A TREATISE

ON

METALLIC AND PAPER MONEY AND BANKS.

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AND BANKS

WRITTEN FOR THE ENCYCLOPÆDIA BRITANNICA

BY

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Quærenda Pecunia primum est.—Hor.

Ibit in immensos ni provideatis abusus, præclara res Numaria.—Budelius de Monetis.

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MONEY.

MONEY[1] (Gr. Μονητα, νομισμα; Lat. *moneta, pecunia, nummûs;* Fr., *monnaie,*) the name given to the commodities or articles which the people of different countries universally accept, either voluntarily or by compulsion, as equivalents for their services, and for whatever else they may have to dispose of.

PART I.—METALLIC MONEY.

SECT. 1.—*Circumstances which led to the use of Money. Principal properties which all Commodities used as such ought to possess. Metallic Money not a Sign or a Measure of Value, but a real Equivalent.*

Circumstances which led to the use of money.

Were the division of labour unknown, and did individuals or families directly supply themselves with the articles required for their subsistence and accommodation, there would be no exchanges, and, consequently, no money. But, after this division has been established, the employment of money becomes necessary, or, at least, highly advantageous. A small part only of a man's wants is then directly supplied by his own exertions. The greater part is indirectly supplied by his exchanging services, or articles belonging to him, for such services or articles rendered by or belonging to others as he has occasion for, and they are willing to furnish. Every man thus lives by exchanging, or becomes in some measure a merchant, and the society itself grows to be what is properly a commercial society.

"But when the division of labour first began to take place, this power of exchanging must frequently have been very much clogged and embarrassed in its operations. One man, we shall suppose, has more of a certain commodity than he himself has occasion for, while another has less. The former, consequently, would be glad to dispose of, and the latter to purchase, a part of this superfluity. But, if this latter should chance to have nothing that the former stands in need of, no exchange can be made between them. The butcher has more meat in his shop than he himself can consume, and the brewer and the baker would each be willing to purchase a part of it; but they have nothing to offer in exchange except the different productions of their respective trades, and the butcher is already provided with all the bread and beer which he has immediate occasion for. No exchange can, in this case, be made between them. He cannot be their merchant, nor they his customers; and they are all of them thus mutually less serviceable to one another. To avoid the inconveniency of such situations, every prudent man, in every period of society, after the first establishment of the division of labour, must naturally have endeavoured to manage his affairs in such a manner as to have at all times by him, besides the peculiar produce of his own industry, a certain quantity of some one commodity or other, such as he imagined few people would be likely to refuse in exchange for the produce of their industry."[2]

This commodity, or *Marchandise banale*, as it is termed by the French, whatever it may be, is *money*.

Commodities used as money.

Different commodities have been used as money in different countries and states of society. Those nations which chiefly subsist by the chase, such as the ancient Russians, and the greater part of the Indians who occupy the unsettled portions of America, use the skins of wild animals as money.[3] In pastoral societies cattle are sometimes used for that purpose. Homer tells us that the armour of Diomed cost only *nine* oxen, whilst that of

[1] Etymologists differ respecting the derivation of the word money. Some contend that it comes from *monere* (*quia nota inscripta de valore admonet*), because the stamp impressed on coined money indicates its weight and fineness—(Bouteroue, "Recherches sur les Monnoyes de France, p. 1); and others that it originates in the circumstance of silver being first coined at Rome in the temple of *Juno Moneta*.—Suidas, *in voce* Μονητα.

[2] *Wealth of Nations*, M'Culloch's ed., in one vol., p. 10.

