Padstow, whither he set forward, dressed as usual in a boy's plain short jacket, and carrying with him all proper apparatus for portrait painting. Here, among others, he painted the whole household of the ancient and respectable family of Prideaux, even to the dogs and cats of the family. He remained so long absent from home, that some uneasiness began to arise on his account, but it was dissipated by his returning, dressed in a handsome coat, with very long skirts,

laced ruffles, and silk stockings. On seeing his mother he ran to her, and taking out of his pocket twenty guineas which he had earned by his pencil, he desired her to keep them, adding that in future he should maintain himself."

For his mother he always entertained the deepest affection, and neither age nor the pressure of worldly business diminished his enthusiasm in the least. He loved to speak of the mildness of her nature and the tenderness of her heart, of her love of truth and her maternal circumspection. He delighted to recall her epithets of fondness, and relate how she watched over him when a boy, and warmed his gloves and great coat in the winter mornings, on his departure for school. This good woman lived to the age of ninety-two, enjoyed the fame of her son, and was gladdened with his bounty.

Of those early efforts, good judges have spoken with much approbation; they were deficient in grace, but true to nature, and remarkable for their fidelity of resemblance. He painted with small pencils, and finished more highly than when his hand had attained more mastery. His usual price, when he was sixteen years of age, was seven shillings and sixpence for a portrait. But of all the works, which he painted in those probationary days, that which won the admiration of the good people of Truro most, was a parrot walking down his perch; all the living parrots that saw it, acknowledged the resemblance. So much was he charmed with the pursuit and his prospects, that when Wolcot asked him how he liked painting? "Better," he answered, "than bread and meat."

In the twentieth year of his age he went to London, and under the patronage of Wolcot, at first excited great attention. Of his success, Northcote gives the following account. "The novelty and originality of manner in his pictures, added to his great abilities, drew an universal attention from the connoisseurs, and he was immediately surrounded and employed by all the principal nobility of England. When he ceased, and that was soon, to be a novelty, the capricious public left him in disgust. They now looked out for his defects alone, and he became, in his turn, totally neglected and forgotten; and, instead of being the sole object of public attention, and having the street where he lived so crowded with coaches of the nobility as to become a real nuisance to the neighborhood, 'so,' as he jestingly observed to me, 'that he thought he must place cannon at the door to keep the multitude off from it,' he now found himself as entirely deserted as if his house had been infected with the plague. Such is the world!" His popularity, however, continued rather longer than this description would seem to imply. When the wonder of the town began to abate, the country came gaping in; and ere he had wearied both, he had augmented the original thirty guineas with which he commenced the adventure, to a very comfortable sum; had furnished a house in Orange Court, Leicester Fields. The first use which he made of his success, was to spread comfort around his mother; and then he proceeded with his works and studies like one resolved to deserve the distinction which he had obtained. His own strong natural sense, and powers of observation, enabled

him to lift the veil which the ignorant admiration of the multitude had thrown over his defects : he saw where he was weak, and labored most diligently to improve himself. His progress was great, and visible to all, save the leaders of taste and fashion. When his works were crude and unstudied, their applause was deafening : when they were such as really merited a place in public galleries, the world, resolved not to be infatuated twice with the same object, paid them a cold, or at least, a very moderate attention. "Reynolds," it has been remarked, "is the only eminent painter who has been able to charm back the public to himself after they were tired of him." The somewhat rough and unaccommodating manners of Opie were in his way ; it requires delicate feet to tread the path of portraiture ; and we must remember that he was a peasant, unacquainted with the elegance of learning, and unpolished by intercourse with the courtesies and amenities of polite life. He was thrown into the drawing-room, rough and rude as he came from the hills of Cornwall, and had to acquit himself as well as he could.

He divided his time between his profession and the cultivation of his mind. He was conscious of his defective education ; and, like Reynolds, desired to repair it by mingling in the company of men of learning and talent, and by the careful perusal of the noblest writers. "Such were the powers of his memory that he remembered all he had read. Milton, Shakespeare, Dryden, Pope, Gray, Cowper, Butler, Burke, and Dr. Johnson, he might, to use a familiar expression, be said to know by heart." A man of powerful under-

standing and ready apprehension, "who remembered all he read," and who had nine of the greatest and most voluminous of our authors by heart, could never be at any loss in company, if he had tolerable skill in using his stores. To his intellectual vigor we have strong testimony. "Mr. Opie," said Horne Tooke, "crowds more wisdom into a few words than almost any man I ever knew; he speaks as it were in axioms, and what he observes is worthy to be remembered." "Had Mr. Opie turned his powers of mind," says Sir James Mackintosh, "to the study of philosophy, he would have been one of the first philosophers of the age. I was never more struck than with his original manner of thinking and expressing himself in conversation; and had he written on the subject, he would, perhaps, have thrown more light on the philosophy of his art than any man living."

The chief excellence of Opie lies in portrait painting. He has great vigor, breadth, and natural force of character. His portrait of Charles Fox has been justly commended, nor does the circumstance of his having completed the likeness from the bust by Nollekens, as related by Smith, diminish his merit. When Fox, who sat opposite to Opie at the academy dinner, given in the exhibition-room, heard the general applause which his portrait obtained, he remembered that he had given him less of his time than the painter had requested, and said across the table, "There, Mr. Opie, you see I was right; everybody thinks it could not be better. Now, if I had minded you, and consented to sit again, you most probably would have spoiled the picture."

“He painted what he saw,” says West, “in the most masterly manner, and he varied little from it. He saw nature in one point more distinctly and forcibly than any painter who ever lived. The truth of color, as conveyed to the eye through the atmosphere, by which the distance of every object is ascertained, was never better expressed than by him. He distinctly represented local color in all its various tones and proportions, whether in light or in shadow, with a perfect uniformity of imitation. Other painters frequently made two separate colors of objects in light and in shade, — Opie never. With him no color, whether white, black, primary or compound, ever, in any situation, lost its respective hue.”

His works were not the offspring of random fits of labor after long indulgence in idleness, they were the fruit of daily toil, in which every hour had its allotted task. “He was always in his painting-room,” says his wife, Amelia Opie, “by half past eight o’clock, in winter, and by eight, in summer; and there he generally remained closely engaged in painting, till half past four, in winter, and till five, in summer. Nor did he allow himself to be idle when he had no pictures bespoken, and as he never let his execution rust for want of practice, he, in that case, either sketched out designs for historical or fancy pictures, or endeavored, by working on an unfinished picture of me, to improve himself by incessant practice in that difficult branch of art, female portraiture. Neither did he suffer his exertions to be paralyzed by neglect the most unexpected and disappointment the most undeserved.”

“During the nine years that I was his wife,”

says Mrs. Opie, "I never saw him satisfied with any one of his productions; and often, very often, have I seen him enter my sitting-room, and, in an agony of despondence, throw himself on the sofa, and exclaim: 'I am the most stupid of created beings, and I never, never shall be a painter as long as I live.' He used to study at Somerset House, where the pictures were hung up, with more persevering attention and thirst for improvement than was ever exhibited, perhaps, by the lowest student in the schools, and on his return, I never heard him expatiate on his own excellences, but sorrowfully dwell on his own defects."

When Henry Fuseli was made keeper of the Royal Academy, Opie was elected to the professorship of painting. He gave four lectures, which contain many discriminating remarks and valuable thoughts, though they are deficient in deep discernment, and an original grasp of mind. The following passage embodies important hints, not only for young artists, but for every young man who is aspiring to usefulness in any situation of life.

"Impressed as I am at the present moment, with a full conviction of the difficulties attendant on the practice of painting, I cannot but feel it also my duty to caution every one who hears me, against entering into it from improper motives and with inadequate views of the subject; as they will thereby only run a risk of entailing misery and disgrace on themselves and their connections during the rest of their lives. Should any student therefore happen to be present who has taken up the art, on the supposition of finding it an easy and amusing employment—any one who has

been sent into the academy by his friends, with the idea that he may cheaply acquire an honorable and profitable profession — any one who has mistaken a petty kind of imitative monkey talent for genius — any one who hopes by it to get rid of what he thinks a more vulgar or disagreeable situation, to escape confinement at the counter or desk — any one urged merely by vanity or interest, or, in short, impelled by any consideration but a real and unconquerable passion for excellence — let him drop it at once, and avoid these walls and every thing connected with them as he would the pestilence; for if he have not this unquestionable liking, in addition to all the requisites above enumerated, he may pine in indigence, or pass through life as a hackney likeness-taker, a copier, a drawing-master or pattern-drawer to young ladies, or he may turn picture-cleaner, and help time to destroy excellences which he cannot rival, but he must never hope to be in the proper sense of the word, a painter.

“ He who wishes to be a painter, must overlook no kind of knowledge. He must range deserts and mountains for images, picture upon his mind every tree of the forest and flower of the valley, observe the crags of the rock and the pinnacles of the palace, follow the windings of the rivulet, and watch the changes of the clouds; in short, all nature, savage or civilized, animate or inanimate, the plants of the garden, the animals of the wood, the minerals of the mountains, and the motions of the sky, must undergo his examination. Whatever is great, whatever is beautiful, whatever is interesting, and whatever is dreadful, must be familiar to his imagination, and concur to store his mind

with an inexhaustible variety of ideas ready for association on every possible occasion, to embellish sentiment and to give effect to truth. It is moreover absolutely necessary that then the epitome of all — his principal subject and his judge — should become a particular object of his investigation; he must be acquainted with all that is characteristic and beautiful, both in regard to his mental and bodily endowments; must study their analogies, and learn how far moral and physical excellence are connected and dependent one on the other. He must farther observe the power of the passions in all their combinations, and trace their changes, as modified by constitution or by the accidental influences of climate or custom, from the sprightliness of infancy to the despondency of decrepitude; he must be familiar with all the modes of life; and, above all, endeavor to discriminate the essential from the accidental, to divest himself of the prejudices of his own age and country, and, disregarding temporary fashions and local taste, learn to see nature and beauty in the abstract, and rise to general and transcendental truth, which will always be the same." These are noble sentences, and worthy of the regard of those who *paint the mind*, who are employed in intellectual portraiture, and whose work is to survive all material fabrics.

Mr. Opie died on the ninth day of April, 1807. During his sickness he imagined himself to be occupied in his favorite pursuit, and continued painting, in idea, till death interposed. He was interred in St. Paul's cathedral, near Sir Joshua Reynolds.

"In person," says Allan Cunningham, from whom we have compiled the preceding biography,

“Opie looked like an inspired peasant. Even in his more courtly days there was a country air about him, and he was abrupt in his language and careless in his dress, without being conscious of either. His looks savored of melancholy; some have said of moroseness. The portrait which he has left of himself shows a noble forehead and an intellectual eye. There are few who cannot feel his talents, and all must admire his fortitude. He came coarse and uneducated from the country into the polished circles of London, was caressed, invited, praised and patronized for one little year or so, and then the giddy tide of fashion receded; but he was not left a wreck; he had that strength of mind which triumphs over despair. He estimated the patronage of fickle ignorance at what it was worth, and lived to invest his name with a brighter, as well as a steadier, halo than that of fashionable wonders.

NATHANIEL SMITH. ·

NATHANIEL SMITH was born at Woodbury, in the State of Connecticut, January 6, 1762. He was destitute of the means of an early education, and, while yet a youth, was actively and successfully engaged in pursuits in which he discovered such discretion and strength of intellect as promised future eminence. An incident, of no great importance in itself, induced him to enter upon the study of the profession of law. Having engaged in this pursuit, he persevered in it with surprising constancy of purpose, unappalled by difficulties, which ordinary minds would have deemed entirely insurmountable. He studied under the direction of the celebrated judge Tapping Reeve, of Litchfield, founder of the law-school in that place, and the sound and enlightened guide of many young men who have become eminent in their profession. Probably no individual who has lived in this country has done so much as judge Reeve, in implanting in the breasts of lawyers the great principles of morality and religion.

Mr. Smith entered the office of judge Reeve about the close of the war of the Revolution, and such was his progress as to afford proof of the soundness of his judgment in the choice of his profession. In 1787, he was admitted to the bar, and his first efforts showed a mind of a superior order. Though surrounded by powerful competitors, he soon rose to distinction, and was pronounced an able advocate.

In 1795, Yale college bestowed on him the honorary degree of Master of Arts, and in the same year he was chosen Representative in the Congress of the United States, where he continued four years. On his declining a third election to Congress, he was chosen a member of the upper house (Senate,) of his native State, in which office he was continued by annual election for several years. In these various stations he acquired great respect for his manly eloquence, his firmness, his political integrity, and his comprehensive views. In October, 1806, he was appointed a judge of the supreme court. This office he accepted at a great pecuniary sacrifice, as thereby he relinquished his lucrative and extensive professional employments. He remained in this important office until May, 1819.

Not having had the advantages of early instruction and discipline, his style and manner of speaking showed nothing of the polished refinement of the scholar, but it manifested that which is of far greater value, a mind thoroughly disciplined, acquainted with the subjects on which it was occupied, and intensely engaged in convincing the understandings of his hearers. In his arguments at the bar, in his speeches before deliberative assemblies, and in his opinions on the bench, he discussed nothing but the merits of the question; and here he always appeared, as in truth he was, an able man. His language was not classical, but appropriate, his eloquence was not ornamented, but powerful; it fixed attention and produced conviction. He never sought to display qualities which he did not possess. He reasoned according to the strict rules of logic, without ever having

studied them — he spoke well, without any theoretical knowledge of the arts of the rhetorician. To a mind naturally strong and thoroughly disciplined he added so much knowledge of the technicalities and forms of the law, as enabled him to discern the nature of the questions submitted to him, and, with the aid of his own resources, to decide correctly in cases of doubt and difficulty. To obstacles which could be overcome he never yielded. The powers of his mind rose with every difficulty which he had to encounter, and he appeared to be the strongest when sustaining the heaviest weight.

Judge Smith was never a skeptic in religion. He always entertained great regard for Christianity. He had, notwithstanding, doubts respecting the reality of that change which is produced in the hearts of men by the influence of the Spirit of God. At length, at the age of forty-six years, in the full possession of his understanding, and at a time when his imagination could not lead him astray, and in the hour of calm and deliberate reflection, he believed that such a change was produced in his own bosom. Under its influence he afterwards lived. His religious impressions were kept entirely concealed, for a time, from his most intimate friends. This proceeded, as is supposed, from an excessive delicacy as well as from a mistaken sense of duty. Placed as he was in a high and responsible office, and fearing that, in his situation, an avowal of his faith in Christ might be attributed to improper motives, he retained his feelings within his own breast. When his situation in relation to the public became such as to prevent any misconstruction of his motives, he

hesitated no longer to profess his belief in religious truth, and his high hopes growing out of it. His trust in the merits and grace of the Redeemer of men cheered and supported him during the remainder of his days.

He died in the calm and blessed expectation of eternal life, at Woodbury, on the ninth of March, 1822, in the sixty-first year of his age.

JOHN GODFREY VON HERDER.

THIS distinguished author was born on the 25th of August, 1744, at Mohrangen, a small town in Eastern Prussia, where his father taught a school for girls. His early education was not favorable to the development of his faculties. His father confined his reading to a very few books, but his love of learning was so strong as to lead him to prosecute his studies in secret. The clergyman of the place employed the boy as a copyist, and soon discovered his talents, and allowed him to participate in the lessons in Latin and Greek, which he gave his own children. At this time young Herder suffered from a serious disease of the eyes, which was the occasion of his becoming better known to a Russian surgeon, who lived in the clergymen's house, and who was struck with the engaging manners, and pleasing appearance of the youth. He offered to take Herder with him to Königsberg and to Petersburg, and to teach him surgery gratuitously. Herder, who had no hopes of being able to follow his inclinations, left his native city in 1762; but, in Königsberg, he fainted at the first dissection at which he was present. He now resolved to study theology. Some gentlemen to whom he became known, and who immediately interested themselves in his favor, procured him an appointment in Frederic's College, where he was at first tutor to some scholars, and, at a later period, instructor

in the first philosophical, and in the second Latin class, which left him time to study. During this period he became known to the celebrated Kant, who permitted him to hear all his lectures gratuitously. He formed a more intimate acquaintance with Hamann. His unrelaxing diligence penetrated the most various branches of science, theology, philosophy, philology, natural and civil history, and politics. In 1764, he was appointed an assistant teacher at the cathedral school of Riga, with which office that of a preacher was connected. His pupils in school, as well as his hearers at church, were enthusiastically attached to him, so much that it was thought necessary to give him a more spacious church. His sermons were distinguished by simplicity, united with a sincere devotion to evangelical truth and original investigation. While on a visit to Strasburg, in 1767, he was invited to become court preacher, superintendent and consistorial counsellor, at Bückeburg, whither he proceeded in 1771. He soon made himself known as a distinguished theologian, and, in 1775, was offered a professorship at Göttingen, which he however, did not accept immediately, because the king had not confirmed his appointment unconditionally; and, contrary to custom, he was expected to undergo a kind of examination. But, being married, Herder did not feel at liberty to decline the appointment. On the very day when he had resolved to go to Göttingen, he received an invitation to become court preacher, general superintendent and consistorial counsellor at Weimar. This appointment was through the influence of Göthe. He arrived at Weimar in October, 1776. It was

at the time when the duke Augustus and the princess Amelia had collected many of the most distinguished German literati at their court. Weimar was greatly benefited by Herder's labors as a pulpit orator, inspector of the schools of the country, the patron of merit and founder of many excellent institutions. In 1801, he was made president of the high consistory, a place never before given to a person not of the nobility. Herder was subsequently made a nobleman by the elector of Bavaria. He says himself that he accepted the rank for the sake of his children. Herder died, on the 18th of December, 1803. Germany is deeply indebted to him for his valuable works in almost every branch of literature, and few authors have had a greater influence upon the public taste in that country. His works were published in forty-five octavo volumes, in 1806. Another edition is now publishing in sixty small volumes. As a theologian, Herder contributed to a better understanding of the historical and antiquarian parts of the Old Testament. "In early years," says Herder, "when the fields of knowledge lay before me, with all the glow of a morning sun, from which the meridian sun of life takes away so much of the charm, the idea often recurred to my mind, whether, like other great subjects of thought, each of which has its philosophy and science, that subject also, which lies nearest to our hearts—the history of mankind, viewed as a whole—might not also have its philosophy and science. Every thing reminded me of this idea; metaphysics and morals, natural philosophy and natural history lastly, and most powerfully, religion." This is the key to Herder's

life. The object of his investigations was to find the point from which he might calmly survey every thing, and see how all things converge. "It is," says Frederic Schlegel, "the very perception and feeling of the poetical, in the character of natural legends, which forms the most distinguishing feature in the genius of Herder. He has an energy of fancy by which he is enabled to transport himself into the spirit and poetry of every age and people. The poetry of the Hebrews was that which most delighted him. He may be called the mythologist of German literature, on account of this gift, this universal feeling of the spirit of antiquity. His power of entering into all the shapes and manifestations of fancy, implies in himself a very high degree of imagination. His mind seems to have been cast in so universal a mould, that he might have attained to equal eminence, either as a poet or philosopher."

Notwithstanding his genius, Herder had great difficulties to surmount; want of early education and encouragement, poverty, and a serious and lasting disease of the eyes. He was a most laborious and indefatigable student. He did not attempt to arrive at truth by metaphysical speculation, but by observation, by the constant study of nature and the mind, in all its works, in the arts, law, language, religion, medicine, poetry, &c.

In 1819, the grand duke of Weimar ordered a tablet of cast iron to be placed on his grave, with the inscription, *Licht, Liebe Leben*. Light, Love, Life.

GIOVANNI BATTISTA BELZONI.

THIS enterprising traveller was born at Padua, Italy, in 1778, where his father was a barber. The family, however, had belonged originally to Rome; and it is related that Belzoni, when only thirteen years of age, betrayed his disposition for travelling, by setting out one day along with his younger brother to make his way to that city, which he had long been haunted with a passionate desire to see, from hearing his parents so often speak of it. The failing strength and courage of his brother, however, forced him to relinquish this expedition, after they had proceeded as far as the Apennines; and he returned to assist his father once more in his shop, as he had already, for some time, been doing. But when he was three years older, nothing could detain him any longer in his native place; and he again took the road to Rome, which he now actually reached. It is said that on his first arrival in this capital, he applied himself to the acquirement of a knowledge of the art of constructing machines for the conveyance and raising of water, with the view probably of obtaining a livelihood by the exhibition of curious or amusing experiments in that department of physics. It is certain, however, that he eventually adopted the profession of a monk. The arrival of Bonaparte in Italy, in 1800, brought him the opportunity, which he embraced, of throwing off his monastic habit; being, by this

time, heartily tired of the idleness and obscurity to which it consigned him. He then pursued, for some time, a wandering life, having, in the first instance, returned to his native town, and then proceeded in quest of employment to Holland, from whence, in about a year afterwards, he came back to Italy. By this time he had attained so uncommon a height, with strength proportioned to it, that he was an object of wonder wherever he was seen. It was probably with the expectation of being able to turn these personal advantages to account, that he determined, in 1803, to go over to England. On arriving there, accordingly, he first attempted to gain a maintenance by walking over the country exhibiting hydraulic experiments, and feats of muscular strength; and accompanied by his wife, an Englishwoman whom he had married soon after his arrival, he visited with this object all the principal towns both of Great Britain and Ireland. He continued for about nine years in England. In 1812, he sailed with his wife for Lisbon. After spending some time in that city, he proceeded to Madrid, where he attracted considerable attention by his performances. From Spain he went to Malta; and here, it is supposed, the idea first suggested itself to him of passing over to Egypt, as others of his countrymen had already done, and offering his services to the Pacha, the active and enterprising Mohammed Ali. Accordingly, carrying with him a recommendation from a Maltese agent of the Pacha's, he proceeded, still accompanied by his wife, to Cairo. On presenting himself to Ali, he was immediately engaged, on the strength of his professed skill in hydraulics, to construct a

machine for watering some pleasure gardens at Soubra, on the Nile. This undertaking, it is said, he accomplished to the Pacha's satisfaction; but an accident having occurred to one of the persons looking on, at the first trial of the machine, the Turkish superstition, under the notion that what had happened was a bad omen, would not suffer the use of it to be continued. Belzoni was once more thrown on his own resources, probably as much at a loss as ever, what course to adopt.

At this time, the late Mr. Salt, the learned orientalist, was English Consul in Egypt, and embracing the opportunity which his situation afforded him, was actively employed in investigating and making collections of the remains of antiquity with which that country abounded. For this purpose he kept several agents in his employment, whose business it was to make researches, in all directions, after interesting objects of this description. To Mr. Salt, Belzoni now offered his services in this capacity, and he was immediately employed by that gentleman, in an affair of considerable difficulty: the removing and transporting to Alexandria of the colossal granite bust of Memnon, which lay buried in the sands near Thebes. The manner in which Belzoni accomplished this, his first enterprise in his new line of pursuit, at once established his character for energy and intelligence. Dressing himself as a Turk, he proceeded to the spot, and there half persuaded and half terrified the peasantry into giving him the requisite assistance in excavating and embarking the statue, till he had at last the satisfaction of seeing it safely deposited in the boat intended for its conveyance down the Nile.

It reached England, and was placed in the British Museum.

Belzoni had now found his proper sphere, and henceforward his whole soul was engaged in the work of exploring the wonderful country in which he was, in search of the monuments of its ancient arts and greatness. In this occupation he was constantly employed, sometimes in the service of Mr. Salt, and sometimes on his own account. The energy and perseverance of character which he exhibited, were truly astonishing. In despite of innumerable obstacles, partly of a physical nature, and partly arising from the opposition of the natives, he at last succeeded in penetrating into the interior of the temple of Ihamboul, in Upper Egypt, which was so enveloped in sand, that only its summit was visible. On returning from this expedition, he next undertook a journey to the Valley of Bebanel Malonk, beyond Thebes, where, from a slight inspection on a former occasion of the rocky sides of the hills, he had been led to suspect that many tombs of the old inhabitants would be found concealed in them. For some time he searched in vain in all directions for any indication of what he had expected to find, till at last his attention was turned to a small fissure in the rock, which presented to his experienced eye something like the traces of human labor. He put forward his hand to examine it, when the stones, on his touching them, tumbled down, and discovered to him the entrance to a long passage, having its sides ornamented with sculpture and paintings. He at once entered the cavern, proceeded forward, and, after overleaping several obstacles, found himself in a sepulchral

chamber, in the centre of which stood an alabaster sarcophagus, covered with sculptures. He afterwards examined this sarcophagus, and with immense labor, took exact copies of the drawings, consisting of nearly a thousand figures, and the hieroglyphic inscriptions, amounting to more than five hundred, which he found on the walls of the tomb. It was from these copies that Belzoni formed the representation or model of this tomb, which he afterwards exhibited in London and Paris.

On returning to Cairo from this great discovery, he immediately engaged in a new investigation, which conducted him to another perhaps still more interesting.

He determined to make an attempt to penetrate into one of the pyramids. At length in the pyramid called Cephrenes, he discovered the entrance to a passage which led him into the centre of the structure. Here he found a sepulchral chamber, with a sarcophagus in the middle of it, containing the bones of a bull — a discovery, which has been considered as proving that these immense edifices were in reality erected by the superstition of the old Egyptians for no other purpose than to serve each as a sepulchre for one of their brute divinities.

Encouraged by the splendid success which attended his efforts, and which had made his name famous in all parts of the literary world, Belzoni engaged in various other enterprises of a similar character. He also made several journeys in the remote parts of Egypt, and into the adjoining regions of Africa. He set sail for Europe in September, 1819. The first place which he visit-

ed was his native city, from which he had been absent nearly twenty years. He presented to the Paduans two lion-headed granite statues, which were placed in a conspicuous situation in the palace of Justice. A medal was at the same time struck in honor of the giver, on which were inscribed his name and a recital of his exploits. From Italy Belzoni hastened to England, where the rumor of his discoveries had already excited a greater interest than in any other country. In 1820, an account of his travels and discoveries appeared in a quarto volume, with another volume of plates, in folio. It soon passed through three editions, while translations of it into French and Italian appeared at Paris and Milan. After this, Belzoni visited successively, France, Russia, Sweden, and Denmark. Returning to England he undertook, under the auspices of government, the perilous attempt of penetrating into central Africa. Proceeding to Tangiers he went from thence to Fez. Unexpected difficulties prevented his advancing in that direction. On this disappointment, he sailed for Madeira, and from thence, in October, 1823, he set out for the mouth of the river Benin, on the western coast of Africa, with the intention of making his way to the interior from that point. A malady, however, attacked him almost as soon as he stepped his foot on shore. He expired at Gato, on the 3d of December, 1823. His remains were interred on the shore, under a plane tree. An inscription in English was afterwards placed over his grave.

WILLIAM CAXTON.

“THE ease which we now find in providing and dispersing what number of copies of books we please by means of the press,” says Dr. Middleton, in his *Free Inquiry*, “makes us apt to imagine, without considering the matter, that the publication of books was the same easy affair in all former times as in the present. But the case was quite different. For, when there were no books in the world but what were written out by hand, with great labor and expense, the method of publishing them was necessarily very slow, and the price very dear; so that the rich and curious only would be disposed or able to purchase them; and to such, also, it was difficult to procure them or to know even where they were to be bought.”

Of the truth of these remarks of Dr. Middleton, a great variety of facts might be brought forward in proof. In 1299, the Bishop of Winchester borrowed a Bible, in two volumes, folio, from a convent in that city, giving a bond, drawn up in the most formal and solemn manner, for its due return. This Bible had been given to the convent by a former Bishop, and, in consideration of this gift and one hundred marks, the monks founded a daily mass for the soul of the donor. In the same century, several Latin Bibles were given to the University of Oxford, on condition that the students who read them should deposit a cautionary pledge. And even after manuscripts were

multiplied, by the invention of linen paper, it was enacted by the statutes of St. Mary's college, at Oxford, in 1446, that "no scholar shall occupy a book in the library above one hour, or two hours at most, lest others should be hindered from the use of the same." Money was often lent on the deposit of a book; and there were public chests in the universities and other seminaries, in which the books so deposited were kept. They were often particularly named and described in wills, generally left to a relative or friend, in fee, and for the term of his life, and afterwards to the library of some religious house. "When a book was bought," observes Mr. Walton, "the affair was of so much importance, that it was customary to assemble persons of consequence and character, and to make a formal record that they were present on the occasion." The same author adds: "Even so late as the year 1471, when Louis XI, of France, borrowed the works of the Arabian physician, Rhasis, from the faculty of medicine, at Paris, he not only deposited, by way of a pledge, a valuable plate, but was obliged to procure a nobleman to join with him as party in a deed, by which he bound himself to return it, under a considerable forfeiture." Long and violent altercations, and even lawsuits, sometimes took place, in consequence of the disputed property of a book.

Books were so scarce in Spain in the tenth century, that several monasteries had among them only one copy of the Bible, one of Jerome's Epistles, and one of several other religious books. There are some curious instances given by Lupus, abbot of Ferrieris, of the extreme scarcity of classical manuscripts in the middle of the ninth

century. He was much devoted to literature, and from his letters appears to have been indefatigable in his endeavors to find out such manuscripts, in order to borrow and copy them. In a letter to the pope, he earnestly requests of him a copy of Quintilian, and of a treatise of Cicero; "for," he adds, "though we have some fragments of them, a complete copy is not to be found in France." In two other of his letters, he requests of a brother abbot the loan of several manuscripts, which he assures him shall be copied and returned as soon as possible, by a faithful messenger. Another time he sent a special messenger to borrow a manuscript, promising that he would take very great care of it, and return it by a safe opportunity, and requesting the person who lent it to him, if he were asked to whom he had lent it, to reply to some near relation of his own, who had been very urgent to borrow it. Another manuscript, which he seems to have prized much, and a loan of which had been so frequently requested, that he thought of *banishing* it somewhere, that it might not be destroyed or lost, he tells a friend he may perhaps lend him when he comes to see him, but that he will not trust it to the messenger who had been sent for it, though a monk, and trust-worthy, because he was travelling on foot.

Respecting the price of manuscript books, we are not in the possession of many facts. Plato paid one hundred minæ, equal to £375, for three small treatises by Philolaus, the Pythagorean. After the death of Speusippus, Plato's disciple, his books, few in number, were purchased by Aristotle, for about £675. It is said, that St. Jerome nearly ruined himself by the purchase of religious

works alone. Persons of moderate fortunes could not afford the means of procuring them, nor the rich even without the sacrifice of some luxuries. The mere money which was paid for them in the dark ages, whenever a person distinguished himself for his love of literature, was seldom the sole or the principal expense. It was often necessary to send to a great distance and to spend much time in finding out where they were. In the ninth century, an English bishop was obliged to make five journeys to Rome, principally in order to purchase books. For one of his books thus procured, king Alfred gave him an estate of eight hides of land, or as much as eight ploughs could till. About the period of the invention of cotton paper, 1174, the homilies of St. Bede and St. Augustine's Psalter were bought by a prior in Winchester, from the monks of Dorchester, in Oxfordshire, for twelve measures of barley and a pall richly emroidered in silver.

Stow informs us, that in 1274, a Bible, in nine volumes, fairly written, with a gloss, or comment, sold for fifty marks, or £33 6s. 8d. About this time the price of wheat averaged 3s. 4d. a quarter, a laborer's wages were one and a half pence a day, a harvest-man's, two pence. On a blank page of Comestor's Scholastic History, deposited in the British museum, it is stated that this manuscript was taken from the king of France, at the battle of Poitiers. It was afterwards purchased by the earl of Salisbury for a hundred marks, or £66 13s. 4d. It was directed, by the last will of his countess, to be sold for forty livres. At this time the king's surgeon's pay was £5. 13s. 4d. per annum, and one shilling a day besides. Master-

carpenters had four pence a day; their servants two pence.

At the beginning of the fourteenth century, some books were bequeathed to Merton college, Oxford, of which the following are the names and valuation. A Scholastic History, twenty shillings; a Concordance, ten shillings; the four greater prophets, with glosses, five shillings; a Psalter, with glosses, ten shillings; St. Austin on Genesis, ten shillings. About the year 1400, a copy of the Roman *de la Rou* was sold before the palace-gate, at Paris, for £33 6s. 6d. The countess of Anjou paid for a copy of the Homilies of Bishop Haiman, two hundred sheep, five quarters of wheat, five quarters of barley, and five quarters of millet. On the conquest of Paris, in 1425, the duke of Bedford sent the royal library to England. It consisted of only eight hundred and fifty-three volumes, but it was valued at more than two thousand two hundred pounds sterling. Further facts of a similar character will be found in the life of the individual to which we now proceed.

WILLIAM CAXTON was born in the weald of Kent, England, about the year 1412. At this period learning of all kinds was in a much more depressed state in England than in most of the continental countries, in consequence, principally, of the civil war in which the nation was embroiled, the habits of restlessness thus produced, and the constant preoccupation of the time and thoughts of men in promoting the cause they espoused, and in protecting their lives and property. Under these circumstances the most plain and common education was often neglected. Caxton's parents, however, performed their duty to him.

“I am bounden,” says he, “to pray for my father and mother, that, in my youth sent me to school, by which, by the sufferance of God, I get my living, I hope, truly.”

When he was about fifteen or sixteen he was put an apprentice to William Large, a mercer of London, and afterwards mayor. The name *merc*er was given at that time to general merchants, trading in all kinds of goods. After he had served his apprenticeship, Caxton took up his freedom in the mercer's company, and became a citizen of London. Some subsequent years he spent in travelling in various countries on the continent of Europe. In 1464, he was appointed ambassador to the court of the duke of Burgundy. During his residence in the Low Countries he acquired or perfected his knowledge of the French language, gained some knowledge of Flemish or Dutch, imbibed a taste for literature and romance, and, at great expense, made himself master of the art of printing.

About 1472, Caxton returned to England, and introduced, in all probability, the art of printing into that country. The common opinion is that the “Game of Chess” was the first book printed by Caxton, though Mr. Dibdin thinks that the “Romance of Jason” was printed before it. Caxton was most indefatigable in cultivating his art. Besides the labor necessarily attached to his press, he translated not fewer than five thousand closely printed folio pages, though well stricken in years. The productions of his press amount to sixty-four. In 1480, he published his Chronicle, and his Description of Britain, which is usually subjoined to it. These were very popular, having been re-

printed four times in *this century* and seven times in the *sixteenth century*.

“After divers works,” says he, “made, translated and achieved, having no work in hand, I, sitting in my study, where, as lay many divers pamphlets and books, it happened that to my hand came a little book in French, which lately was translated out of Latin, by some noble clerk of France, which book is named ‘Æneid,’ as made in Latin by that noble person and great clerk, Virgil, which book I saw over, and read therein. (He then describes the contents.) In which book I had great pleasure, by cause of the fair and honest terms and words in French, which I never saw tofore like, ne none so pleasant, ne so well ordered; which book, as me seemed, should be much requisite to noble men to see, as well for the eloquence as histories. And when I had advised me in this said book, I deliberated, and concluded to translate it into English; and forthwith took a pen and ink and wrote a leaf or twain, which I oversaw again, to correct it; and when I saw the fair and strange terms therein, I doubted that it should not please some gentlemen which late blamed me, saying that in my former translations I had over curious terms, which could not be understood of common people; and desired me to use old and homely terms in my translations; and fain would I satisfy every man, and so to do, took an old book and read therein; and certainly the English was so rude and broad, that I could not well understand it; and also, my lord abbot of Westminster, did do show to me late certain evidences, written in old English, for to reduce it into our English now used; and certainly it was

written in such wise, that was more like to Dutch than to English. I could not reduce, nor bring it to be understanden. Certainly the language now used varieth far from that which was used and spoken when I was born; for we, Englishmen, been born under the domination of the moon, which is never at rest, but ever wavering. The most quantity of the people understand not Latin nor French in this realm of England."

Caxton seems to have been much puzzled and perplexed about the language he should use in his traslations; for, while some advised him to use old and homely terms, others, "honest and great clerks," he adds, "have been with me, and desired me to write the most curious terms that I could find, — and thus, betwixt plain, rude and curious, I stand abashed."

Among the books which Caxton published were two editions of Chaucer's Tales. He seems to have had a veneration for the memory of this poet, and to have formed, with sound judgment and good taste, a most correct and precise estimate of the peculiar merits of his poetry. As a proof of the former, we may mention, that Caxton, at his own expense, procured a long epitaph to be written in honor of Chaucer, which was hung on a pillar near the poet's grave in Westminster Abbey. The following remarks of Caxton show that he was able thoroughly to relish the merits and beauties of Chaucer's poetry. "We ought to give a singular laud unto that noble and great philosopher, Geoffrey Chaucer, the which, for his ornate writings in our tongue, may well have the name of a laureate poet. For tofore, that he embellished and ornated and made fair our English,

in this realm was made rude speech and incongruous, as yet appeareth by old books, which, at this day ought not to have place, ne be compared unto his beauteous volumes and ornate writings, of whom he made many books and treatises of many a noble history, as well in metre as in rhyme and prose; and then so craftily made, that he comprehended his matters in short, quick and high sentences, eschewing perplexity; casting away the chaff of superfluity, and showing the picked grain of sentence, uttered by crafty and *sugared eloquence*. In all his works he excelled, in mine opinion, all writers in our English, for he writeth no void words, but all his matter is full of high and quick sentence, to whom ought to be given laud and praise for his noble making and writing."

Caxton died in 1490-1, was buried in St. Margaret's, and left some books to that church. "His character," says his biographer, "may be collected from the account we have given of his labors. He was possessed of good sense and sound judgment; steady, persevering, active, zealous and liberal in his services for that important art which he introduced into England; laboring not only as printer, but as translator and editor."

RICHARD BAXTER.

RICHARD BAXTER was born on the 12th of November, 1615, at Rowton, in Shropshire, England. Here he spent, with his grandfather, the first ten years of his life. His father was a freeholder, and possessed of a moderate estate; but having been addicted to gaming in his youth, his property became so deeply involved, that much care and frugality were required to disencumber it at a future period of his life. He became a pious man about the time of the birth of Richard. To him the lad was indebted for his first religious instructions. There must have been in Richard, when a child, some striking indications of religious feeling, for his father remarked to Dr. Bates, that he would even then reprove the improper conduct of other children, to the astonishment of those who heard him. Baxter's early impressions and convictions, though often like the morning cloud and early dew, were never entirely dissipated, but at last fully established themselves in a permanent influence on his character. His early education was very imperfectly conducted. From six to ten years of age, he was under the four successive curates of the parish, two of whom never preached, and the two, who had the most learning of the four, drank themselves to beggary, and then left the place. At the age of ten, he was removed to his father's house, where Sir William Rogers, a blind old man, was parson. One of his curates,

who had succeeded a person who was driven away on being discovered to have officiated under forged orders, was Baxter's principal schoolmaster. This man had been a lawyer's clerk, but hard drinking drove him from that profession, and he turned curate for a piece of bread. He preached only once in Baxter's time, and then was drunk! From such men what instruction could be expected! How wretched must the state of the country have been, when they could be tolerated either as teachers or ministers! His next instructor, who loved him much, he tells us was a grave and eminent man, and expected to be made a bishop. He also, however, disappointed him; for during no less than two years, he never instructed him one hour; but spent his time, for the most part, in talking against the Puritans. In his study, he remembered to have seen no Greek book but the New Testament; the only father was Augustine de Civitate Dei; there were a few common modern English works, and for the most of the year, the priest studied Bishop Andrews' Sermons. Of Mr. John Owen, master of the free school at Wroxeter, he speaks more respectfully. To him he was chiefly indebted for his classical instruction. He seems to have been a respectable man, and under him, Baxter had for his schoolfellows the two sons of Sir Richard Newport, (one of whom became Lord Newport,) and Dr. Richard Allestree, who afterwards was Regius professor of divinity at Oxford, and provost of Eton college. When fitted for the university, his master recommended that, instead of being sent to it, he should be put under the tuition of Mr. Richard Wickstead, chaplain to the coun-

cil at Ludlow, who was allowed by the king to have a single pupil. But he also neglected his trust. The only advantage young Baxter had with him, was the enjoyment of time and books. "Considering the great neglect," says Mr. Orme, his biographer, "of suitable and regular instruction, which Baxter experienced in his youth, it is wonderful that he ever rose to eminence. Such disadvantages are very rarely altogether conquered. But the strength of his genius, the ardor of his mind, and the power of his religious principles, compensated for minor defects, subdued every difficulty, and bore down, with irresistible energy, every obstacle that had been placed in his way."