[3] Storch, *Traité d'Economie Politique*, tom. iii. p. 16; Ulloa, *Mémoires Philosophiques sur l' Amerique*, tom. ii. p. 100. Skins, hides, or pieces of leather marked with a stamp (*corium forma publica percussum*) are said to have been used as money by the Carthaginians and Spartans, (Seneca, *De Beneficiis*, lib. v. c. 14. Eckhel, *Doctrina Numoram Veteram*, i. *Proleg.*, p. xx., etc). This statement, which is not a little obscure, has been very differently interpreted; some critics contending that it merely refers to such entire skins or hides as were bartered for other things, while others contend that it is meant to designate small bits of leather, marked with a stamp, and (like our bank-notes) substituted for and representing real money. It seems, perhaps, most probable that both interpretations may be true, that is, that entire skins and bits of leather, marked with stamps, may have been used sometimes in the one way and sometimes in the other. The stamp on the skin or hide might represent its weight, and that on the bit of leather its nominal value, or the money to be given for it to the holder.

Money. Glaucus cost a *hundred*.[1] The etymology of the Latin word (*pecunia*) signifying money, and of all its derivatives, would seem to prove that cattle (*pecus*) had been the primitive money of the Romans.[2] And that they had been used as such by the ancient Germans is obvious; for their laws uniformly fix the amount of the penalties to be paid for offences in cattle.[3] In remoter ages corn was very generally used in agricultural countries, as money; and even now, nothing is more common than to stipulate for corn rents and wages. Other articles have been used in other countries. Salt is said to be the common money of Abyssinia.[4] *Cowries*, a species of shells gathered on the shores of the Maldive Islands, are used in smaller payments throughout Hindostan, and form the only money of extensive districts in Africa.[5] Dried fish serves as money in Iceland and Newfoundland;[6] and Adam Smith mentions that, at the period of the publication of the "Wealth of Nations" (1776), it was customary in a village in Scotland for workmen to carry nails, as money, to the baker's shop and the alehouse.[7]

Defects of these commodities. But these articles universally want some of the principal properties which money ought to possess. Products must frequently be brought to market which are worth only part of an ox and part of a skin; but as an ox could not be divided, and as the division of a skin would most probably deprive it of part of its value, they could not be exchanged for such money. Divisibility is not, however, the only indispensable quality in a commodity used as a medium of exchange. It is farther necessary that it should admit of being kept for an indefinite period without deteriorating; that it should, by possessing great value in small bulk, be easily carried about; and that one piece of money of a certain weight and fineness, should be precisely equivalent to every other piece of money of the same weight and fineness. But none of the commodities specified above, as having been used as money, possesses these properties. Though cattle had been sufficiently divisible, they could neither be preserved, nor transported from place to place, without a great deal of trouble and expense; while, owing to the difference in their qualities, one ox of a superior might be worth two or three oxen of an inferior variety. It is plain, therefore, that they could not serve as money except in a very rude state of society, when the arts were almost unknown, and the rearing of cattle formed the principal employment. Corn is sufficiently divisible; but its bulk is far too great in proportion to its value to admit of its easy transportation, and it also is of very different and not easily appreciated qualities. Salt, shells, and fish, are all open to insuperable objections. Equal quantities of all of them differ very greatly in their values; some of them cannot be divided, and others cannot be preserved or transported without much loss.

These commodities were also deficient in a still more important particular. Their value was not sufficiently invariable to permit of their being advantageously used as money. They were not durable or lasting, nor was it possible to adjust their supply so as to avoid sudden fluctuations of price. The occasional abundance and scarcity of pasture has a powerful influence over the price of cattle, which is still more seriously affected by the occurrence of epidemical diseases, and other contingencies. The fluctuations in the price of corn, arising from variations of the seasons, are too frequent and obvious to require to be pointed out. And in the islands where cowries are picked up, a strong gale from a particular point of the compass has frequently, in a few hours, sunk their value considerably. It was not, therefore, to be expected that such commodities should be either generally or permanently used as money in civilised societies. Parties would very frequently be unwilling to buy, or barter produce for articles which might, in a few weeks, or even days, lose a third or a half of their value.

Money.