During his short residence at Ludlow castle, Baxter made a narrow escape from acquiring a taste for gaming, of which he gives a curious account. The best gamester in the house undertook to teach him to play. The first or second game was so nearly lost by Baxter, that his opponent betted a hundred to one against him, laying down ten shillings to his sixpence. He told him there was no possibility of his winning, but by getting one cast of the dice very often. No sooner was the money down, than Baxter had every cast which he wished; so that before a person could go three or four times round the room, the game was won. This so astonished him that he believed the devil had the command of the dice, and did it to entice him to play; in consequence of which he returned the ten shillings, and resolved never to play more. Whatever may be thought of the fact, or of Baxter's reasoning on it, the result to him was important and beneficial.

On returning from Ludlow castle to his father's

house, he found his old schoolmaster, Owen, dying of a consumption. At the request of Lord Newport, he took charge of the school till it should appear whether the master would die or recover. In about a quarter of a year, his death relieved Baxter from this office, and as he had determined to enter the ministry, he placed himself under Mr. Francis Garbet, then minister of Wroxeter, for further instruction in theology. With him he read logic about a month, but was seriously and long interrupted, by symptoms of that complaint which attended him to his grave. He was attacked by a violent cough, with spitting of blood, and other indications of consumption. The broken state of his health, the irregularity of his teacher, and his want of an university education, materially injured his learning and occasioned lasting regrets. He never acquired any great knowledge of the learned languages. Of Hebrew he scarcely knew anything; his acquaintance with Greek was not profound; and even in Latin, as his works show, he must be regarded by a scholar as little better than a barbarian. Of mathematics he knew nothing, and never had a taste for them. Of logic and metaphysics he was a devoted admirer, and to them he dedicated his labor and delight. Definitions and distinctions were in a manner his occupation; the *quod sit*, the *quid sit*, and *quotuplex* — *modes*, *consequences*, and *adjuncts*, were his vocabulary. He never thought he understood anything till he could anatomize it, and see the parts distinctly; and certainly very few have handled the knife more dexterously, or to so great an extent. His love of the niceties of metaphysical disquisition plunged him very early

into the study of controversial divinity. The schoolmen were the objects of his admiration. Aquinas, Scotus, Durandus, Ockham, and their disciples, were the teachers from whom he acquired no small portion of that acuteness for which he became so distinguished as a disputer, and of that logomachy by which most of his writings are deformed.

“Early education,” says Mr. Orme, “exerts a prodigious power over the future pursuits and habits of the individual. Its imperfections or peculiarities will generally appear, if he attempt to make any figure in the literary or scientific world. The advantages of a university or academical education will never be despised, except by him who never enjoyed them, or who affects to be superior to their necessity. It cannot be denied, however, that some of our eminent men, in all departments and professions, never enjoyed these early advantages.”

Among these was Richard Baxter. In answer to a letter of Anthony Wood, inquiring whether he was an Oxonian, he replied with dignified simplicity: “As to myself, my faults are no disgrace to any university, for I was of none; I have little but what I had out of books, and inconsiderable helps of country tutors. Weakness and pain helped me to study how to die: that set me on studying how to live; and that on studying the doctrine from which I must fetch my motives and comforts. Beginning with necessities, I proceeded by degrees, and now am going to see that for which I have lived and studied.”

The defects of early education Baxter made up by greater ardor of application and energy of

purpose. He never attained the elegant refinements of classical literature, but in all the substantial attainments of sound learning he excelled most of his contemporaries. The regrets which he felt, at an early period, that his scholarship was not more eminent, he thus expresses :

“Thy methods cross my ways ; my young desire
 To academic glory did aspire.
 Fain I'd have sat in such a nurse's lap,
 Where I might long have had a sluggard's nap ;
 Or have been dandled on her reverend knees,
 And known by honored titles and degrees ;
 And there have spent the flower of my days
 In soaring in the air of human praise.
 Yea, and I thought it needful to *thy* ends,
 To make the prejudiced world my friends ;
 That so *my praise* might go before *thy grace*,
 Preparing men thy messages to embrace ;
 Also my work and office to adorn,
 And to avoid profane contempt and scorn.
 But these were not thy thoughts ; thou didst foresee
 That such a course would not be best for me,
 Thou mad'est me know that man's contempt and scorn,
 Is such a cross as must be daily borne.”

The principal scene of Baxter's pastoral labors was Kidderminster. Here he resided about fourteen years, and his labors were attended with remarkable success. “It was a great advantage to me,” says Baxter, “that my neighbors were of such a trade as allowed them time to read or talk of holy things. For the town liveth upon the weaving of Kidderminster stuffs ; and they stand in their looms, the men can set a book before them, or edify one another ; whereas ploughmen,

and many others are so wearied, or continually employed, either in the labors or the cares of their callings, that it is a great impediment to their salvation. Freeholders and tradesmen are the strength of religion and civility in the land; and gentlemen and beggars, and servile tenants, are the strength of iniquity. Though among these sorts, there are some also that are good and just, as among the other there are many bad. And their constant converse and traffic with London, doth much promote civility and piety among tradesmen.

“Another furtherance of my work, was the books which I wrote and gave away among them. Of some small books I gave each family one, which came to about eight hundred; and of the larger, I gave fewer; and every family that was poor, and had not a Bible, I gave a Bible to. I had found myself the benefit of reading to be so great, that I could not but think it would be profitable to others.

“God made use of my practice of physic among them also as a very great advantage to my ministry; for they that cared not for their souls did love their lives, and care for their bodies; and by this, they were made almost as observant, as a tenant is of his landlord. Sometimes I could see before me in the church, a very considerable part of the congregation, whose lives God had made me a means to save, or to recover their health; and doing it for nothing, so obliged them that they would readily hear me. Another help to my success, was the small relief which my low estate enabled me to afford the poor; though the place was reckoned at near two hundred pounds

per annum, there came but ninety pounds, and sometimes but eighty pounds to me. Beside which, some years I had sixty, or eighty pounds a year of the booksellers for my books; which little dispersed among them, much reconciled them to the doctrine that I taught. I took the aptest of their children from the school, and sent divers of them to the universities; where for eight pounds a year, or ten, at most, by the help of my friends, I maintained them. Some of them are honest, able ministers, now cast out with their brethren; but, two or three having no other way to live, turned great conformists, and are preachers now. In giving the little I had, I did not enquire whether they were good or bad, if they asked relief; for the bad had souls and bodies that needed charity most. And this truth I will speak to the encouragement of the charitable, that what little money I have now by me, I got it almost all, I scarce know how, at that time when I gave most, and since I have had less opportunity of giving, I have had less increase.

“My public preaching met with an attentive, diligent auditory. Having broke over the brunt of the opposition of the rabble before the wars, I found them afterwards tractable and unprejudiced. Before I entered into the ministry, God blessed my private conference to the conversion of some, who remain firm and eminent in holiness to this day; but then, and in the beginning of my ministry, I was wont to number them as jewels; but since then I could not keep any number of them. The congregation was usually full, so that we were fain to build five galleries after my coming thither; the church itself being very capacious,

and the most commodious and convenient that ever I was in. Our private meetings, also, were full. On the Lord's days there was no disorder to be seen in the streets; but you might hear a hundred families singing psalms and repeating sermons as you passed through them. In a word, when I came thither first, there was about one family in a street that worshipped God and called on his name, and when I came away, there were some streets where there was not one poor family in the side that did not so; and that did not, by professing serious godliness, give us hopes of their sincerity. And in those families which were the worst, being inns and ale-houses, usually some persons in each house did seem to be religious. Though our administration of the Lord's supper was so ordered as displeased many, and the far greater part kept away, we had six hundred that were communicants; of whom there were not twelve that I had not good hopes of as to their sincerity."

In accounting for these signal and blessed effects of his ministry, his biographer remarks with great justice, that "Baxter never spoke like a man who was indifferent whether his audience felt what he said, or considered him in earnest on the subject. His eye, his action, his every word, were expressive of deep and impassioned earnestness, that his hearers might be saved. His was eloquence of the highest order; not the eloquence of nicely selected words, — or the felicitous combination of terms and phrases, — or the music of exquisitely balanced periods, (though these properties are frequently to be found in Baxter's discourses,) but the eloquence of the most important truths, vividly

apprehended, and energetically delivered. It was the eloquence of a soul burning with ardent devotion to God, and inspired with the deepest compassion for men, on whom the powers of the worlds of darkness and light, exercised their mighty influence; and spoke through his utterances, all that was tremendous in warning, and all that was delightful in invitation and love. The gaining of souls to Christ was the only object for which he lived. Hence, amidst the seeming variety of his pursuits and engagements, there was a perfect harmony of design. His ruling and controlling principle was the love of his Master, producing the desire of a full and faithful discharge of his duty, as his approved minister. This was the centre around which every thing moved, and by which every thing in his circumstances and character was attracted or repelled. This gave unity to all his plans, and constituted the moral force of all his actions.

Baxter died December 8, 1691. He left the world in joyful assurance of entering into the saint's everlasting rest. During his sickness, when the question was asked, How he did? his reply was, *Almost well.*

In reviewing the life of this extraordinary man, we see what powerful and numerous difficulties a resolute mind can overcome. Baxter, during his whole life, might be almost said to die daily. Hardly ever was such a mind connected with so frail an earthly lodging-place. He was the sport of medical treatment and experiment. At about fourteen years of age he was seized with the small-pox, and soon after, by improper exposure to the cold, he was affected by violent catarrh and cough.

This continued for about two years, and was followed by spitting of blood, and other phtisical symptoms. One physician prescribed one mode of cure, and another a different one; till, from first to last, he had the advice of no less than thirty-six professors of the healing art. He was diseased literally from head to feet; his stomach acidulous, violent rheumatic headaches, prodigious bleeding at the nose, his blood so thin and acrid that it oozed out from the points of his fingers, and often kept them raw and bloody. His physicans called it hypochondria. He himself considered it to be premature old age; so that at twenty he had the symptoms, in addition to disease, of fourscore. He was certainly one of the most diseased and afflicted men that ever reached the ordinary limits of human life. How, under such circumstances, he was capable of making the exertions which he almost incessantly made, appears not a little mysterious.

Baxter lived also in one of the most stormy periods of English history. Men were bound, and in "deaths oft," for conscience sake. For preaching the truth, as they honestly believed it be, no less than two thousand ministers were, on one occasion, ejected from their pulpits. Civil wars raged with fearful violence, and many were the men whose hands were imbrued in fraternal blood. Baxter was in all these tumultuous scenes; now in the army of the Protector, now showing his dexterity in logical warfare before councils and synods, now in prison, and now in his pulpit at Kidderminster. In short, he lived at the time of Selden, and Milton, and Hampden, and Pym, — at the time of the breaking up of the dark ages,

after old systems were overthrown, and when all was in confusion and uncertainty.

Notwithstanding all this, his labors were prodigious. The works of bishop Hall amount to ten volumes, octavo, Lightfoot's extend to thirteen, Jeremy Taylor's to fifteen, Dr. Goodwin's to twenty, Dr. Owen's to twenty-eight; while Richard Baxter's works, if printed in a uniform edition, could not be comprised in less than sixty volumes, making at least thirty-five thousand closely printed octavo pages. At the same time, his labors as a minister, and his engagements in the public business of his times, formed his chief employment for many years, so that he speaks of writing but as a kind of recreation from more severe duties. The subjects on which he wrote embrace the whole range of theology; in all the parts of which he seems to have been nearly equally at home. Doctrinal, practical, casuistical and polemical, all occupied his thoughts and engaged his pen.

“His inquiries ranged, and his writings extended from the profoundest and most abstruse speculation on the divine decrees, the constitution of man, and the origin of evil, to the simplest truths adapted to the infant mind. Baxter appears to have read every thing relating to his own profession, and to have remembered all which he read. The fathers and schoolmen, the doctors and reformers of all ages and countries, seem to have been as familiar to him as his native tongue. He rarely makes a parade of his knowledge, but he never fails to convince you that he was well acquainted with most which had been written on the subjects which he discusses.”

ARTHUR YOUNG.

THIS celebrated agriculturist was a younger son of the Rev. Arthur Young, D. D., prebendary of Canterbury, and was born on the seventeenth of March, 1741, at Bradfield Hall, Suffolk, England. Dr. Young, not being able to provide very liberally for his younger children, designed Arthur for trade, and accordingly apprenticed him to a wine-merchant at Lynn, in Norfolk; but the lad having evinced an early attachment to agricultural pursuits, on his father's death, in 1761, returned home, and managed the farm at Bradfield, for the benefit of his widowed mother and her family. He left his maternal roof in 1767, having during his five years' farming kept a register of his experiments, which formed the basis of his "Course of Experimental Agriculture," published anonymously in 1770, and which was well received by practical farmers, though it was rather too highly colored.

On quitting home, he hired a farm in Essex, but after six months' trial he was obliged to relinquish it for want of funds. He at last fixed himself near North Minns, in Hertfordshire, where he continued for about nine years, repeating his experiments on lands not very favorable to them, and, like many other ingenious speculatists, losing his money nearly as often as he made the attempt. So warmly, however, was he attached to his favorite pursuits, that he determined to promote and recommend them by his pen, and before he

had completed his thirtieth year published several works for the improvement of agriculture, particularly his "Farmer's Letters," "Rural Economy," and "Tours through the Southern, Northern and Eastern parts of England," all of them replete with useful information. During his visit to the north of England, an opportunity was afforded him of rendering essential service to a most extraordinary self-taught agriculturist in humble life, a miner, at Swinton, named James Crofts, who, by the almost incredible devotion of twenty hours a day to hard labor, had, with his own hands, reclaimed ten acres of moor-land, on which he kept three milch cows, an heifer, and a galloway. To encourage such a rare instance of industry and application in the lower orders, Mr. Young set on foot a subscription for the benefit of this humble but most valuable member of society, the produce of which freed him from his subterranean employment, and enabled him to direct his attention exclusively to the improvement of waste lands, an occupation for which he had, under every possible disadvantage, evinced an extraordinary adaptation of untutored genius.

The tour of Mr. Young occupied six months; the information and incidents of which were collected and published in four octavo volumes. He soon after printed an "Essay on Swine," to which the gold medal of the Society for the Encouragement of Arts was awarded. In 1770, he gave to the world a very valuable treatise, called "The Farmer's Guide in hiring and stocking farms," and so indefatigably did he pursue his favorite object, that in the summer of 1770 he made a tour through the eastern counties of England, in con-

tinuance of his plan, imperfectly as he had then formed it, of an agricultural survey of England. The observations made during this journey were published in May, 1771, and it is no small proof of their author's industry, that they were printed as soon as in the course of the year 1770 (half of which, at least, was spent in travelling) and of the spring of 1771. In this short period he must have found time to print and publish his "Farmer's Guide," in two volumes, octavo, his "Eastern Tour," in four, "Rural Economy," in one, a second volume of the "Farmer's Letters," and a "Course of Experimental Agriculture," in two volumes, quarto, besides superintending through the press the second edition of his "Northern Tour," in four volumes, octavo. With so much to do in so short a space of time, what wonder that Mr. Young should not have performed everything which he undertook equally well? He wrote his books too fast, and was too prone to substitute speculations for facts.

After the death of his mother, he entered on the possession of the family estate, which he continued to cultivate during the remainder of his life. In addition to the works which have been named, he wrote a very sensible pamphlet on the expediency of a free exportation of corn, proposals to the Legislature for numbering the people, observations on the present state of the waste lands of the kingdom, an essay on the culture of cole-seed for feeding sheep and cattle, for which the gold medal of the Society for the encouragement of Arts was, for the second time, awarded him, and a political arithmetic. His reputation was soon widely spread abroad. By order of the

empress Catharine, his agricultural tours were translated into the Russian language. At the same time she sent several young Russians to the author to learn the system of English agriculture under his immediate superintendence. Prince Potemkin speedily sent two others, and his example was soon followed by the marquis de Lafayette.

Mr. Young's tour through Ireland, published in 1780, and which contains a mass of valuable facts and observations, is characterized by Maria Edgeworth "as the most faithful portrait of the inhabitants of Ireland, to whom it rendered essential service, by giving to other nations, and more especially to the English, a more correct notion than they had hitherto entertained of their character, customs and manners."

In 1784, this indefatigable writer commenced his "Annals of Agriculture," a periodical publication, continued monthly, until the close of his life, when it amounted to forty-five octavo volumes, forming a rich collection of facts, essays and communications on every question of agriculture and political economy. For a long time, however, this work was more laborious than successful, doing little if anything beyond paying its expenses, and averaging, when the fifteenth volume was completed, a sale of only three hundred and fifty copies of each number. This want of patronage, the disadvantage of a provincial press, misunderstandings with one publisher, the failure of another, £350 in the editor's debt, and a variety of untoward accidents, not unfrequently falling to the lot of authors and editors, considerably damped Mr. Young's expectations from a work to

which he had looked for posthumous reputation. But that reputation was not so long delayed; and with it the sale of his work and consequently its profits gradually increased. For the information contained in this truly valuable miscellany, he had the honor of receiving the approbation and personal thanks of George III. when he one day met Mr. Young on the terrace at Windsor. So deep an interest did the venerable monarch take in the success of a work, of whose merit no one was more competent to judge, that he shortly after sent its editor some communications in the form of letters, which were inserted in the annals under the signature of Ralph Robinson.

In 1787, 1788, and 1789, Mr. Young performed three tours in France, and published the result of his observations in two quarto volumes, which were favorably received. As a proof of his energy, it is stated that he performed his second journey on the back of a horse wall-eyed and well nigh blind, without surtout or saddlebags, and met, as might be expected from such an equipment for a three months' trip, with several adventures not unworthy the knight-errantry of Hudibras or Don Quixote to perform, or the genius of Cervantes or Butler to celebrate.

On the formation of the Agricultural Board, Mr. Young became its secretary, and performed the duties of his office till his death with great zeal and fidelity. He continued from time to time to survey several of the counties of England, of which surveys he published detailed reports. To his very last days his attachment to his early pursuits continued; and at the time of his death he was preparing for the press the result of his

agricultural experiments and observations during a period of fifty years.

Mr. Young was a man of strong understanding, of a vigorous mind, and of warm feelings; a most diligent student, yet disposed to think for himself. He was extremely temperate in his habits, ardent and indefatigable in his pursuits, and diligent and laborious in a degree seldom equalled. Through the whole course of his life he was a very early riser, and continued this practice even after blindness made him dependent on others for the prosecution of his studies. His firmness was great; but to a man of sanguine disposition, the continual obstruction to his pursuits produced by a want of sight, (a calamity which afflicted him after 1811 till his death,) could scarcely have been borne with patience, had it not been for the influences of religion, whose benign operation was never more triumphantly displayed.