Gold and silver the fittest materials for money. The desire of uniting the different qualities of invariability of value, divisibility, durability, facility of transportation, and perfect sameness, doubtless formed the irresistible reasons which have induced all civilised communities to employ gold and silver as money. Though far from invariable, the value of these metals changes only by slow degrees; they are readily divisible into any number of parts, which may be reunited, by means of fusion, without loss; they do not deteriorate by being kept; their firm and compact texture makes them difficult to wear; their cost of production, especially of gold, is so considerable, that they possess great value in small bulk, and can, of course, be transported with comparative facility: and their identity is perfect, the pure gold and silver supplied by Russia and Australia having precisely the same qualities with that furnished by California and Peru. No wonder, therefore, when almost every property necessary to constitute money is possessed in so eminent a degree by the precious metals, that they have been used as such from a very remote æra. Their employment in this function is not ascribable to accident, to the genius of any individual, or to any peculiar combination of circumstances. It grew naturally out of the wants and necessities of society, on the one hand, and the means of supplying them possessed by these metals, on the other. They became universal money, as Turgot has observed, "not in consequence of any arbitrary agreement among men, or of the intervention of any law, but by the nature and force of things."

Introduction of gold and silver as money. A considerable period must necessarily have elapsed, after the introduction of the precious metals into commerce, before they were used generally as money. But, by degrees, the various qualities which so peculiarly fit them for this purpose would become obvious; and, in

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[1] *Iliad*, lib. 6, lin. 235. Garnier contends, in a note to his translation of the *Wealth of Nations* (v. p. 18, ed. 1822), that by oxen, in the statement now referred to, Homer did not mean the animals so called, but coins impressed with the figure of an ox. But though the oldest Attic and some other ancient coins are marked with an ox, it does not follow that cattle were not used as money previously to their being issued. Indeed, the fair presumption is, that that circumstance was the cause of their figures being impressed on the coins.

[2] Morellet, *Prospectus d'un Nouveau Dictionnaire de Commerce*, p. 115.

[3] Storch, *in loco citato*.

[4] *Wealth of Nations*, p. 10.

[5] Dans les pays où le cuivre a trop de valeur pour pouvoir représénter celle des plus menues denrées, on est encore oblige lui substituer quelque autre matière plus commune. C'est cette circonstance qui a fait adopter aux Indiens l'usage des *cauris* en guise des petite monnoie. Cet usage pourroit parôitre etrange dans les pays aussi riches et d'une civilisation aussi ancienne que le Bengale et l'Indoustan: maise le cuivre y est si rare, et les vivres y sont a si bon marche, qu'une pièce de la valeur de 1 cop. et ½ [about a halfpenny English] peut y acheter une quantite des denrees suffisante pour la subsistence journalière d'un homme du peuple. On est donc oblige de deviser la plus petite monnoie de cuivre en plusieurs fractions; et comme une monnoie d'aussi peu de valeur couteroit plus à fabriquer qu'elle ne pourroit valoir, on la remplace par un coquillage dont la nature fait présque tous les fraix. Quelque mince que soit la valeur d'un *cauris*, elle suffit dans ces contrees fertiles pour acheter une pièce des bananes ou quelque autre fruit commun."—Le Goux de Flaix, *Essai sur l'Indoustan*, tom. i. pp. 143-226, quoted by Storch, *Economie Politique*, tom. iii. p. 133.

[6] Smith, *ubi supra;* and Horrebow, *Description de l'Islande*, tom. ii. p. 90.

[7] *Wealth of Nations, loc. cit.*

Money. consulting their own advantage, individuals would endeavour to exchange some portion of their produce for commodities which could be easily concealed or carried about, which did not deteriorate by being kept, and of which they could give a portion that would be equivalent to, and readily accepted for, any article they might afterwards wish to obtain. When first brought to market, gold and silver, like copper, iron, or any other metal, were in an unfashioned state, in bars or ingots. Sheep, oxen, corn, cloth, &c., were then bartered for gold or silver, exactly as they were bartered for iron, copper, tin, or anything else. The parties having agreed upon the *quality* and *quantity* of the metal to be given for the goods, the latter was ascertained by weight. Nor is this a mere conjectural statement, advanced in a later age to explain appearances, and resting on probability only. Aristotle[1] and Pliny[2] tell us, that such was, in fact, the method by which the precious metals were originally exchanged in Greece and Italy; and the sacred writings present us with a remarkable example of the prevalence of the same primitive practice in the East. We are there told that Abraham weighed four hundred shekels of silver, and gave them in payment of a piece of ground he had purchased from the sons of Heth.[3] It is also mentioned that this silver was "current money with the merchant," an expression which evidently refers to its quality only; for, had it been coined, or marked with a stamp, indicating its weight and fineness, it would have been unnecessary to weigh it. These ancient practices still subsist in various countries. In many parts of China, gold and silver do not circulate as coin under the authority of a public stamp. When exchanged, they are cut into pieces, supposed to be nearly proportioned to the value of the article they are to be given for; and the pieces are then weighed to ascertain their precise value. This practice is also prevalent in other countries.[4]