A most important change in his principles and character took place in the year 1797, when the death of his youngest daughter, to whom he had been most tenderly attached, first led him to apply to that only true source of consolation over which the world has no power. During the former fifty-six years of his life, while most subjects of importance had, at one time or other engaged his attention, the most important of all, religion, had scarcely occupied a thought. He was not indeed an avowed skeptic, but his mind was so uninstructed and his heart so unconcerned in all that respected religion, that, as he used often afterwards to declare and deeply to lament, he was little better than a heathen. The diligence with which he thenceforth discharged his official duties,

prosecuted his studies, and continued his favorite pursuits, was however in no degree abated, but the motive was wholly changed. He was now actuated by a desire to please God, and by a wish in his fear to do good to men. A very large proportion of his property was devoted to the relief of the distressed; the poor peasantry around his estate ever looked up to him as a father and a friend. To enable him to give more to the poor, he lived with simplicity and moderation, without ostentation, though with much hospitality: no man having a warmer heart towards his friends or giving them a kindlier welcome at his cheerful board. His early opposition to the slave-trade evinced that he was a friend to the whole brotherhood of man. He died on the twentieth of February, 1820. The disease which terminated his mortal existence was an extremely painful one; but, in the most excruciating bodily agony, his patience and resignation were exemplarily manifested.

CHARLES G. HAINES.

CHARLES G. HAINES was born at Canterbury, in the State of New Hampshire, about the year 1793. His father was a respectable farmer, in humble circumstances, but endowed with a vigorous mind. His energetic habits of thought doubtless exerted great influence on the mind of his son, by calling its powers into activity at an early age, and thus, in some measure, compensated for the absence of those opportunities of education, which the limited means of the family put beyond their reach. Charles passed the years of his boyhood in his father's house, laboring on the farm in the summer, and attending the village school in the winter. It is probable that this mode of life did not please him, and that a restless spirit induced him to seek some other employment of a less humble character. About the age of fourteen years, he obtained the situation of a clerk in the office of Col. Philip Carrigain, at that time secretary of the State of New Hampshire. While a mere copyist in the office of this gentleman, his desire to be distinguished in every occupation in which he was engaged, showed itself in the acquisition of a beautiful handwriting — an attainment upon which no intelligent man will place a low estimate. On the appointment of Col. Carrigain to prepare a map of the State, and his consequent resignation of his office of secretary, young Haines, partly by his own

exertions, and partly by the assistance of his friends, prepared himself for college, and was admitted to the institution in Middlebury, Vermont, in 1812. He passed through the usual course with credit, and in 1816, received the degree of Bachelor of Arts. In consequence of unremitted application, his health had become feeble, and he was induced to undertake a journey on horseback. On this occasion, he first visited the city of New York. He continued his journey as far as Pittsburgh, in Pennsylvania. He returned to Vermont, in much better health, and commenced the study of law in the office of the Hon. Horatio Seymour, of Middlebury. He also engaged in the task of assisting in the editorship of one of the principal political journals of the State, probably from want of other means of subsistence. In 1818, Mr. Haines removed to the city of New York, and entered the law office of Pierre C. Van Wyck, Esq. He soon took an active part in the local politics of the State, and was appointed private secretary to Governor Clinton. Yet so great was his address, or so happy his disposition, that he was beloved by all parties for his generous feelings and polite deportment. During the first year of his residence in New York, Mr. Haines produced a pamphlet, in which he took an elaborate review of the probable expense and advantages of the great western canal. Soon after he produced a larger work on the same subject, in which he displays great research and industry. After this he secluded himself almost entirely from society, and applied himself closely to professional studies. Few men labor more assiduously than Mr. Haines did for

three years after his admission to the bar, and until attacked by the disease which proved fatal to him. Besides attending to his business as a lawyer, he uniformly devoted three hours in a day to reading law, and spent his nights, till a very late hour, in the study of history and political science. It was his habit to make copious abstracts of the books which he read, to which he added numerous notes of his own. He was not an exact, practical lawyer. While he was familiar with the general doctrines of the law, he devoted his earnest attention to questions involving the principles of our federal and state constitutions. It was therefore in the courts of the United States, where all the important doctrines regarding our national compact are agitated and determined, that Mr. Haines desired to appear. His studies had a constant tendency to this object. Among his manuscripts, there is a minute analysis of the "Federalist," besides several volumes filled with quotations, and occasionally with complete abstracts of works on kindred subjects. The first question in which he was concerned before the Supreme Court of the United States, was one involving the constitutionality of the state bankrupt laws. On its decision depended the fortune of thousands of individuals, and the title to millions of property. Mr. Henry Clay and Mr. David B. Ogden, were his senior counsel, and Mr. Webster and Mr. Wheaton were the opposing counsel. The impression made by Haines on his learned auditors was favorable. The argument for the constitutionality of the State bankrupt laws was the fruit of long and laborious preparation. It was afterwards printed,

and does great credit to his industry, learning, and good sense. His legal talents were never fully tested. His early education had been hurried and deficient. His powers of thought had never been tasked by rigorous trains of mathematical and metaphysical reasoning. His mind had never been disciplined to that severity and exactness of thought, which go to form a truly able lawyer. Yet his mental processes were just, rapid, and vigorous, and even when competing with men of the highest legal attainments, his previous diligent preparation, made him always respectable. Mr. Haines was frequently called upon to address public assemblies upon various topics which for the moment interested the community. He freely lent his aid to the various institutions of charity and reform, giving to them liberally his time, his money, and his labor. In general, he wrote out the substance of his intended speech at length. As the views which he took of his subject were large, his efforts of this kind never disappointed public expectation, and were frequently honorable to his talents, as well as to his good feelings. Among the topics of this nature, on which he wrote and spoke with effect, were "Pauperism," and the "Penitentiary system." His useful exertions for the cause of humanity in relation to these subjects will long be remembered with gratitude.

In the political struggles of the State, Mr. Haines was very active. In 1825, Governor Clinton nominated him adjutant general of the militia of the State, an office which he did not live to assume. The labors, in which he was engaged, were too severe for his physical strength.

Intense study and continued sedentary habits were gradually making fatal inroads upon a constitution originally good, and which had been sustained thus far by a life of the strictest temperance. His friends often warned him against the effects of midnight study and neglect of exercise, but he used to reply that he did not require any relaxation. Their fears were too soon realized. He lingered till the third of July, 1825, when he expired at the age of thirty-two years. His funeral took place on the sixth of July, and was attended by an immense concourse of citizens.

“His devotion to politics,” remarks his biographer, “was almost a passion, and if talent may be estimated by success, he was well adapted for political life. Certain it is, that he seized with uncommon tact upon those circumstances which industry and zeal could render favorable; and, as he conciliated every man whom he approached, he accomplished as much by his personal influence, as by his writings. There was, besides, in him an enthusiasm, which believed nothing impossible; and to such an one, obstacles are toys, and victory a pastime. More than all, and united with all, he possessed an indefatigable systematic industry, the great secret of all acquisitions. Those who have the originality to conceive great designs, are not found, in general, to possess the practical talent of developing their utility, and carrying them into execution. Mr. Haines had the sagacity to seize on the best conceptions of other men, the diligence to gather important facts and circumstances in their support, and the activity and energy to turn them to practical account.”

Mr. Haines is a remarkable instance of what the unaided efforts of one man may accomplish. He came to the city of New York, a poor and friendless stranger, and in the short space of seven years, he surrounded himself with numerous and valuable friends, acquired considerable reputation as a scholar, a politician, and a writer, and rose to one of the highest offices in the gift of the State government. His social and private character was exemplary, though his constitutional ardor sometimes triumphed over his judgment.

CARSTEN NIEBUHR.

CARSTEN NIEBUHR was born on the 17th of March, 1733, in Hadeln, then belonging to the province of Friesland, Denmark, but since united with the kingdom of Hanover, Germany. He lost his mother before he was six weeks old. He grew up under the care of a step-mother in his father's house, where his way of life and employments, as well as his education, were those common to the peasant boys of his country. It was, probably owing to his own eager desire for knowledge that his father was induced, only with a view of his being somewhat better instructed than a common peasant, to send him to the grammar school in Otterndorf, whence he afterwards went to that at Altenbruch. But the removal of the school-master of the place, and the prejudices of the guardians, (for his father had died in the interval,) put an end to his school-studies before he had gone far enough to have them sufficiently impressed on his memory, to be of any service to him, when he afterwards resumed them. The division of his father's property between the surviving children had left him, instead of the farm which had been so long the hereditary possession of the family, only a very small capital, quite inadequate to the purchase of any land for himself; and necessity would have led him to acquire knowledge, as a means of subsistence, even if he had been of a character to endure to live without

education, and without employment. He was obliged, however, to content himself with such accomplishments as were attainable without school-learning; he, therefore, for a year, pursued music with great zeal, and learned to play on several instruments with a view to earn his living as an organist. As this employment, likewise, did not meet the approbation of his guardians, his maternal uncle took him home to his own house, where he passed about four years, during which his life was once more that of a peasant. The older he grew, however, the less could he endure the void and dulness of this way of life, which can only be relieved, either, as in old times, by a share in the general deliberation on the affairs of the community, and by cheerfulness and merriment, or, as is the case with the English farmer, by a participation in the advantages of education and literary amusement. He felt an irresistible impulse to learn, to employ himself, and to render himself generally useful.

The providential circumstances which determine the course of life of distinguished men, deserve to be remembered. In the highest degree providential was that which gave to Niebuhr the direction which he thenceforth followed, until it led him to become one of the most eminent travellers of modern times. A law suit had arisen concerning the superficial contents of a farm, which could only be decided by measurement, and as there was no land surveyor in Hadeln, the parties were obliged to send for one to another place. Niebuhr felt for the honor of his native district with all the warmth of old times, and this occurrence appeared to him disgraceful to it. He

could now fulfil a duty towards his country by learning the neglected art, which at the same time furnished him with an occupation and an object such as he desired. Learning that instruction in practical geometry was to be had in Bremen, he immediately, on arriving at age, repaired to that city. This plan was frustrated; the teacher upon whom he depended was dead; but he did not disdain the instruction of a humble practitioner of the art. He, however, would be obliged to lodge and board in his house, and here the bashful, strictly decorous, and self-distrusting young peasant, found two town-bred young ladies, sisters of his intended teacher, whose attentions appeared to him so singular that he quickly took his departure. He now turned his eyes towards Hamburg, but there he was destined again to experience disappointment, and to have his perseverance put to the test.

He had passed his two and twentieth year when he went to Hamburg to avail himself of Succow's instructions in mathematics, and, without any false shame on account of his age, to begin his school-studies anew, his income was not sufficient to maintain him even with that rigid economy which was natural to him. He determined, however, to spend just so much of his small capital as would enable him to accomplish his end. He arrived at Hamburg in the summer of the year, 1755. But just at this time, Succow was called to Jena; the mathematical chair was not filled till Büsch was appointed to it. The severest application to private instruction was, therefore, necessary to make the lessons at the gymnasium (or public school) intelligible or profitable to him. A

countryman of his, named Witke, who, at that time, lived at Hamburgh as candidate for holy orders, and who afterwards died at Otterndorf, where he was pastor, gave him this private instruction with true cordiality and friendship. Niebuhr always spoke of him as the person who laid the foundation of his education, and, as such, honored and loved him with sincere affection. Notwithstanding his uncommon exertions, and the strength of his body and mind, twenty months (eight of which were passed in nearly preparatory studies, for the Latin tongue was almost entirely unknown to him) were quite insufficient for one, who began to learn so late in life, to acquire that amount of knowledge which more favored youths bring with them to the university. Among other things thus unavoidably neglected was Greek, of which he always lamented the want. Under Büsch he had begun to learn mathematics. He was the earliest and most distinguished of all his pupils, and in subsequent life, became his most intimate friend. To stop in the middle of any undertaking was thoroughly repugnant to his whole character. He had gone to Hamburgh solely with a view to acquire a knowledge of geometry, and of some things commonly taught in the schools; but as soon as he had become acquainted with the sciences, he could not rest till he was able to embrace them in all their extent and depth. In the spring of 1757, he repaired to Göttingen. The mathematics continued to be his favorite study. He was now more than ever compelled, by the diminution of his little substance, to aim at some employment by which he could maintain himself, and to which his studies

would lead. This he now looked to in the Hanoverian engineer corps, in which (as was the case in nearly the whole military service of Germany) men of efficient mathematical attainments were extremely rare. There he might hope to obtain by merit a competent support. He studied with the steadiness which a fixed, simple, and prudent plan of life ensures, from the spring of 1757 for more than a year, undisturbed by the war which frequently raged around Göttingen. At this time he recollected that an endowment, or fund for exhibitions, existed at this university, and begged his friend to ascertain whether it was only for poor students in the strict sense of the term, or whether it was endowed without that limitation, "as a means of persevering in the study of something useful and important. In this case alone could he allow himself to apply for it." He received it and appropriated it entirely to the purchase of instruments.

At this period Frederick the Fifth reigned in Denmark in enviable tranquility. Louis the Fourteenth's memory still shone throughout Europe, with all that false glitter which had hung around his name during his life, and he was well known to be the model after which the ministers of the Danish monarch endeavored, as far as it was compatible with the character of a peaceful king, to form their sovereign. Seldom, however, have the aims of ministers been less liable to reproach than were those of the then baron J. H. E. Bernstorff; and among all the statesmen of the continent, there was not, perhaps, one of his time so well informed, so noble minded, and so intelligent. The extraordinary and beneficent

qualities and endowments of the second count Bernstorff will be remembered by a grateful nation, since what he effected remains indestructible, and forms the sole basis for future reforms and improvements. Posterity will perhaps mention, as among the noblest actions of his uncle, J. H. E. Bernstorff, the emancipation of his serfs, or the slaves of the soil; the leisure which he insured to Klopstock, and the scientific expedition which he sent into Arabia. This enterprise was originally owing to Michaelis, who had represented to the minister of state that many elucidations of the Old Testament might be obtained by personal observation and inquiry in Arabia, which might be regarded as hitherto untrodden by European feet. The original idea in the mind of the author extended no farther than this; that a single traveller, an oriental scholar out of his own school, should be sent by way of India to Yemen; a plan which would then have caused the undertaking to end in nothing, even supposing the traveller ever to have found his way back. Happily Bernstorff immediately perceived the defectiveness of the plan, and replied to it by a proposal to render the mission far more extensive in objects and outfit. As Bernstorff took up the project with all the vivacity and liberality for which he was so remarkable, and fully empowered Michaelis to propose an oriental scholar to him, it might have been expected that Michaelis would have named the man who, among all his contemporaries, was unrivalled for his knowledge of the Arabic language, and, as all Germany knew, was fighting inch by inch with starvation, — Reiske, — whom, moreover, Michaelis had known from

the time he was at school. But instead of Reiske, he recommended a pupil of his own, Von Haven, whose acquirements must, at that time, have been those of a mere school-boy, since a two years' residence at Rome, (whither he went to prepare himself under the Maronites,) and even the journey itself, never raised him above the meanest mediocrity. Michaelis was also commissioned by Bernstorff to propose the mathematicians and natural historians. For the choice of these men, Michaelis applied to Kästner, one of the Göttingen Society of Sciences, of which he was then director. A student of Hanover, Bölzing, at first accepted the proposal, but after a short time withdrew his promise. Kästner next proposed Niebuhr. One day in the summer of 1758, on his way from a meeting of the Society, to which he had just proposed Niebuhr, he walked into his room. "Have you a mind to go to Arabia?" said he. "Why not, if any body will pay my expenses," answered Niebuhr, whom nothing bound to his home, and who had an unbounded desire for seeing the world. "The King of Denmark," replied Kästner, "will pay your expenses." He then explained the project and its origin. Niebuhr's resolution was taken in a moment, so far as his own inclination was concerned. But as he thought very humbly of himself, and most reverentially of science and of the truly instructed, he despaired of his own ability and power of being useful. On this head, however, Kästner set him at ease by the promise of a long term of preparation, which he might employ chiefly under Mayer, in astronomy, and by the assurance that, with his determined industry and perseverance, the allotted

time would be fully sufficient. The same evening Niebuhr, who wanted nothing to fix his resolution but Mayer's promise to instruct him in astronomy, called on the philosopher. Mayer, who was not so sanguine a man as Kästner, cautioned him against a determination which, with his character, would be irrevocable, while he knew not the dangers and fatigues which he was about to brave. He, however, promised the desired instruction. Michaelis, whom he visited the following day, probably saw that there was levity and precipitation in so prompt a resolution, and pressed upon him to delay a week to reconsider the matter. It passed, but Niebuhr did not trouble himself with any further deliberation on a subject upon which his mind was already thoroughly resolved, and Michaelis now regarded the engagement as definitively accepted. His conditions were a year and a half for preparation; and during this period, the same salary as Von Haven received. Bernstorff assented to this arrangement without the slightest hesitation. Niebuhr now lived solely for his object. He pursued his studies in pure mathematics, perfected himself in drawing, and sought to acquire such historical information as was attainable with that degree of learning which he had so lately and so imperfectly acquired, without neglecting his more immediate objects. He cultivated practical mechanics, with a view of acquiring greater dexterity in handling his instruments, and in various manual operations, the acquirement and practice of which in Europe, except for those whose business they are, is but a waste of time. His attention was, however, principally occupied by the private lessons of Mich-

aelis in the Arabic language, and of Mayer in astronomy. These he remembered with very different feelings. For the grammatical study of languages in general he had but little talent or inclination. At the end of a few months he gave up this course of instruction.

Tobias Mayer was undoubtedly one of the first astronomers and mathematicians of his time. The results of his labors consist principally of a catalogue of 992 stars, and his famous lunar and solar tables. His valuable theory of the moon, and the laborious calculation of these tables, together with the invention of Hadley's quadrant, in 1731, enabled Maskelyne to bring into general use the method of discovering the longitude by observing the distance of the moon from the sun, and certain fixed stars, called the lunar method. Mayer's zeal for teaching his pupil was as great as Niebuhr's for learning of him. Among all the men of whom he became acquainted in the course of his long life, there was none whom he so loved and honored as Mayer; and the most intimate friendship subsisted between them. He retained an ardent attachment to Mayer's memory up to the most advanced age, and he hardly ever received from Providence any greater gratification than that of hearing that his first lunar observations reached his beloved teacher on his death-bed, before consciousness had left him, and had cheered and animated his last moments; and that these observations had decided the giving the English premium, offered for the discovery of the longitude, to the widow of the man to whom he felt that he was indebted for his acquirements in this branch of science. Mayer; on his part, had no

more earnest solicitude than to educate a pupil who would apply his method of determining the longitude, and his, at that time, unprinted lunar tables, of which Niebuhr made a copy. Mayer interested himself in the outfit of Niebuhr's journey, so entirely as if it had been his own personal affair, that he divided his quadrants with his own hands. The accuracy of this labor of friendship was proved by the observations which were made with it. About the time of commencing his journey, Niebuhr was appointed lieutenant of engineers; a circumstance which only deserves notice for the sake of a letter which places his modesty and judgment in the most amiable light. "He was," as he wrote to a friend, "led to think of a title for himself, by Von Haven's appointment to a professorship in the university of Copenhagen. A similar one had been offered to him, but he held himself unworthy of it. The one which he had received appeared to him more suitable. He might have had that of captain, if he had asked for it; but that, for a young man, would have been too much. As a lieutenant, it would be highly creditable to him to make valuable observations; but as professor, he should feel it disgraceful not to have sufficiently explored the depths of mathematical science." He had at that time no other plan than that of living in his native country, after the accomplishment of his mission, on the pension which was assigned to him.

The party consisted of Von Haven, already mentioned; Forskaal, in many respects, eminently qualified for the undertaking; Cramer, a physician, a most unfortunate choice; Bauernfeind, a draughtsman, a respectable artist, but intemper-

ate ; and Niebuhr. On the 10th of March, 1761, the travellers left the Elsinour roads for the Mediterranean. The voyage was a pleasant one to Niebuhr. He endeavored to make himself acquainted with the construction of the ship, and he exercised himself daily in nautical and astronomical observations, which procured him the satisfaction of being regarded by the officers as an active and useful member of their company. Mayer, in the instructions which he gave to Niebuhr, had constantly kept in view that his pupil would be placed in situations in which it would be absolutely necessary for him to be able to rely upon himself, and where he could not hope for the slightest assistance or support. He had taught him entirely himself, and encouraged him with the assurance that an active and clear-sighted man is generally able to discover means to overcome the obstacles which may oppose him. His method of teaching, which was entirely practical, was chiefly this: he first described to his pupil the object of the observation and the method of using the instruments; he then left him without any assistance, to try how far he could proceed in his observation and calculation, and desired him to tell him when he came to any insurmountable difficulty. He was obliged to describe exactly how far he had gone on well, and where his progress had been stopped, and then Mayer assisted him.

A stay of some weeks at Marseilles, and of a shorter time at Malta, procured a very agreeable recreation to the party. The scientific enterprize was known throughout Europe, and we should find it difficult now to picture to ourselves the

universal interest in its success which ensured to the travellers the most cordial reception and the most respectful attentions. It was an enterprize consonant with the spirit of the times, and in no manner solitary or strange. Asia was become an object of interest to Europeans from the war which the two great maritime powers were then waging in India. England began to send out ships to circumnavigate the globe. It was just that period of general satisfaction and delight in science and literature in which mankind believed that they had found the road that must inevitably lead to rapid advances in knowledge and improvements; men of letters enjoyed great consideration; and the interest of science and its followers were generally regarded as among the most important in which mankind could be engaged.

From Malta the expedition proceeded to the Dardanelles. In the Archipelago, Niebuhr was attacked with the dysentery, and was near dying. He recovered his health at Constantinople, but so slowly that at the expiration of two months from the beginning of his illness he had scarcely made sufficient progress to go on board a vessel bound for Alexandria without manifest danger. In Egypt, the party remained a whole year, in which time Niebuhr, in company with Von Haven and Forskaal, visited Mount Sinai. During their stay in Egypt, Niebuhr determined the longitude of Alexandria, Kheira, Raschid, and Damietta, by means of numerous lunar observations, with an accuracy which the astronomers of Bonaparte's expedition, to their great surprise, found fully equal to their own. The following is the description of the outfit of himself and his companions

for their expedition to Mount Sinai. "We had made careful provision for every thing which we thought necessary for the journey before us. We had abundance of eatables, a tent, and beds. Most of the utensils carried on expeditions in these countries, have been described and drawn by other travellers; and indeed some of them are so convenient, that they might be introduced into European armies with signal advantage. Our little kitchen apparatus was of copper, well tinned inside and outside. Our butter we carried in a sort of pitcher, made of thick leather. Table cloths we did not want. A large round piece of leather was our table. This had iron rings attached to its edge, through which a cord was passed. After dinner it was drawn up, slung over a camel, and thus served the double office of a table and a bag. Our coffee cups (saucers we had none) were carried in a wooden box covered with leather, and wax candles in a similar box, enclosed in a leathern bag. In the lid of this box was a tube, which was our candlestick. Salt, pepper, and spice, we also kept in a little wooden box, with several lids screwed one over another. Instead of glasses we had little copper cups, beautifully tinned within and without. Our lanterns were of linen, and could be folded together like the little paper lanterns which children make in Europe, only that ours had covers and bottoms of iron. Each of us was furnished with a water pitcher of thick leather, out of which we drank; and as we sometimes found no water for two or three days, we carried a good many goat skins filled with it. We also took two large stone water jars with us, that we might be able to

carry water ourselves on the journey from Suez to Djidda. Our wine we kept in large glass flasks, each holding twenty of our bottles. These vessels appeared to us the best for the purpose; but when a camel falls, or runs against another with his load, they easily break, and therefore goat skins are better for the purpose. The hides which are used to contain water, have the hair on the outside; but those for wine have it on the inside, and are so well pitched, that the liquor acquires no bad taste."

In this journey, Niebuhr made astronomical and geographical observations as often as possible. Out of these laborious investigations grew the chart of the Red sea, which, considering the circumstances under which it was made, was a masterly work. Von Haven died about the end of May, 1763. Niebuhr was again attacked by dysentery, and was saved only by the greatest care and temperance. The climate and numerous annoyances which Forskaal had partly brought upon himself, and partly aggravated through his caprice, brought on a bilious disorder, of which he died at Jerim, on the 11th of July, 1763. Mokha, situated in the arid desert of Tehama, is, during summer, a horrible residence, and but few days elapsed before the surviving travellers and their servant were attacked with the fever of the climate. Bauernfeind and the servant died at sea. Cramer reached Bombay, languished for some months, and died. *Niebuhr was saved by that extreme abstemiousness which renders a tropical climate as little dangerous to the Europeans as to natives.* While he was laboring under the dysentery, the physician had told him to abstain from

meat, and to eat nothing but bread and a sort of rice soup. This regimen cured his illness. At the end of several weeks, the physician learned with astonishment, that Niebuhr was patiently continuing a diet by means of which few Europeans could be induced to purchase their lives, even when laboring under dangerous illness. The reception which Niebuhr met with from the English at Bombay, was extremely cordial. In Egypt he had first learned to delight in the society of Englishmen; and there was laid the foundation for that mutual attachment which ever after continued uninterrupted. There he learned the English language. He also made a copy of his journal, and sent it through London to Denmark. After a stay of fourteen months he left Bombay, visited Mascat, and made himself acquainted with the state of the remarkable province of Oman. He then proceeded to Shiraz and Persepolis. The last night of his journey to Persepolis was perfectly sleepless. The picture of these ruins remained during his whole life indelibly engraven on his mind. They appeared to him the crown and glory of all which he had seen. He passed between three and four weeks amidst them in the desert, in unremitting labor, measuring and drawing the fragments. From Shiraz he crossed the Persian gulf to Bassora. In Persia he collected historical documents concerning the fate of this unfortunate country, from the death of Nadir Shah up to his own times. From Bassora he proceeded through Bagdad and Mosul to Haleb. He was now perfectly at home; since he had been alone, he had been at liberty to conform, without molestation, to oriental manners and customs.

He was also in as good health as at any period of his life. An opportunity of going to Jaffa tempted him to visit Palestine. After that, he explored Lesser Asia, and reached Constantinople, on the 20th of February, 1767. After having spent five months in that city, he passed over Turkey in Europe to Poland, and in November reached Copenhagen. He was received by the court, by the ministers, and by the men of science, with the greatest distinction. Bernstorff, particularly, loaded him with marks of his esteem. The whole expense of the expedition was but £3,780 sterling. It would necessarily have been much greater had not Niebuhr been the sole survivor for nearly the whole of the last four years; but although the sources of expense were thus greatly diminished, they were still more so by his scrupulous integrity; not only in avoiding every outlay not essential to the object, but in paying out of his private pocket for every thing which could be regarded as a personal expense. He was now employed for some time in arranging his materials and preparing his journal for publication. He met in this undertaking with almost innumerable difficulties, owing to his want of an early literary education, to his extreme modesty, to the removal of his patron, Count Bernstorff, and to the unprovoked hostility of some of the literati of the country. In 1773, he was married to a daughter of the physician, Blumenberg. They had two children, a daughter, and B. G. Niebuhr, the illustrious author of the most learned and valuable history of Rome which has been written.

Niebuhr soon took up his abode at Meldorf, having had the office of secretary of the district

given to him by the government. A great part of his time was employed on his farm. He also found great satisfaction in the company of Boie, the governor of the district. Meanwhile, his children grew to an age to require instruction. This he gave them himself. "He instructed both of us," says his son, "in geography, and related to us many passages of history. He taught me English and French; better, at any rate, than they would have been taught by any one else in such a place; and something of mathematics, in which he would have proceeded much farther, had not want of zeal and desire in me unfortunately destroyed all his pleasure in the occupation. One thing was indeed characteristic of his whole system of teaching; as he had no idea how any one could have knowledge of any kind placed before him, and not seize it with the greatest delight and avidity, and hold to it with the steadiest perseverance, he became disinclined to teach, whenever we appeared inattentive or reluctant to learn. As the first instructions I received in Latin, before I had the happiness to become a scholar of the learned and excellent Jäger, were very defective, he helped me, and read with me Cæsar's Commentaries. Here, again, the peculiar bent of his mind showed itself; he always called my attention much more strongly to the geography than to the history. The map of ancient Gaul by D'Anville, for whom he had the greatest reverence, always lay before us. I was obliged to look out every place as it occurred, and to tell its exact situation. His instruction had no pretension to be grammatical; — his knowledge of the language so far as it went, was gained entirely by reading, and by

looking at it as a whole. He was of opinion that a man did not deserve to learn what he had not principally worked out for himself; and that a teacher should be only a helper to assist the pupil out of otherwise inexplicable difficulties. From these causes his attempts to teach me Arabic, when he had already not that facility in speaking it without which it was impossible to dispense with grammatical instruction, to his disappointment and my shame, did not succeed. When I afterwards taught it myself, and sent him translations from it, he was greatly delighted. I have the most lively recollections of many descriptions of the structure of the universe, and accounts of eastern countries, which he used to tell me, instead of fairy tales, when he took me on his knee before I went to bed. I recollect too, that on the Christmas eve of my tenth year, by way of making the day one of peculiar solemnity and rejoicing to me, he went to a beautiful chest containing his manuscripts, which was regarded by us children, and indeed by the whole household, as a sort of ark of the covenant, took out the papers relating to Africa, and read to me from them. He had taught me to draw maps, and with his encouragement and assistance I soon produced maps of Habbesh and Sudan. I could not make him a more welcome birth-day present, than a sketch of the geography of eastern countries, or translations from voyages and travels, executed as might be expected from a child. He had originally no stronger desire than that I might be his successor as a traveller in the East. But the influence of a very tender and anxious mother, upon my physical training and constitution, thwarted his plan

almost as soon as it was formed. In consequence of her opposition, my father afterwards gave up all thoughts of it."

Niebuhr had the satisfaction to find that his merits as a traveller were more and more appreciated. His works were very popular in England. The crown prince of Denmark also showed him distinguished favor. In 1802, he was appointed foreign member of the French National Institute. In his various labors he was indefatigable. In his 71st and 72d years, he toiled through a great part of the night. Nor did his indefatigable zeal relax even when his eyes began to fail. The consequences of this night-work were irremediable and fatal. In a short time he could no longer see to read, and for writing he required an extraordinary quantity of light, and even then the lines were often intermingled. His wife, after many years of suffering, died in 1807. His daughter, and the widowed sister of his wife, who had lived with the family for twelve years, could now devote themselves wholly to render him the assistance of which he stood in so much need. Every thing was read aloud to him. The conversation of Gloyer, his successor as secretary of the district, revived to his mind's eye many a faded or vanished picture of the East, and the books which this invaluable friend read aloud to him, and the circumstances, which he related, put him in possession of the works and statements of more recent travellers. This was without comparison one of his highest enjoyments. "When I related to him," says his son, "the descriptions of any traveller newly returned from the East, or gave him in my letters any accounts of travels

not known on the continent, his whole being seemed reanimated, and he dictated answers, which showed that his mental vision was vivid and powerful as ever. It was still more remarkable that these new facts imprinted themselves on his mind with all the depth and sharpness with which objects are stamped on a youthful memory, and so remained up to the time of his death. He combined them with what he had himself observed and experienced.

“In the autumn of 1814,” continues his son, “his appearance was calculated to leave a delightful picture in the mind. All his features, as well as his extinguished eyes, were the expression of the extreme and exhausted old age of an extraordinarily robust nature;—it was impossible to behold a more venerable sight. So venerable was it, that a Cossack who entered, an unbidden guest, into the chamber where he sat with his silver locks uncovered, was so struck with it, that he manifested the greatest reverence for him, and a sincere and cordial interest for the whole household. His sweetness of temper was unalterable, though he often expressed his desire to go to his final home, since all which he had desired to live for had been accomplished. A numerous, and as yet unbroken family circle was assembled around him, and every day in which he was not assailed by some peculiar indisposition, he conversed with cheerfulness and cordial enjoyment on the happy change which had taken place in public affairs. We found it very delightful to engage him in continued recitals of his travels, which he now related with peculiar fulness and vivacity. In this manner he spoke once, and in great detail, of

Persepolis, and described the walls on which he had found the inscriptions and bas-reliefs, exactly as one would describe those of a building visited within a few days and familiarly known. We could not conceal our astonishment. He replied, that as he lay in bed, all visible objects shut out, the pictures of what he had beheld in the East continually floated before his mind's eye, so that it was no wonder he could speak of them as if he had seen them yesterday. With like vividness was the deep intense sky of Asia, with its brilliant and twinkling host of stars which he had so often gazed at by night, or its lofty vault of blue by day, reflected, in the hours of stillness and darkness, on his inmost soul; and this was his greatest enjoyment."

Towards evening, on the 26th of April, 1815, some one read to him as usual, while he asked questions which showed perfect apprehension and intelligence. He then sunk into a slumber and departed without a struggle. A concourse of people from all parts of the country attended his body to the grave. The funeral was solemnized with all the honors which respect and affection can pay. He had attained the age of eighty-two. He was extremely frugal. Economy had become a habit with him in early life. As a peasant lad he drank nothing but water and milk; and at a later period he deviated from this simple diet, only in compliance with the custom of others, with which he every where made it a rule to conform, and he then drank an extremely small quantity of wine. He had no favorite dishes but the peasant fare of his native land. "At the highest point of elevation," says his biographer, "to

which he attained, favored by his prince, respected and admired by the learned and eminent of all countries, it was his pride that he was born a peasant of Free Friesland. His manners never lost the simplicity, nor his morals the purity of that singular and estimable class of men. If ever there lived a man who might safely and reasonably be held up to the people as an object of imitation, it was Carsten Niebuhr. Not only was he a poor man, — an orphan, — born in a remote part of a remote province, far from all those facilities for acquiring knowledge, which in this age and country are poured out before the feet of the people; he was not even gifted in any extraordinary way by nature. He was in no sense of the word a *genius*. He had no imagination. His power of acquiring does not seem to have been extraordinarily rapid, nor his memory singularly retentive. In all cases where the force of that will, at once steady and ardent, which enabled him to master his favorite studies, was not brought to bear, his progress was slow and inconsiderable. It is not therefore in any supposed intellectual advantages that we must look for the causes of his rise to eminence. They are to be found rather in the moral qualities which distinguished him, qualities attainable in a greater or less degree by men of the humblest rank, of the most lowly intellect, the least favored by situation or connection. He possessed, in an eminent degree, the distinguishing virtues of his country, sincerity, unadulterated and faithful love of truth, and honesty. The zeal with which he gave himself to a pursuit which might enable him to be useful to his native district; the total absence of vanity which char-

acterized the whole course of his studies and of his journeyings ;— the simplicity of his narrative, in which no more of himself and his individual feelings appears than is just necessary to keep up the thread of the story ;—the rigorous accuracy and anxiety after truth for which his travels have ever been and still remain pre-eminently distinguished among all who preceded, and all who have followed him on the same ground, afford ample evidence of the singleness and the steadiness of the motives which actuated him. The most punctilious honor marked his disbursement of the funds intrusted to his care by the Danish government, and he ever abstained with the utmost exactness from applying a farthing of this money to any object which could be considered by others, or which his own more fastidious delicacy could regard, as a personal gratification.

“ His self-command was perfect. He could abstain from what was agreeable, and do what was disagreeable to him. He was conscientious, sober, temperate even to abstemiousness, laborious and persevering ; neither discouraged nor elated by the incidents which he must have known were inseparable from the career which he had chosen.”

JONAS KING.

WHILE the tribute of admiration is readily awarded to such men as Park, and Ledyard, and Belzoni, who have manifested an unconquerable perseverance and a noble enthusiasm and enlargement of views in extending the boundaries of science, and geographical discovery, there is still another class of men worthy of more exalted honor. We should be among the last to disparage the efforts of such men as we have named. We consider them as benefactors of mankind; we rejoice that they could break away from the call of avarice, from the syren voice of pleasure, and from the powerful attractions of home and native land, and spend their days in travelling through savage deserts, encountering the fierce suns of the tropics, and still fiercer men. We should rejoice to visit the grave of Belzoni, and remove the rubbish which time or the hand of the Bedouin may have gathered around his tomb. The names of Horne-
mann, and Salt, and Clapperton, and Parry, are not to be named lightly. They accomplished very much for the cause of science, and indirectly for the moral and spiritual emancipation of our race. Most of them were cut down early, but they did not fall into an untimely, much less into a dishonorable grave. Their names will be mentioned with respect in every future age of the world.

Notwithstanding, we are called to contemplate a higher species of excellence, a more noble disin-

terestedness, a more enduring renown. Men have gone into all the world to do good, not to explore pyramids, nor to measure obelisks, nor to watch the changes of heavenly bodies, but to sympathize in human calamity, to give to benighted men the lamp of eternal life, to extend the reign of civilization and of the Christian faith; not to send back polished vases, and granite statues, and classic fragments, but the report of nations saved, the joy of redeemed men, and the assured promise of still more glorious achievements. These men have not despised science and have not been unmindful of classic recollections. Still they went for a higher purpose; they devoted themselves to a more self-denying work; a nobler enthusiasm filled their souls, a richer treasure freighted their ships. They carried with them the hopes of heaven; they travelled for eternity. Many of them fell in the first onset, but their ashes rest in hope, and angels guard their repose.

Among the most honored names in this class of the benefactors of man, is that of Jonas King. In delineating a few of the incidents in his eventful life, we are sure that the consideration that we may be advancing that cause to which he has devoted his days, will apologize for what in other circumstances might seem inconsiderate or inexpedient. His name is public property; it is a part of his means of doing good.

JONAS KING was born in 1793, at Hawley, a town in the western part of the county of Franklin, in the State of Massachusetts. His parents were worthy and estimable people, but were entirely unable to assist their son to obtain the advantages of education. It seems from the fact

which we are about to relate, that he was not in circumstances in his native town to acquire that common-school learning, which is the rich legacy of nearly all the children of New England.

In December, 1807, William H. Maynard, Esq. was engaged in instructing a school in Plainfield, a town adjacent to Hawley. One cold morning, on entering his school-room, Mr. Maynard observed a boy that he had not seen before, sitting on one of the benches. The lad soon made known his errand to his instructor. — He was fifteen years old; his parents lived seven miles distant; he wanted an education, and had come from home on foot, that morning, to see if Mr. Maynard could help him contrive how to obtain it. Mr. Maynard asked him if he had any acquaintances in the place who would assist him in acquiring an education. “No.” “Can your parents render any assistance?” “No.” “Have you any friends who will help you?” “No.” “Well, how do you expect to obtain an education?” “I don’t know, but I thought I would come and see you.” Mr. Maynard told him to remain that day, and he would see what could be done. He discovered that young King was possessed of good sense, but of no uncommon brilliancy. He was particularly struck with the cool and resolute manner in which he undertook to conquer difficulties which would have intimidated common minds. In the course of the day, Mr. Maynard made provision for having him boarded through the winter in the family with himself, the lad paying for his services by manual labor. He gave himself diligently to study, in which he made commendable but not rapid proficiency, embracing every opportunity of

reading and conversation for obtaining knowledge; and thus he spent the winter.

The necessary preparation for college was acquired, we believe, under the tuition of the Rev. Jeremiah Hallock, of Plainfield. To this gentleman's faithful care and thorough instruction, a large portion of the young men who have acquired a liberal education for thirty years past, in the western counties of Massachusetts and in the adjoining portions of New York and Vermont are greatly indebted. A majority of a number of the classes who have been educated at Williams college, pursued their classical preparatory studies at Plainfield, and departed in a body to their collegiate residence with the truly patriarchal benedictions of their venerated instructor.