Before the art of metallurgy was well understood, the baser metals were frequently used as money. Iron was the primitive money of the Lacedemonians, and copper of the Romans. But these metals deteriorate by being kept; and, besides this defect, the rapid improvement of the arts, and the consequent reduction of their price, speedily rendered their bulk in proportion to their value much too great to permit of their continuing to serve as money. Copper, however, is still advantageously used in the form of tokens, convertible into silver in very small payments. In Great Britain, copper pence and half-pence are rated far above their real value. But as their issue is exclusively in the hands of government, and as they are legal tender to the extent of one shilling only in any one payment, this over-valuation has not, for reasons which will be afterwards explained, had any bad effect.[5]

The trouble and inconvenience attending the weighing of the metal in every exchange of gold or silver for commodities, must have been early experienced. But the greatest obstacle to the use of unfashioned metals as money, would undoubtedly be found in the difficulty of determining their quality, or the degree of their purity, with sufficient facility and accuracy. The operation of *assaying* is one of great nicety and delicacy; and, notwithstanding all the assistance derived from modern art, it is still no easy matter to ascertain the precise degree of purity of a piece of metal. In early ages, such an operation must have been performed in a clumsy and bungling manner. It is most probable, indeed, that when the precious metals were first used as money, their quality would be appreciated roughly by their weight and colour. A very short experience would, however, be sufficient to show the inexactness of conclusions derived from such loose and unsatisfactory criteria; and the devising of some method by which the fineness of the metal offered in exchanges might be easily and correctly made known, would very soon be felt as indispensable to the general use of gold and silver as money. Such a Coinage. method was not long in presenting itself. It was early discovered that the purity of the metal would be indicated, and the trouble and expense of weighing it avoided, by marking each piece with a *public stamp*, declaring its weight and fineness. Such seem to have been the various steps which led the ancients, at a very remote æra, to the introduction of coined money.[6] It was an invention of the greatest utility, and has powerfully contributed to facilitate commerce, and to accelerate the progress of civilisation and the arts.[7]

"Without some article of known exchangeable value, such as coin, readily received as an equivalent for other things, the interchange of commodities must have been very limited, and consequently the divisions of labour very imperfectly established. Now, money obviates these evils, and by a twofold operation, augments production. In the first place, it saves all that time and labour which, while the intercourse between man and man is carried on by barter, must frequently intervene before a person can be supplied with the quantity of the commodity which he wants. In the second place, and in consequence of its saving the time and labour which must otherwise be spent in effecting exchanges, it multiplies the transactions of mercantile industry, and thus allows the divisions of employment to be more thoroughly established. By the first operation, it disengages a very considerable portion of labour from an unproductive occupation, and enables it to receive a more useful direction. By the second operation, it increases in a very high degree the productive powers of the labour already usefully employed. It assists every man in availing himself of the skill and dexterity which he may have acquired in any particular calling, and promotes cultivation in a manner suitable to the climate and soil of different districts, and of different countries. And by both these operations, coined money increases to an extent, not easy to be calculated, the wealth of civilised communities."[8] Advantages of coined money.

But however great the advantages attending the use of coins, their introduction did not, in any degree, affect the principle of exchanges. Equivalents are still given

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[1] *Polit.* lib. i. cap. 9. [2] *Hist. Nat.* lib. 33, cap. 3. [3] *Genesis*, chap. xxiii. verse 16.

[4] Goguet, *De l' Origine des Loix*, &c., tom. i. p. 269.

[5] See Memorandum on the Silver Coinage of 1817, by the Master of the Mint, p. 378 of the Appendix to the Lords' Report on the Resumption of Cash Payments by the Bank.

[6] Goguet, *De l' Origine des Loix*, &c., tom. i. p. 268, 4to. edit. See also Park's *Travels*, vol. i. p. 464, 8vo. edit.

[7] The Roman jurists have given a brief, but clear and comprehensive, account of the circumstances which led to the use of coined money.—*Origo emendi vendendique a permutationibus cœpit. Olim enim non ita erat nummus; neque aliud merx, aliud pretium vocabatur; sed unusquisque, secundum necessitatem temporum ac rerum, utilibus inutilia permutabat, quando plerumque evenit ut quod alteri superest alteri desit. Sed quia non semper, nec facile concurrebat, ut, cum tu haberes quod ego desiderarem, invicem haberem quod tu accipere velles, electa materia est, cujus publica ac perpetua æstimatio difficultatibus permutationum æqualitate quantitatis subveniret; eaque materia formâ, publicâ percussa, usum dominiumque, non tam ex substantiâ præbet quam ex quantitate; nec ultra merx utrumque, sed alterum pretium vocatur.*—(Digest, lib. xviii., tit. i., *De Contr. Empt. Leg.* i.)

[8] Torrens *On the Production of Wealth*, p. 305.

for equivalents. The exchange of a quarter of corn for an ounce of pure unfashioned gold bullion, is undeniably as much a barter as if the corn were exchanged for an ox, or a barrel of beer. But supposing the metal to be formed into a coin, that is, impressed with a stamp indicating its weight and fineness, that circumstance would evidently make no change in the terms of the barter. The coinage saves the trouble of weighing and assaying the bullion, but it does nothing more. A coin is merely a piece of metal of a known weight and purity, and the commodities exchanged for it are always held to be of equal value. And yet these obvious considerations have been very generally overlooked. Coins, instead of being viewed in the same light as bullion or other commodities, have been regarded as something quite mysterious. They are said to be both *signs* and *measures* of value. But a sovereign is not a sign, it is the thing signified. A promissory-note payable on demand, or at some stated period, may not improperly be considered as the sign of the specie to be paid for it; but that specie is itself a commodity possessed of real exchangeable worth. It is equally incorrect to call money a measure of value, at least in the peculiar sense in which that phrase is commonly understood. Gold and silver do not measure the value of commodities, more than the latter measure the value of gold and silver. Everything possessed of value may either measure, or be measured by, everything else possessed of value. When one commodity is exchanged for another, each measures the value of the other. If the quartern loaf sold for a shilling, it would be quite as correct to say, that a quartern loaf measured the value of a shilling, as that a shilling measured the value of a quartern loaf.

Coins not signs of value: in what sense measures of value.

Standards of value.

The quality of serving as a measure of value is, therefore, inherent in every commodity. But the slow degrees by which the precious metals change their value, renders them peculiarly well fitted for forming a standard by which to compare the values of other and more variable articles. To this standard reference is almost always made in estimating the value of products in civilised countries. We do not say that one man is worth a thousand acres of land, and that another is worth a thousand sheep, but we ascertain for how much gold or silver the land and the sheep would respectively exchange, and then say that their proprietors are worth so much money. But in this there is nothing mysterious. We merely compare the value of one commodity with the value of another. And as coin or money is the most convenient standard of comparison, the value of other commodities is usually estimated or rated in it.

Non-existence of an abstract or ideal standard.