After spending the usual time of four years at Williams college, Mr. King graduated in 1816. The class with which he was connected was highly respectable, both in numbers and talents. To Mr. King, at commencement, was assigned one of the principal appointments, — the philosophical oration. For means of pecuniary support, he was almost wholly dependent on his own vigorous efforts in teaching school and in other ways. By the recommendation of the Rev. President Moore, which was very full in regard to all points, Mr. King was admitted to the patronage of the American Education Society, being the sixth on a list which now numbers more than fourteen hundred. The amount of assistance, however, which he received was very limited, as the resources of the society were, at that time, small, and his collegiate course terminated soon after he received the first appropriation.

On leaving Williams college, he repaired to the Theological Seminary at Andover, to avail himself of the invaluable opportunities which are there enjoyed in the study of the oriental languages. He left the seminary after completing the full course in 1819. Of his classmates, six are missionaries and two are presidents of colleges. At the foundation of the new college in Amherst, in 1821, Mr. King was immediately named as professor of the oriental languages and literature. A part of the intervening time, between the close of his residence at Andover and this appointment, was passed in missionary labors in the southern States.

Feeling his need of more ample preparation, to discharge the duties of his professorship, he concluded to visit France, and avail himself of the eminent advantages which the French capital holds out for oriental studies. His expenses were defrayed by the hands of generous private friendship. After residing some time in Paris, news was received of the death of the Rev. Levi Parsons, a distinguished missionary of the American Board of Commissioners for Foreign Missions, in Palestine. His only associate, the Rev. Pliny Fisk, in consequence of the bereavement, greatly needed a fellow-laborer, who, with a knowledge of Arabic and other languages, could accompany him in his contemplated journeys, preparatory to the establishment of the mission with which he was connected. Having received an intimation that Mr. King might be induced to offer his services for a limited period, he wrote to him immediately, earnestly requesting that some arrangement might be made to that effect. Mr.

King immediately endeavored to ascertain the path of duty, and with the advice of his intimate and valuable friend, S. V. S. Wilder, Esq., an American merchant, then residing in Paris, concluded to offer his services for three years. Mr. Wilder generously offered one hundred dollars a year for the time specified, and two other gentlemen made liberal donations towards defraying the necessary expenses. In referring to the dangers to which he might be exposed by travelling in unhealthy climates, and by other causes, Mr. King observes: "Here (at Paris,) I see around me, with crippled limbs and scarred bodies, men who risked their lives at Jena and Marengo, at Austerlitz and Waterloo, to gain a little perishable glory; and shall not I risk as much in the cause of the Prince of Peace, who gives to all his faithful followers the high prize of immortal glory and joys inconceivable?"

On Monday, September 30, 1822, Mr. King left Paris for Marseilles, and passed through Fontainebleau, Fontenay, Lyons, Nismes, &c. We copy a few extracts from his very interesting journal. "On the first of October, awoke in the morning just as the twilight appeared. I had rode all night. When I fell asleep it was rainy, dark and cheerless; but the rain was now past, and the clouds were all dispersed, except a light, fleecy girdle, hanging round the horizon, above which, in the east, the morning star seemed to twinkle with uncommon beauty, and in the west the moon, just past the full, was looking mildly down upon the Loire, whose waters faintly reflected her light as they glided silently along at the foot of the elevation on which I rode. As

daylight increased, cultivated hills, beautiful vineyards, and fertile plains rose to my view, and presented one of the most lovely scenes I had ever witnessed."

At Lyons, Mr. King remarks, "My emotions were indescribable. I stood on a spot where the Romans had once resided, where their emperors had lived and erected magnificent temples to their idols, where Hannibal and Cæsar with their conquering armies had passed along, where hordes of Saracens had spread their desolations, and where Pothinus and Irenæus with nineteen thousand followers took their flight to glory amid the flames of persecution. I followed them, in my imagination, through their last conflict, till I saw them bowing before the throne of God and joining in ascriptions of praise to the Lamb that was slain."

On the 28th of October, while sailing out of the harbor of Marseilles, Mr. King exclaims: "I could not but feel some emotions on leaving a country where I had spent one of the most interesting years of my life. Land of science and of sin, of gaiety and pleasure, I bid thee farewell! The sun shines brightly on thy beautiful fields, the mild gales breathe softly on thy enchanting hills; and along the borders of thy streams, in the midst of vines and olives, lie scattered the cottages of peasants and the mansions of nobles. Thou hast within thy bosom all that can gratify genius, and taste, and sense. Oh, when shall the spirit of Massillon rest upon thy priests! When shall the light of millennial glory dawn upon thy population! With fervent prayers for thy prosperity, I bid thee farewell!"

On the second of November, Mr. King reached Malta, and was warmly welcomed by the missionaries, Messrs. Fisk and Temple. On the 10th of January, 1823, Mr. King, in company with Messrs. Fisk and Wolff, reached Alexandria, in Egypt. In this city they were actively employed about ten days, when they departed for Rosetta and Cairo. In the course of their travels through this land of signs and wonders, they took occasion to visit many specimens of ancient art and science. In describing the antiquities of Gornon, near the hundred-gated Thebes, the travellers remark: "The principal room in the tomb visited by Belzoni, was fifty feet by thirty. Here, when the tomb was opened, was a sarcophagus of alabaster, which has been removed to London, and is now in the museum. Adjoining this is a room thirty feet square, on three sides of which is a projection which forms a kind of table. All the walls of the rooms and of the passages are covered with hieroglyphics of the finest kind. In one place are portrayed priests, dressed in white, handling serpents; in another, persons offering sacrifices; in a third, a company of prisoners; in a fourth, dead bodies, &c. All these apartments are cut out of the solid rock. How much labor to prepare a tomb for one man!"

After visiting many other interesting spots, the travellers returned to Cairo. The time which they spent in Egypt was about three months. In connection with Mr. Wolff, they preached the gospel in English, French, German, Italian, Greek, Hebrew and Arabic, distributed about nine hundred copies of the Bible, or parts of it, in twelve languages, and nearly three thousand tracts.

On the seventh of April, 1823, Mr. King, after suffering severely from the scorching winds of the desert and from the want of water, reached the "promised land." We extract a few paragraphs in regard to the journey.

"After some refreshment we took a Persian Testament and Genesis in Arabic and went to Hadgi Mohammed, the dervish. We sat down with him on his blanket spread on the sand, with the sun beating on our heads, and then showed him our books. He reads well in Persian and Arabic. Of the other dervishes not one knows how to read. While we were reading with him, most of the dervishes and several Turks and Armenians gathered around and listened. Mohammed read in Genesis, and said that it was *very good*. Another Turk then took it, and read that God *rested* on the seventh day, and remarked angrily that it was infidelity to say that God *rested*. Mr. Wolff tried to explain, but to no purpose, till he said he had given such a book to the Mufti of Jerusalem, who said it was good. This argument silenced him at once. We gave the book of Genesis to Mohammed. While we were sitting with him, Elias, the Maronite, began to beat his mother, because she did not cook his victuals as he wished. Mr. Wolff went to him and reproved him severely for such conduct. The Turks said, *tauntingly*, 'He is a Christian.' We were glad they heard Mr. Wolff's admonition, in which he showed them how inconsistent his behaviour was with the spirit of the gospel. The unnatural man at length relented, and went to his mother and kissed her hand in token of acknowledgment. Towards evening, two Turks had a dispute, which finally led to

blows. Hadgi Ibrahim interfered, and by loud words and a few blows settled the quarrel. After this, the dervish Mustapha became very angry with his ass, and, like Balaam, fell to beating him, and concluded by calling him a *Jew!*”

On the 14th of March, the travellers experienced a strong scorching wind from the south east. The air seemed as if it issued from the mouth of an oven. Many of the Arabs bound a handkerchief over their mouths and noses, as a defence against it. The thermometer in their tent was at 99°. The wind sometimes blew the sand over the hills like snow in a storm.

About 4 o'clock in the afternoon of the 25th of April, they “stood within the gates of Jerusalem.” “The scenes and events of four thousand years,” say they, “rushed upon our minds; events in which Heaven, and Earth, and Hell, had felt the deepest interest. This was the place selected by the Almighty for his dwelling, and here his glory was rendered visible. This was the perfection of beauty and the glory of all lands. Here David sat and tuned his harp, and sung the praises of Jehovah. Hither the tribes came up to worship. Here enraptured prophets saw bright visions of the world above, and received messages from on high for guilty man. Here our Lord and Saviour came in the form of a servant, and groaned, and wept, and poured out his soul unto death, for the redemption of man.”

While resident in this country, Mr. King visited the principal towns, and objects of curiosity in Palestine, resided, some time, for the purpose of acquiring Arabic, at a monastery on Mount Lebanon, and performed various tours in the surrounding regions of Syria, and the ancient Phœnicia.

On the 26th of September, 1825, three years after leaving Paris, Mr. King finally departed from the Holy Land, proceeded to Tarsus, the birth-place of Paul, and from thence travelled by land to Smyrna, where he arrived on the 23d of December, eighty-nine days after leaving his brethren in Syria. At Smyrna he remained till the 15th of June, 1826, in the study of modern Greek, and then passed by land to the sea of Marmora, and across that sea to Constantinople. "While in this city," Mr. King remarks, "I viewed the place from the tower of Pera. The prospect is enchanting. Hills and valleys covered with the habitations of 600,000 souls; the mighty domes and lofty minarets of mosques; the palace of the sultan, encircled with gardens, beautiful as Eden; the waters of the Bosphorus, and the sea of Marmora, dividing the continent of Europe and Asia, and whitened with sails; and lofty mountains, among which is Olympus, with everlasting snows upon his hoary head; all combine to present a view, perhaps unequalled for beauty and grandeur, in any part of the world."

While in Syria, Mr. King published a Farewell Letter, having special reference to the Armenian population. This letter being translated into Turkish, with considerable additions, by Mr. Goodell, found its way to Constantinople, and produced a very great excitement among the hundred thousand Armenians in that capital.

Mr. King returned by water to Smyrna, in July. In August he went on board the United States' ship Erie, bound to Mahon, in Minorca, and touched at Tripoli and Algiers in Africa, on his way to that port. From thence he proceeded

to Spain, France, and England, making some stay in the two latter countries.

To provide for the wants of the Armenian population, Mr. King secured donations in France and England, to the amount of about eight hundred dollars, with which he purchased fonts of Armenian and Arabic types. Among the contributors were some of the most distinguished benefactors and philanthropists of the age. A printing press, for the Armenian language, was forwarded to Malta about the same time.

Mr. King arrived in his native country on the 4th of September, 1827. During six or eight months subsequent, he was employed on agencies, in the northern and middle States, in behalf of the missionary cause. Having been invited by a number of friends, to proceed to Greece in one of the vessels which was to carry out supplies to the afflicted inhabitants of that country, he resigned his professorship of the Oriental languages in Amherst college, and early in June, 1828, embarked at New York, for Greece. He arrived at Paros on the 26th of July, and was cordially welcomed by the Greek government. He soon after resumed his connection with the American Board, and ever since has been actively engaged, chiefly at Athens, in establishing schools, in circulating the Scriptures, school books, and tracts, and diffusing, in various ways the principles of knowledge and Christianity. For several years he had under his control a high school at Athens, which at one time contained nearly two hundred scholars; and his influence on the schools and the education of Greece has been great and salutary. The Greek national education is more truly reli-

gious, more effective in developing moral sentiments and a real independence of thought, than it would have been but for Mr. King; and the national mind of that people has received, through his labors, several fundamental ideas, which must exert great influence upon the future developments of that mind.

It is believed that Greece must ultimately be blessed with religious liberty, notwithstanding the apparent tendency of things has of late years been the other way. Education has gradually been brought under an ecclesiastical influence adverse to its freedom in matters of religion. The Greek Catechism having been forced into the schools, Mr. King was obliged to retire from all immediate connection with them. The ecclesiastical influence was strikingly apparent in the Constitution adopted by the Greeks in the year 1844, which forbids proselyting, and has subjected Mr. King to the trial of persecution for righteousness' sake.

Soon after the adoption of the Constitution, Mr. King was charged in the newspapers at Athens, with an attempt at proselytism; and the charge was soon followed by the allegation, that he had uttered impious and injurious language respecting the Virgin Mary. Mr. King prepared and published a small volume, defending himself from the charge, by quoting at considerable length the sentiments of Epiphanius, Chrysostom, Clemens, and others, names held in the highest esteem by the Greeks, and showing that their belief accorded with his own. This volume he sent to the most distinguished men in the Greek nation, civil and ecclesiastical, and it made a strong impression. Several persons of distinction gave their voice in

its favor. The Greek Synod, however, denounced the book, and demanded of the government his prosecution for proselytism. The book was also denounced by the "Great Church" at Constantinople. Soon after, he was assaulted by a fanatical Greek in the streets of Athens, with the intent to do him injury, if not to take his life, but a soldier interfered and delivered him.

The case came to a trial in the civil courts, first, whether the charges against him were open to a legal prosecution. It was carried at length to the Areopagus, in April, 1846. He thus wrote in May;—

"My two lawyers, Paul Calligas and Spyridon Triantaphylles, spoke well. After them I asked permission of the President of the court, Mr. Clonaris, to speak. He replied, you have your lawyers. But, said I, I have a word also. Say on, said he. So I commenced and continued to speak for fifteen or twenty minutes, in the midst of repeated interruptions on the part of the President, who finally, just as I had reached the subject of images, silenced me altogether. Seeing that it was impossible for me to proceed any further, without exposing myself to be put under arrest, I ceased. And I have since thought that it was providential, in order to save me from the ill treatment which I might have received, had I finished all I had to say on the subject of images and transubstantiation.

"I am told that the most distinguished lawyers of Athens, who were present at my trial, have expressed their opinion that there is no cause of accusation against me.

"Yesterday the decision of the court of the

Areopagus was given against me. So now I must be tried before the criminal court, where all thieves and robbers and murderers are tried. I shall be tried, I suppose, by a jury; but what jury will have independence enough to declare me innocent, after the Holy Synod has declared me guilty of blasphemy, and after three courts have found cause of complaint against me?

“My trial is to be at Syra, July 22, just one year from the time I began to distribute the little book called my ‘Defence.’ If I am condemned, I suppose I shall on that day, be imprisoned at Syra. My two lawyers, Paul Calligas and Spyridon Triantaphylles, will be there to plead my cause; which, I believe, they have conscientiously undertaken to defend. Their pleas before the Areopagus, already published, have produced and are producing, a happy influence in my favor, as I have reason to believe. And not only did they come out boldly before the Areopagus, but in private circles they plead my cause, I believe, and have done much to convince many persons that it is just. At Syra they will probably enter into the subject of my trial much more theologically than they could before the Areopagus; for this tribunal is confined principally to the right application of the law, but does not enter into the subject, to determine whether the person accused is guilty, or not, of the charge brought against him. Should the jury decide in my favor, and against the Holy Synod, it will be wonderful, and will have great influence, I doubt not, in opening the eyes of many to see the real situation of this church.

“A judge here, and representative of the na-

tion, said to my wife, day before yesterday, that he thought I might be in great danger at Syra, when I go there to be tried; that the people might arise and stone me; and that it would be better to have the case put off, if I could, for a while, &c. But I trust the Lord, who has thus far protected me, will protect me to the end. My duty is clear; and that is, to go to Syra and take what comes. I have not been wholly without apprehensions as to what may befall me there; still I do not feel very anxious with regard to it. The hand of the Lord has appeared to be so manifest in all this affair, from the commencement to the present time, that I feel that I shall live, and in some way or other gain the victory."

The result of this prosecution is not known when this edition goes to the press.

The degree of Doctor in Divinity has been conferred on Mr. King by one of the colleges of New England.

We close this brief memoir with a letter from Mr. King, as honorable to his feelings as it was gratifying to the gentlemen connected with the Society to whom it was addressed.

"Tenos, (Greece,) 27th May, 1830.

"In the year of 1816, as near as I recollect, just as I was about finishing my collegiate studies, I received from the American Education Society a donation of fifty dollars; and though it was not expected, as I suppose, by the Society, that I should ever refund that sum, and though, since the refunding system has been adopted, it is the custom of the Society, as I am informed, with regard to that system, to make an exception in

favor of missionaries, still I am happy to return the above mentioned sum, with the interest, which, by this time nearly equals the principal; and I therefore send you *one hundred* dollars, which I wish you to accept as payment for the fifty dollars which I received about fourteen years ago. It is not long, since I have had it in my power to remit this sum, which I hope may be the means of aiding some one more worthy than myself."

HUMPHREY DAVY.

HUMPHREY DAVY was born at Penzance, in Cornwall, England, in 1778. His father followed the profession of a carver in wood, in that town, where many of his performances are still to be seen in the houses of the inhabitants. All that we are told of Davy's school education is, that he was taught the rudiments of classical learning at a seminary in Truro. He was then placed by his father, with an apothecary and surgeon in his native place; but instead of attending to his profession, he spent his time either in rambling about the country or in experimenting in his master's garret, sometimes to the no small danger of the whole establishment. The physician and Davy at last agreed to part.

When rather more than fourteen years old, he was placed as pupil with another surgeon residing in Penzance; but it does not appear that his second master had much more success than his first, in attempting to give him a liking for the medical profession. The future philosopher, however, had already begun to devote himself, of his own accord, to those sciences in which he afterwards so greatly distinguished himself; and proceeding upon a plan of study which he had laid down for himself, he had, by the time he was eighteen years old, obtained a thorough knowledge of the rudiments of natural philosophy and chemistry, as well as made some proficiency in botany, anatomy and geome-

try. The subject of metaphysics, it is stated, was also embraced in his reading at this period.

But chemistry was the science to which, of all others, he gave himself with the greatest ardor; and, even in this early stage of his researches, he seems to have looked forward to reputation from his labors in this department. "How often," said he, in the latter period of his life, "have I wandered about those rocks in search after new minerals, and when tired sat down upon those crags, and exercised my fancy in anticipations of future renown." The peculiar features of this part of the country doubtless contributed not a little to give his genius the direction it took. The mineral riches concealed under the soil formed alone a world of curious investigation. The rocky coast presented a geological structure of inexhaustible interest. Even the various productions cast ashore by the sea were continually affording new materials of examination to his inquisitive and reflecting mind. The first original experiment, it is related, in which he engaged, had for its object to ascertain the nature of the air contained in the bladders of sea-weed. At this time he had no other laboratory than what he contrived to furnish for himself, by the assistance of his master's vials and gallipots, the pots and pans used in the kitchen, and such other utensils as accident threw in his way. These he converted with great ingenuity to his own purposes. On one occasion, however, he accounted himself particularly fortunate in a prize which he made. This was a case of surgical instruments with which he was presented by the surgeon of a French vessel that had been wrecked on the coast, to whom he had done some kind

offices. Examining his treasure with eagerness, Davy soon perceived the valuable aid he might derive in his philosophical experiments from some of the articles. One of the principal of them was, in no long time, converted into a tolerable air-pump. The proper use of the instruments was, of course, as little thought of by their new possessor as that of his master's gallipots which he was wont to carry up to his garret. Davy's subsequent success as an experimentalist, was owing in no small degree to the necessity he was placed under, in his earlier researches, of exercising his skill and ingenuity in this manner. "Had he," remarks his biographer, "been supplied, in the commencement of his career, with all those appliances, which he enjoyed at a later period, it is more than probable that he might have never acquired that wonderful tact of manipulation, that ability of suggesting expedients, and of contriving apparatus so as to meet and surmount the difficulties, which must constantly arise during the progress of the philosopher through the unbeaten tracks and unexplored regions of science. In this art, Davy certainly stands unrivalled; and, like his prototype, Scheele, he was unquestionably indebted for his address to the circumstances which have been alluded to. There was never, perhaps, a more striking exemplification of the adage, that 'necessity is the parent of invention.'"

Davy first pursued his chemical studies without teacher or guide, in the manner which has been described, and aided only by the most scanty and rude apparatus. When still a lad, however, he was fortunate in becoming acquainted with Mr. Gregory Watt, son of the celebrated James Watt.

This gentleman having come to reside at Penzance for the benefit of his health, lodged at Mrs. Davy's, and soon discovered the talent of her son. The scientific knowledge of Mr. Watt gave an accurate direction to the studies of the young chemist, and excited him to a systematic perseverance in his favorite pursuit. He was also providentially introduced to the notice of Mr. Davies Gilbert, since president of the Royal Society.

The boy, we are told, was leaning on the gate of his father's house, when Mr. Gilbert passed, accompanied by some friends, one of whom remarked, that there was young Davy, who was so much attached to chemistry. The mention of chemistry immediately fixed Mr. Gilbert's attention; he entered into conversation with the young man, and becoming speedily convinced of his extraordinary talents and acquirements, offered him the use of his library, and whatever other assistance he might require in the pursuit of his studies. Mr. Gilbert and Mr. Watt, soon after this, introduced Davy to the celebrated Dr. Beddoes, who had just established at Bristol what he called his Pneumatic Institution for investigating the medical properties of the different gases. Davy, who was now in his nineteenth year, had for some time been thinking of proceeding to Edinburgh, in order to pursue a regular course of medical education; but Dr. Beddoes, who had been greatly struck by different proofs which he had given of his talents, and especially by an essay in which he propounded an original theory of light and heat, having offered him the superintendence of his new institution, he at once accepted the invitation. "The young philosopher," remarks a

biographer, "was now fairly entered on his proper path, and from this period we may consider him as having escaped from the disadvantages of his early lot. But it was while he was yet poor and unknown, that he made those acquirements which both obtained for him the notice of his efficient patrons, and fitted him for the situation in which they placed him. His having attracted the attention of Mr. Gilbert, as he stood at his father's gate, may be called a happy incident in the providence of God; but it was one that never would have happened had it not been for the proficiency he had already made in science by his own endeavors. He had this opportunity of emerging from obscurity; but had he not previously labored in the cultivation of his mind, it would have been no opportunity at all."

The experiments conducted by Davy, and under his direction, at the Bristol institution, were soon rewarded by important results; and of these Davy, when he had just completed his twenty-first year, published an account, under the title of "Researches, chemical and philosophical, chiefly concerning nitrous oxide, and its respiration." In this publication, the singularly intoxicating effects produced by the breathing of nitrous oxide, were first announced. This annunciation excited considerable sensation in the scientific world, and at once made Davy generally known as a most ingenious and philosophic experimentalist. He was, in consequence, soon after its appearance, invited to fill the chemical chair of the Royal Institution, then newly established.

When he commenced his lectures, he was scarcely twenty-two years of age; but never

was success in such an undertaking more marked and gratifying. He soon saw his lecture-rooms crowded, day after day, by all that was most distinguished in the rank and intellect of the metropolis; and his striking and beautiful elucidations of every subject that came under his review, riveted often to breathlessness the attention of his splendid auditory. The year after his appointment to this situation he was elected professor of chemistry to the Board of Agriculture; and he greatly distinguished himself by the lectures which, for ten successive sessions, he delivered in this character. They were published in 1813, at the request of the Board.

In 1806, he was chosen to deliver the Bakerian lecture before that Society, and he performed the same task for several successive years. Many of his most brilliant discoveries were announced in these discourses. In 1812, he received the honor of knighthood from the prince regent, being the first person on whom his royal highness conferred that dignity. Two days after, he married a lady of considerable fortune. In 1813, he was elected a corresponding member of the French Institute. He was created a baronet in 1818. In 1820, he was chosen a foreign associate of the Royal Academy of Sciences at Paris, on the death of the illustrious Watt. He had been for some time secretary of the Royal Society; and on the death of Sir Joseph Banks, in 1820, he was, by an unanimous vote, raised to the presidency of that learned body, — an office which he held till he was obliged to retire on account of ill health, in 1827, when his friend and first patron, Mr. Davies Gilbert, was chosen to succeed him. Little, we

may suppose, did either of the two anticipate, when they first met, thirty years before, at the gate of Mrs. Davy, that they would thus stand successively, and in this order, at the head of the most distinguished scientific association in England.

The first memoir by Davy, which was read before the Royal Society, was presented by him in 1801. It announced a new theory, which is now generally received, of the galvanic influence, or the extraordinary effect produced by two metals in contact with each other, when applied to the muscle even of a dead animal, which the Italian professor, Galvani, had discovered. It was supposed, both by Galvani and his countryman Volta, — who also distinguished himself in the investigation of this curious subject, — that the effect in question was an electrical phenomenon, whence galvanism used to be called animal electricity; but Davy showed, by many ingenious experiments, that, in order to effect it, the metals in fact underwent certain chemical changes. Indeed, he proved that the effect followed when only one metal was employed, provided the requisite change was by any means brought about on it, as, for example, by the interposition, between two plates of it, of a fluid calculated to act upon its surface in a certain manner. In his Bakerian lecture for 1806, he carried the examination of this subject to a much greater length, and astonished the scientific world by the announcement of a multitude of the most extraordinary results, from the application of the galvanic energy to the composition and decomposition of various chemical substances. From these experiments he arrived at the conclusion, that the

power called chemical affinity was in truth identical with that of electricity. Hence the creation of a new science, now commonly known by the name of electro-chemistry, being that which regards the supposed action of electricity in the production of chemical changes. The discourse, in which these discoveries were unfolded, was crowned by the French Institute with their first prize, by a decision which reflects immortal honor upon that illustrious body; who thus forgot not only all feelings of mutual jealousy, but even the peculiar and extraordinary hostility produced by the war which then raged between the two countries, in their admiration of genius and their zeal for the interests of philosophy.

In the interesting and extraordinary nature of its announcements, the Bakerian lecture of 1807 was as splendid a production as that of the former year. There are certain substances, as the reader is aware, known in chemistry by the name of alkalies, of which potash and soda are the principal. These substances chemists had, hitherto in vain, exhausted their ingenuity and the resources of their art in endeavoring to decompose. The only substance possessing alkaline properties, the composition of which had been ascertained, was ammonia, which is a gas, and is therefore called a volatile alkali; and this having been found to be a compound of certain proportions of hydrogen and nitrogen, an opinion generally prevailed that hydrogen would be found to be also a chief ingredient of the *fixed* alkalies. Davy determined, if possible, to ascertain this point, and engaged in the investigation with great hopes of success, from the surpassing powers of decomposition which he

had found to belong to his new agent, the galvanic influence. The manner in which he pursued this subject is among the most interesting specimens of scientific investigation on record.

One of the most important of the laws of galvanic decomposition, which he had previously discovered, was, that when any substance was subjected to this species of action, its oxygen (an ingredient which nearly all substances contain) was developed at what is called the positive end or pole of the current of electricity, while, whenever any hydrogen or inflammable matter was present, it uniformly appeared at the opposite or negative pole. Proceeding upon this principle, therefore, Davy commenced his work with a fixed alkali; and at first submitted it, dissolved in water, to the galvanic action. The result, however, was, that the water alone was decomposed, nothing being disengaged by the experiment but oxygen and hydrogen, the ingredients of that fluid, which passed off as usual, the former at the positive, the latter at the negative pole. In his subsequent experiments, therefore, Davy proceeded without water, employing potash in a state of fusion; and having guarded the process from every other disturbing cause that presented itself, by a variety of ingenious arrangements, he had at last the satisfaction of seeing the oxygen gas developed, as before, at the positively electrified surface of the alkali, while, at the same time, on the other side, small globules of matter were disengaged, having all the appearances of a metal. The long agitated question was now determined; the base of the fixed alkalies was clearly metallic. To ascertain the qualities of the metallic residue which he had

thus obtained from the potash, was Davy's next object. From its great attraction for oxygen, it almost immediately, when exposed to the atmosphere, became an alkali again, by uniting with that ingredient; and, at first, it seemed on this account hardly possible to obtain a sufficient quantity of it for examination. But at last Davy thought of pouring over it a thin coating of the mineral fluid called naphtha, which both preserved it from communication with the air, and, being transparent, allowed it to be examined.

But there was another course of investigation, into which this philosopher entered, which resulted in a practical discovery of high importance. This was the contrivance of the *safety-lamp*. In coal-mines, frequent explosions had been caused by the *fire-damp*, or inflammable gas, which is found in many parts of them. By a series of experiments, Davy found that this dangerous gas, which was known to be nothing more than the hydrogen of the chemists, had its explosive tendencies very much restrained by being mixed with a small quantity of carbonic acid and nitrogen (the ingredients which along with oxygen form atmospheric air;) and that, moreover, if it did explode, when so mixed, the explosion would not pass through apertures less than one seventh of an inch in diameter. Proceeding therefore upon these ascertained facts, he contrived his *safety-lamp*. It consists of a small light fixed in a cylindrical vessel, which is everywhere air-tight except in the bottom, and which is formed of fine wire-gauze, and in the upper part there is a chimney for carrying off the foul air. The air admitted through the gauze suffices to keep up the flame, which in

its combustion produces enough of carbonic acid and nitrogen to prevent the fire-damp, when inflamed within the cylinder, from communicating the explosion to that which is without. The heretofore destructive element, thus caught and detained, is therefore not only rendered harmless, but actually itself helps to furnish the miner with light, the whole of the interior of the cylinder being filled with a steady green flame, arising from the combustion of the hydrogen, which has been admitted in contact with the heat, but cannot carry back the inflammation it has received to the general volume without. Armed with this admirable protection, therefore, the miner advances without risk, and with sufficient light to enable him to work, into recesses which formerly he would not have dared to enter. The safety-lamp has already been the means of saving many lives, and has enabled extensive mines or portions of mines to be wrought, which, but for its assistance, must have remained unproductive. The coal-owners of the northern districts, in 1817, invited Sir Humphrey Davy to a public dinner, and presented him with a service of plate of the value of £2,000, in testimony of what they felt to be the merit of this invention.

“The transformations of chemistry,” remarks Mr. John F. W. Herschel, “by which we are enabled to convert the most apparently useless materials into important objects in the arts, are opening up to us every day sources of wealth and convenience, of which former ages had no idea, and which have been pure gifts of science to man. Every department of art has felt their influence, and new instances are continually occurring of the

unlimited resources which this wonderful science develops in the most sterile parts of nature. Not to mention the impulse which its progress has given to a host of other sciences, what strange and unexpected results has it not brought to light in its application to some of the most common objects! Who, for instance, would have conceived that linen rags were capable of producing *more than their own weight* of sugar, by the simple agency of one of the cheapest and most abundant acids? — that dry bones could be a magazine of nutriment, capable of preservation for years, and ready to yield up their sustenance in the form best adapted to the support of life, on the application of that powerful agent, steam, which enters so largely into all our processes, or of an acid at once cheap and durable? — that saw-dust is susceptible of conversion into a substance bearing no remote analogy to bread; and though certainly less palatable than that of flour, yet in no way disagreeable, and is both wholesome and digestible, as well as highly nutritive? What economy in all processes where chemical agents are employed, is introduced by the exact knowledge of the proportions in which natural elements unite, and their mutual powers of displacing each other! What perfection in all the arts where fire is employed, either in its more violent applications (as, for instance, in the smelting of metals by the introduction of well-adapted fluxes, whereby we obtain the whole product of the ore in its purest state), or in its milder forms, as in sugar-refining, the whole modern practice of which depends on a curious and delicate remark of a late eminent scientific chemist on the nice adjustment of temperature at which the crystalliza-

tion of syrup takes place; and a thousand other arts, which it would be tedious to mention."

We have not space to enumerate many other splendid discoveries of this great philosopher. In 1827, his health had become so poor, that he found it necessary to seek relaxation from his engagements, and accordingly resigned the presidency of the Royal Society. Immediately after this he proceeded to the continent. During his absence from England, he still continued his chemical researches, the results of which he communicated in several papers to the Royal Society. He also, notwithstanding his increasing weakness and sufferings, employed his leisure in literary compositions on other subjects, an evidence of which appeared in his "Salmonia," a treatise on fly-fishing, which he published in 1828. This little book is full of just and pleasing descriptions of some of the phenomena of nature, and is imbued with an amiable and contented spirit. His active mind, indeed, continued, as it would seem, to exert itself to the last, almost with as unwearied ardor as ever. Besides the volume which we have just mentioned, another work, entitled "The Last Days of a Philosopher," which he also wrote during this period, has been given to the world since his death. He died at Geneva, on the 30th of May, 1829. He had only arrived in that city the day before; and having been attacked by an apoplexy after he had gone to bed, expired at an early hour in the morning.

"No better evidence," says his biographer, "can be desired than that which we have in the history of Davy, that a long life is not necessary to enable an individual to make extraordinary

progress in any intellectual pursuit to which he will devote himself with all his heart and strength. This eminent person was indeed early in the arena where he won his distinction, and the fact, as we have already remarked, is a proof how diligently he must have exercised his mental faculties during the few years that elapsed between his boyhood and his first appearance before the public. Although during this time he had scarcely any one to guide his studies, or even to cheer him onward, yet, notwithstanding that, he had taken his place among the known chemists of the age, almost before he was twenty-one. The whole of his brilliant career in that character, embracing so many experiments, so many literary productions, and so many splendid and valuable discoveries, extended only over a space of not quite thirty years. He had not completed his fifty-first year when he died. Nor was Davy merely a man of science. His general acquirements were diversified and extensive. He was familiar with the principal continental languages, and wrote his own with an eloquence not usually found in scientific works. All his writings, indeed, show the scholar and the lover of elegant literature, as well as the ingenious and accomplished philosopher. Like almost all those who have greatly distinguished themselves in the world of intellect, he selected his one favorite path, and persevered in it with great energy; while he nevertheless revered wisdom and genius in all their manifestations."

Of the religious opinions and feelings of Sir Humphrey Davy we know very little. The following striking sentence is found in one of his moral works. "I envy," says he, "no quality of

the mind or intellect in others ; not genius, power, wit, or fancy ; but if I could choose what would be most delightful, and I believe most useful to me, I should prefer *a firm religious belief* to every other blessing."

ADAM CLARKE.

WE suppose that no one will deny to Dr. Clarke the claim of great and multifarious learning, and of most patient and unwearied industry in whatever he undertook. The soundness of his judgment, the clearness of his perceptions, and the strength of his reasoning powers are in very high estimation. The truth of some of the religious doctrines which he maintained, may be questioned in many of the divisions of the Christian church; yet the high characteristics of energy, perseverance, supreme devotion to one great object, all will cheerfully unite in awarding to him. He was unquestionably the most learned man ever connected with the Methodist church.

ADAM CLARKE was born at Cootinagtug, about thirty miles from the city of Londonderry, Ireland, in the year 1760. His father was a member of a respectable English family. His mother was of Scottish descent. Reduced fortunes were the reasons of their removing to Ireland. His parents were pious and intelligent people. As soon as he could well be taught anything, he was instructed to fear and love the God and Father of all, and to worship him in spirit and in truth, through the only Mediator.

The religious principles, thus early implanted, expanded and strengthened as he advanced in years. His father being diligently engaged from day to day in his occupation as a farmer, had not

perhaps discerned in his son any peculiar predilection for learning. Had this been the case, it is very probable that he would not have cherished it, but that he would have judged it most prudent to turn the attention of his son towards trade and commerce. Though he was able to have imparted to him a sound and mature education, he withheld the boon in a great measure, partly from his circumstances and prospects in life, and partly because he foresaw that his agricultural cares would too frequently engage his time as well as divide the attention of his pupil to too great a degree to anticipate any early proficiency in learning.

Having designed his son for trade, Mr. Clarke placed him under the care of Mr. Bennett, an extensive linen-manufacturer, in the neighborhood. The lad had either no power or no disposition to throw any obstacles in the way of a connection which his father evidently desired, and to which, perhaps, he himself thought he should be able to reconcile himself. But whether he betrayed his aversion to manual labor, or whether he discovered his strong desire for study, it was soon perceived that he was very much dissatisfied. Accordingly a separation took place between him and his master, alike honorable to all the parties concerned. His love of reading, at the age of nine years, was intense. To gratify this passion, he would undergo any privations and submit to any hardships. The pence he obtained for good behavior and extra work, he never expended for toys and sweetmeats, but carefully preserved them for the purchase of books.

Mr. Bennett continued till his death a steady

friend and correspondent of Mr. Clarke. About this time, the founder of Methodism, the Rev. John Wesley, was active in his inquiries after pious and promising young men to assist him in the work of the ministry. Adam Clarke was pointed out to him as a youth of promise, by an individual who had become acquainted with his talents. Mr. Wesley had sometime before founded a school at Kingswood, near Bristol, for the education of the sons of preachers. After a short correspondence, young Clarke was sent to this school. Unhappily, the treatment which he received from the master was harsh and violent. Some have supposed it to have arisen out of a determination on the part of the pupil to apply himself to the acquisition of more extensive knowledge than the system or resources of that seminary contemplated. It was during this trying period that he laid the foundation of that profound acquaintance with the Hebrew language, to which he ultimately attained. At an early age, he took for his motto, "through desire, a man, having separated himself, seeketh and intermeddleth with all wisdom." Mr. Wesley soon after arrived at Kingswood, and the pains and fears of Mr. Clarke were dispersed. That acute observer perceived and estimated the excellence of his persecuted protege, and in a short time adjudged him to be worthy to undertake the labors of an evangelical itinerancy. Mr. Clarke entered on his public work in 1782. Several circumstances combined to render him a preacher of the highest popularity among the Methodists, and of the greatest usefulness in extending the influence and exalting the character of that denomination.

At the age of twenty-two years, he had upon his hands the study of the Latin, Greek, Hebrew and French languages, but as he was obliged to travel several miles every day, and preached on an average thirty days in every month, he did not make much progress. About this time, he read four volumes of Church History while riding on horseback. Owing to the injudicious conduct of an acquaintance, Dr. Clarke relinquished his studies for the space of four years, but was induced by Mr. John Wesley to resume them. During eleven months, in the year 1784, he preached five hundred and sixty-eight sermons, and travelled many hundreds of miles. This was an average of nearly two sermons every day. He also, during this time, made himself master of the science of chemistry. His attention was first directed to biblical criticism by the loan, from a friend, of a Hebrew folio Bible, with various readings, which he carefully studied. In 1786, he recommenced the study of the Greek and Latin and the Septuagint version of the Scriptures. He had no teacher, and his stock of books was small, yet he read and collated the original texts in the Polyglot, particularly the Hebrew, Samaritan, Chaldee, Syriac, Vulgate and Septuagint.

Dr. Clarke was an example of temperance and persevering industry. "Rising early, and late taking rest, avoiding all visits of ceremony and journeys of mere pleasure and recreation, restricting himself to the most wholesome diet and temperate beverage, not allowing unnecessary intrusion on his time;—these were among the means by which he at once performed so much important duty, acquired such a store of knowl-

edge, and retained so unusual a portion of sound and vigorous health." Dr. Clarke applied himself to the study of languages for the purpose of assisting the British and Foreign Bible Society.

In the year 1795, he made an entire new translation of the New Testament from the Greek. His principal work is his Commentary on the Old and New Testaments. He commenced this great undertaking at the age of twenty-six, and spent forty years of close and unremitting study upon it. He literally translated every word, comparing the whole with all the *ancient* versions and the most important of the *modern*, and collated all with the various readings of the most eminent biblical scholars, and illustrated the whole by quotations from ancient authors, Rabbinical, Greek, Roman, and Asiatic. In this arduous labor he had no assistant, nor even a week's help from an amanuensis; on the contrary, he performed during the whole of this period, with the utmost fidelity, the arduous labors of a Methodist preacher. Whatever may be said of its doctrines, its criticisms, and its interpretations, no one can deny that it exhibits an uncommon display of ingenuity and industry, and a vast accumulation of learning.

Dr. Clarke died of the Asiatic cholera, at Bayswater, August 25, 1832. He left his residence the day previous to preach at Bayswater, on the Sabbath. He was attacked in the night, and died at eleven the next day, at the age of seventy-two.

COUNT RUMFORD.