It is obvious, from this statement, that the exchange of one commodity, or set of commodities, for another, may sometimes be adjusted by referring to money, without any money being actually in the possession of either of the parties to the exchange. If a horse, for example, commonly sold for £10, an ox for £5, and a sheep for £1, the animals might be exchanged in this proportion without the intervention of money. The frequent recurrence of transactions of this kind seems to have given rise to the notion of an abstract or ideal standard of value. Thus, instead of saying that a horse is worth £10, an ox £5, &c., it has been contended that it might as well be said that they are respectively worth $10x$, $5x$, and $1x$; and, since the comparative values of commodities may be as clearly expressed in this way as in sums of money, that the latter may be discarded as a standard, and a set of arbitrary terms adopted in its stead. But those who argue thus completely mistake the nature and functions of a standard. Its object is not merely to mark the known relations between different commodities, but also to enable those which are unknown to be readily discovered. And although a series of arbitrary terms may serve well enough for the first of these purposes, it is quite impossible that it can ever serve for the second. This, however, is the principal object of a standard; and it is sufficiently plain that nothing can be used as such unless it possess the same properties as the things with which it is to be compared. To measure length, a standard must have length; to measure value, it must have value. The value of commodities is ascertained by separately comparing them with money, and we express their relation to each other by stating the result of our inquiries; that is, by mentioning the number of dollars, of pounds, or of fractions of a pound, they are respectively worth. And, when any new commodity is offered for sale, or when any change is made in the cost of an old one, we ascertain its relation to the rest, by comparing it with a dollar or a pound. It would be impossible, however, to do this, were the terms dollar or pound purely arbitrary, and referable to no really valuable article. We might as well try to estimate distances by an imaginary inch or an imaginary foot, as to estimate prices or values by an imaginary shilling or an imaginary sovereign. When we say that an ox is worth £5 and a sheep £1, we not only mean that each is worth a certain amount of gold or silver, but also, that when an ox and a sheep are compared together—that is, when the one serves as a standard by which to estimate the value of the other—one ox is worth five sheep. But suppose that we wish to ascertain what is the relative value of some other commodity—a hat, for example—to oxen or sheep. Of what use would it be to be told that one ox was worth five sheep, or that when the value of an ox was represented by the term "$5x$," the value of a sheep was represented by the term "$1x$"? It is not the relation between oxen and sheep, but the relation between these animals and hats, that we are desirous of learning. And, though this relation may be learned by comparing the cost of oxen and sheep with the cost of hats, or by ascertaining for how much of some other really valuable commodity an ox, a sheep, and a hat will respectively exchange, it is obvious it will never be learned by comparing them with x or z, or other arbitrary term or symbol. It would not, in truth, be more absurd to attempt to ascertain it by comparing them with the hieroglyphics on an Egyptian sarcophagus. Nothing that will not exchange for something else can ever be a standard or measure of value. Commodities are always compared with commodities, and not with abstract terms. Men go to market with real values, or their equivalents, in their pockets. And it is to something possessed of real worth—to the gold contained in a sovereign, and not to the word sovereign—that they always have referred, and must continue to refer, in estimating value.[1]

This principle has been neatly and perspicuously stated by Locke:—"Men, in their bargains," says he, "contract not for denominations or sounds, but for the

[1] The following passage of Montesquieu has often been referred to in proof of the existence of an ideal standard:—"Les noirs de la côte d'Afrique ont un signe des valeurs sans monnoie; c'est un signe purement idéal fondé sur le degré d'estime qu'ils mettent dans leur esprit à chaque marchandise, à proportion du besoin qu'ils en ont; une certaine denrée, ou marchandise, vaut trois macutes; une autre, six macutes; une autre, dix macutes; c'est comme s'ils disoient simplement trois, six, dix. Le prix se forme par la comparaison qu'ils font de toutes les marchandises entre elles: pour lors, il n'y a point de monnoie particulière, mais chaque portion de marchandise est monnoie de l'autre."—*Esprit des Loix*, liv. xxii. cap. 8.

But, instead of giving any support to the notion of an abstract standard, this passage might be confidently referred to in proof of its

Money. intrinsic value; which is the quantity of silver (or gold) by public authority, warranted to be in pieces of such denominations. And it is by having a greater quantity of silver (or gold) that men thrive and grow richer, and not by having a greater number of denominations; which, when they come to have need of their money, will prove but empty sounds, if they do not carry with them the real quantity of silver (or gold) that is required."[1]

In common mercantile language, the giving of money for a commodity is termed *buying*, and the giving of a commodity for money, *selling*. *Price*, unless when the contrary is particularly mentioned, always means the value of a commodity rated in money.