BENJAMIN THOMPSON, the distinguished Count Rumford, gave an early promise of his future elevation, although it was little heeded by those with whom he associated. His mind was constantly led away from the pursuits which were assigned to him, to others more congenial to his aspirations. He was born at Woburn, in Essex county, Mass., in 1752, of humble parents, no way distinguished from the laboring community which constituted the bulk of the population of agricultural villages before the Revolution. His father died during his infancy, and his relative and guardian afforded him the ordinary advantages of a common country school. His tastes soon began to show themselves, and the usual sports of boyhood were exchanged for the use of mechanic tools, and drafts of rather wild and impracticable models of perpetual motion. His zeal and perseverance in these fruitless occupations drew forth the surprise and, for the most part, the condemnation of those around him. But although he did not pursue with ardor the thrifty occupations of common industry, he never gave his time to vicious pursuits and the calls of pleasure. The anxiety of his mother and friends was only that he would not be able to learn any craft by which his livelihood would be secured.

At thirteen years of age, he was placed as an apprentice in charge of Mr. Appleton, a merchant of Salem, in whose family there still remains a

relic, the name of "Benjamin Thompson," neatly cut on the frame of the shop-slate. His success in this clerkship was not encouraging; he hankered for the tools of the workshop and musical instruments, of which he had become fond. The fault of guardians and parents then, as now, was to neglect the natural bent of the youthful mind, and insist that the occupation assigned to young persons should be selected by considerations which have nothing to do with their natural bias. Young Thompson's apprenticeship was of short duration, and he returned to live with his mother, at Woburn, without having acquired a regular employment.

His self-reliance was his great characteristic. He seems never to have expected to avoid difficulties, and of course never sank in despondency. He had now become old enough to dwell with anxiety upon his future course in life, and although no flattering opening presented itself, devoted himself to the acquisition of useful knowledge. At about seventeen years of age, he attended lectures on natural philosophy at Cambridge, nothing deterred by a walk of nine miles from Woburn to Cambridge. His companion was another self-educated individual, Mr. (afterwards Col.) Loammi Baldwin, of Woburn, a distinguished engineer. His punctual attendance on these lectures laid the foundation of his extraordinary acquirements in the application of philosophical principles to the common wants of life.

Soon after this period, he commenced the business of teacher of the town school at Bradford, in the southern part of Essex county; and at the age of nineteen we find him engaged in the

same employment, in the town of Concord, N. H., where his fine personal appearance, and the ease of manner which he had acquired in his intercourse with educated men, recommended him to the favor of a lady of large property, the widow of Col. Rolfe, of Concord, which lady he married at this early age.

He was always of an ambitious turn, and in his intercourse with the world lost no opportunities of personal advancement, and by his new position in society he was enabled to make the acquaintance of public men, and procure the appointment of major of militia. But at the period of the commencement of the American Revolution, Major Thompson was thought to favor the royal cause. This imputation was a manifest injustice, as his conduct at that time and subsequently proves. His aspiring temper had led him to form an acquaintance with those who were above his condition in life, and these persons were principally British officers, in civil and military situations. The popular feeling at that time was particularly strong, and prejudices were easily engendered, and Major Thompson's protestations were unavailing to shield him from popular odium. It is much to the credit of his patriotism, that this unmerited treatment did not readily wean him from the American side of the struggle. He turned out with those who encountered the British troops at Lexington, and afterwards went into camp with the troops at Cambridge. He also sought to clear himself from suspicion by the action of a court of inquiry, who decided entirely in his favor, and pronounced him a friend of liberty.

At this time he turned his attention, with his

usual ardor, to military studies, and tried hard to obtain a commission under Congress in a company of engineers about being raised, where his talents and courage would, no doubt, have done honor to the appointment. But his efforts were unsuccessful. The appointment was given to a young man, the son of a distinguished engineer, Major Gridley, who had served in the old French war, and who was afterwards wounded at the battle of Bunker Hill, where he had the day before skillfully laid out the fortifications. At this engagement, his son commanded the only American artillery, in a manner for which he has been severely censured. Mr. Thompson met this disappointment in no very placable spirit, and having lost his wife by death, he embarked for England, to better his fortunes. His acquaintance with the English and royalist party enabled him to be the bearer of despatches to the English government. He was not slow to avail himself of his introduction to persons in power. Every person bringing intelligence from the revolted colonies was welcomed, and especially one who united so much intelligence and practical acquaintance with the detail of measures at the theatre of affairs, was cordially received. His introduction to men in power was of great service to him, and he soon was appointed to a secretaryship in the bureau of American affairs, in the colonial department.

Now began his prosperous life, when he found himself in a situation which drew forth his latent energy and talent. To these he added a most persevering industry and entire confidence in himself. His preparations for every undertaking were always fully made, and he seized upon op-

portunity with avidity. His name became known as a learned man and successful philosopher. He was chosen into the Royal Society, and contributed largely to their memoirs. The studies of that age were of a military character, and Mr. Thompson was distinguished in that department. At the age of thirty, he was made a colonel in the British service. His regiment was sent to this country just at the close of the war, and Col. Thompson gave evidence of his peculiar fitness for command, in the discipline of his troops. A few skirmishes at the south was all the service they were called to perform, and peace speedily caused their return; so that Col. Thompson, although he appeared at the very first and very last of the contest, was exempt from its material and more important struggle. He returned to England on half pay, and was knighted in 1784.

His military ardor was yet uncooled, and he left England to offer his services to the emperor of Austria, in his war against the Turks. On his way to Vienna, he accidentally encountered the future king of Bavaria, at a military review of his troops, at Manheim. His introduction was opportune, and the Duc de Deuxponts was inspired with confidence in his new acquaintance, by his conversation and fine personal appearance. He was in want of a person possessing the very talent Col. Thompson displayed, which caused his invitation to court, and his appointment to offices of trust and responsibility.

His first duty was to reform the discipline of the army, which he performed in a bold and satisfactory manner, so that order was established, economy promoted, and contentment prevailed.

Without relaxing discipline, he abolished useless formalities among the military, and employed the time thus gained, in teaching them and their children the rudiments of common learning; and here the system of common schools, as it prevails in New England, triumphed, as it has often done. Col. Thompson owed much of his success, to his familiarity with the town schools of his native land, which he had practically acquired by teaching. He established, besides the elementary schools of common learning, schools for *employment*, by which the soldier became no longer a drone, and mechanical automaton, but performed an amount of labor on the public works and highways, which contributed somewhat to repay his support by the State. An instance of his characteristic economy appeared in his appropriating the paper used to teach writing in the military schools, to the manufacture of cartridges by the soldiery.

Col. Thompson's success with the military, encouraged him to extend his philanthropy to the mendicants, which overran the kingdom of Bavaria. They had long been a nuisance which the boldest reformers had given up in despair. They were so numerous, so bold, and so thoroughly lazy, that the scheme of making them useful members of society was considered most chimerical and absurd. They audaciously levied contributions on the public, and their systematized exactions were the terror of the bakers, butchers, brewers and shopkeepers of Munich and other cities, who usually compounded with them for a stipulated sum, or sort of black mail. The power of these mendicants was so formidable, that four regiments of cavalry were cantoned in different

parts of Bavaria, to overawe and control them, if necessary. All the arrangements were systematically appointed. A large building was provided, containing the necessary appliances for in-door labor of every mechanical kind, and as machinery had not superseded manual labor in so great a degree as at present, abundant employment for all, both old and young, was found in the various workshops, and in the manufacture of articles of wood, iron, leather, wool and cotton.

It might well require the energies of a man of genius, to convert men, women and children, born beggars, into industrious artisans, and not only to abate a nuisance, but confer a positive benefit upon the depressed and outcast authors of it. Yet such was the miracle wrought by the energy, the philanthropy and the perseverance of Col. Thompson. His institution became celebrated as a model throughout Europe. He secured to himself a reward, in the grateful acknowledgements of those who were benefited by his labors, which he highly appreciated, and which rarely falls to the lot of philanthropists. This was the result of being governed in his labors by the law of kindness. Firmness, promptitude, and energy, characterized his movements, but harshness never. The sturdy beggars were arrested in the streets, by the civil officers; they were informed that begging was prohibited in Bavaria, and that employment, food and clothing would be furnished to all who needed them, and that those who were unable to work should be sent to the hospital. The well disposed eagerly embraced the opportunity offered, and the refractory saw no chance of resistance or escape. In the end, all were satisfied. Two principles, practically

applied, contributed mainly to his success. In the first place, he averred that since goodness and happiness were acknowledged to be inseparable, it was best to begin by making the poor *happy*, and then expect them to become *virtuous*; whereas the common fault was, to endeavor to instil lessons of virtue first, and expect the happiness to follow. In the second place, he roused their pride and encouraged their self-respect, by proclaiming that alms-giving was abolished, and caused it to be inscribed in large letters over the door of his institution, NO ALMS RECEIVED HERE. The pauperism of Bavaria soon lost its worst features, and although in all countries there must be provision for the poor, and the poor are always with us, appealing to our feelings of humanity and sympathy, yet by judicious arrangements, like those of Thompson, the debasing characteristics of systematic pauperism can be avoided. Col. Thompson speaks with enthusiasm of his success in accomplishing his plans. He describes with animation his visit to the workhouse at Munich, after an absence of fifteen months, and speaks of the fête he gave to nearly two thousand of the inmates, in the public gardens, of their solicitude and prayers for him while dangerously sick, and asks if any earthly reward can be greater than the satisfaction he received.

But substantial and pecuniary recompense was not wanting. So great were the benefits conferred on the state, and so various were the improvements he caused to be followed out, that the sovereign of Bavaria conferred upon him many appropriate honors. He appointed him his aide-camp, chamberlain, member of council, and

lieutenant general of his armies. He had been knighted in England, and as the laws of the Bavarian Electorate did not permit his receiving the same honor there, others were procured for him in Poland and Italy. During the temporary occupancy, by the Elector of Bavaria, of the place of Vicar of the Holy Roman Empire, his patron created him a count by the name of Rumford, in honor of Concord, New Hampshire, whose original name was Rumford.

He was now at the zenith of his fame, and was much employed by his writings, in diffusing the knowledge of his plans and his success throughout the world. Much of his philosophical writing, which was highly popular, and free from technicalities, was on the subject of heat, and laborious and expensive experiments were instituted, to ascertain the best mode by which a saving of fuel could be effected by the poor, in cooking their food and warming their houses. By his own statement, it appears that he was enabled, at his establishment, to prepare the food of 1000 persons for $12\frac{1}{2}$ cents' worth of fuel, rating wood at \$6,00 a cord. The ovens, which yet go by his name, are still in constant use, after a trial of fifty years. But the most important blessing he conferred on the poor, as an improvement in their food, was teaching them the value of the potato. Before Count Rumford's philanthropic efforts, the potato was almost an unknown plant, and regarded as a sort of luxury, but in his plan for improving the condition of the military, gardens were established at the barracks, which the soldiers owned as their private property, but were compelled to keep in order, while the produce they raised went

to improve the diet of their families. Count Rumford, by great exertions, succeeded in establishing the culture of this valuable root, and its use at length became general among all classes. Indian corn was another cheap article of food to which he directed the popular attention by his writings, which were enthusiastic as well as intelligible. The following extract from his essay upon food, will show the minuteness with which he entered into detail, and exhibits the curious instance of a great philosopher giving to the world a description of the best method of making hasty-pudding. "In regard to the most advantageous mode of using Indian corn as food, I would strongly recommend a dish made of it, that is in the highest estimation throughout America, and which is really very good and very nourishing. This is called *hasty-pudding*, and is made in the following manner: A quantity of water, proportioned to the quantity of pudding to be made, is put over the fire, in an open iron pot or kettle, and a proper quantity of salt, for seasoning; the salt being previously dissolved in the water, Indian meal is stirred into it, little by little, with a wooden spoon with a long handle, while the water goes on to be heated and made to boil, great care being taken to put in the meal in very small quantities, and by sifting it slowly through the fingers of the left hand, and stirring the water about very briskly at the same time with the wooden spoon in the right hand, to mix the meal with the water in such a manner as to prevent lumps being formed. The meal should be added so slowly, that, when the water is brought to boil, the mass should not be thicker than water-gruel, and half an hour more,

at least, should be employed to add the additional quantity of meal necessary for bringing the pudding to be of the proper consistency, during which time it should be stirred about continually, and kept constantly boiling. The method of determining when the pudding has acquired a proper consistency, is this:—the wooden spoon used for stirring it being placed upright in the kettle, if it falls down, more meal must be added; but if the pudding is sufficiently thick and adhesive to support the spoon in a vertical position, it is declared to be *proof*, and no more meal is added.” He then describes the various additions with which it may be eaten, and cautions his European readers not to be prejudiced against it until they have tried it, “for,” says he, “the universal fondness of Americans for it, proves that it must have some merit; for, in a country which produces all the delicacies of the table in the greatest abundance, it is not to be supposed that a *whole nation* should have a taste so depraved as to give a decided preference to any particular species of food which has not something to recommend it.” His description of the mode of eating it smacks strongly of his early engineering studies. “The manner in which hasty-pudding is eaten, with butter and sugar or molasses, in America, is as follows: the hasty-pudding being spread out equally on a plate, while hot, an excavation is made in the middle with a spoon, into which excavation a piece of butter as large as a nutmeg is put, and upon it a spoonful of brown sugar, or, more commonly, molasses. The butter being soon melted by the heat of the pudding, mixes with the sugar or molasses, and forms a sauce, which being confined in the excavation

made for it, occupies the middle of the plate. The pudding is then eaten with a spoon; each spoonful of it being dipped into the sauce before it is conveyed to the mouth; care being taken in eating it to begin on the outside, or near the brim of the plate, and to approach the centre by regular advances, in order not to demolish too soon the excavation which forms the reservoir for the sauce."

Among all the honors which Count Rumford received, he valued none more highly than that of minister to the Court of London. There was the beginning of his fame, there the first place at which his talents had been appreciated and rewarded. Unfortunately, he was doomed to be disappointed. After his appointment by the Bavarian government to this post, he was informed that the rule of the English Court did not permit the office of ambassador near them, to be filled by a British subject, and that there could be no exception made to this rule, even to favor the claims of so acceptable a man as Count Rumford. This information met him in London, but did not cause him to quit the country. He remained among his old associates for some years, and his position afforded him a more convenient opportunity to disseminate his inventions and improvements. He was one of the leading men in founding the present Royal Institution of Great Britain, the purpose of which shows the character of his mind in bringing the achievements of science to the practical test of utility. This institution was chartered to diffuse the knowledge and introduction of useful inventions; and to teach the application of science to the arts, by means of public lectures.

At this period of his life his thoughts appear to have reverted to his native land, for the weal of whose institutions he had always shown an interest. He was repeatedly invited to revisit it, by individuals and government; but he never found himself at liberty to accept their invitation. He invested five thousand dollars in the American funds to establish a premium to be awarded by the American Academy of Arts and Sciences of Massachusetts, to the author of the most "important discovery or useful improvement, which shall be made and published by printing, or in any way made known to the public, in any part of the continent of America, or in any of the American Islands, during the two preceding years, on heat, and on light; the preference always being given to such discoveries as shall, in the opinion of the Academy, tend most to promote the good of mankind." A like sum was also presented to the Royal Society of Great Britain to be used by them for the same purpose, in order that he might contribute to the "advancement of a science which had long employed his attention, and which appeared to him to be of the highest importance to mankind." The sum invested in this country has never been employed to pay premiums, except in a single instance, and the fund has been constantly accumulating till it has quadrupled its original amount. The legislature of Massachusetts have empowered the American Academy to divert, in some degree, the interest of the capital from its original destination, and apply it to make additions to their library of works on the subjects of heat and light.

Count Rumford's ascendancy at the Bavarian

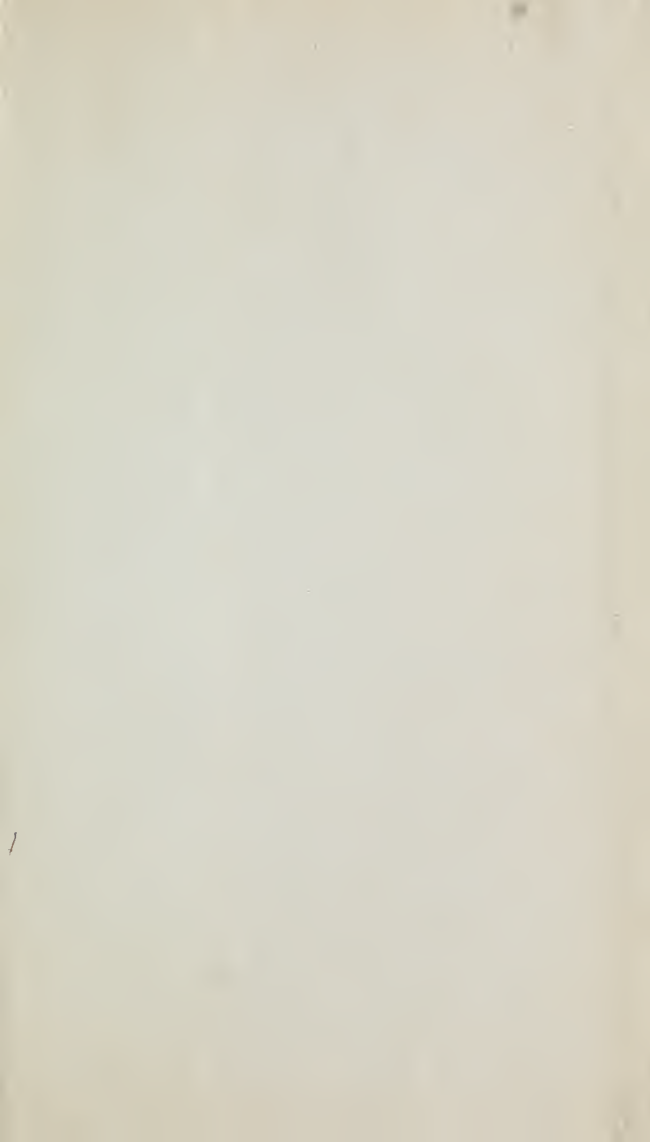
Court, had no doubt given him some ideas of self-consequence, which did not accord with the freer atmosphere of Great Britain, where he was obliged to admit the co-operation, if not the equality, of associates in the same fields of science. From this or some other cause, he was involved in difficulties with the managers of the Royal Institution, whom he probably found less subservient than the savans of his former place of residence. Considerations of this sort probably, led him to the choice of another place of retirement, and he became a resident of France. His industry and researches still marked his character, although his domestic relations became less agreeable. He became united in marriage with the widow of the distinguished chemist, Lavoisier, and after discovering how little their dispositions were suited to promote each other's happiness, they separated by mutual agreement.

Count Rumford's death took place in August, 1814, at the age of 62, and was the occasion of an eulogy by the celebrated Cuvier, before the French Institute, to which body Count Rumford belonged. The university at Cambridge, Mass., was most gratefully remembered in his will, by which he bequeathed \$1000 annually and the reversion of his estate, to found the present Rumford professorship, the object of which is, to teach the application of science to the useful arts, and which has been filled with distinguished ability.

It is interesting to observe in his researches how completely Count Rumford relinquished the warlike to cultivate the peaceful pursuits of mankind. His first experiments were instituted to calculate the force of projectiles, and the explo-

siveness of gunpowder; the later ones to cure smoking chimneys and determine the comparative warmth of different textures used for clothing, and to prove the superiority of broad-rimmed wheels. His whole soul seemed to enter into any scheme for administering to the wants of mankind, and his writings are particularly happy in the plain and graphic mode of explanation. His was not a mawkish sympathy, but an effective effort at amelioration. His success in life was a proud exhibition of New England character, and forcibly illustrates the value of self-dependence and perseverance. A faltering and indolent man would never have made use of his advantages, great though they were; and a lover of ease, contented with a moderate share of renown, would never have accomplished the high aims of Count Rumford. On the whole no man has better applied the maxim of Cicero, "I am a man and have an interest in every thing human."

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