Having thus endeavoured to explain the circumstances which led to the introduction of money, and to show what it really is, and what it is not, we proceed to investigate the laws by which its value is regulated. It is chiefly from the prevalence of erroneous opinions on this subject, that the theory of money has been so much misunderstood.

Sect. II.—*Circumstances which Regulate the Exchangeable Value of Money.*

Value of money: This branch of our subject naturally divides itself into two parts: 1st, An inquiry into the principles which regulate the exchangeable value of money when the power to supply it is free or unfettered; and, 2d, An inquiry how far these principles are affected by the operation of monopoly.

When the power to supply it is unrestricted. I. There does not seem to be much room for difference of opinion respecting the circumstances which regulate the value of the precious metals, and their distribution throughout the various countries of the globe. Bullion is a commodity, on the production of which competition operates without restraint. It is not subjected to any species of monopoly, and its value in exchange must, therefore, depend on the cost of its production, that is, on the quantity of labour required to produce it and bring it to market.

If the same quantity of labour always produced the same quantity of bullion, its value would be invariable, and it would constitute a standard by which the variations in the exchangeable value of other commodities might be correctly ascertained. But this is not the case with bullion or anything else. Its value fluctuates like that of other articles, not only according to the greater or less productiveness of the mines from which it is extracted, but also according to the varying skill of the miners, the improvement of machinery, and other circumstances. Money.

In his treatise on *Political Economy*, Say has a chapter entitled "*De la valeur que la qualité d'être monnoie ajoute à une marchandise.*" But a little reflection will convince us that this is a mistake, and that the circumstance of the precious metals being used as money adds nothing to their value. Say reasons on the hypothesis, which is equally at variance with principle and fact, that an increase of demand is always productive of an increase of value. The latter, however, depends upon the cost of production; and it is obvious that the cost of a thing may be diminished while the demand for it is increased, and conversely. This is so plain a proposition, as hardly to require to be substantiated by argument. And the instance of cotton goods, the price of which, notwithstanding the vast increase of demand, has been constantly on the decline during nearly a century past, is enough to convince the most sceptical of the extreme erroneousness of Say's conclusion. But, with regard to the precious metals, it is clear that under ordinary circumstances, or when mining is prosecuted under nearly the same conditions as other businesses, the capital employed in their production must yield the common and ordinary rate of profit; for, if it yielded more than that rate, there would be an influx of capital to the mining business; and, if it yielded less, it would be withdrawn, and vested in some more lucrative employment. And hence, though the demand for gold and silver should, from the adoption of some other commodity as an instrument of exchange, gradually become less, the value of the precious metals would not on that account be reduced. A smaller supply would, indeed, be annually brought to market, and a portion of the capital formerly engaged in the mining, refining, and preparing of metals, would be disengaged. But as the whole stock thus employed yielded only the average rate of profit, the portion which is not withdrawn must continue to do so; or, which is the same thing, gold and silver must continue to sell for the same price. It is true that where mines are, as they almost always

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non-existence. Had Montesquieu said that the blacks determined the values or prices of commodities, by comparing them with the arbitrary term *macute*, the statement, though erroneous, would have been at least in point. But he says no such thing. On the contrary, he states distinctly that the relative values of commodities (marchandises) are ascertained by comparing them *with each other* (entre elles), and that it is merely the result of the comparison that is expressed in arbitrary terms.

So much for the weight to be attached to this statement, supposing it to be well founded. The truth is, however, that the term *macute* is not really arbitrary, and employed only to mark an ascertained proportion, but that it has a reference to, and is in fact, the name of an intrinsically valuable commodity. "On a bien dit," says l'Abbé Morellet, "que ce mot macute étoit une expression abstraite et générale de la valeur, et cela est vrai au sens où nous l'expliquerons plus bas; mais on n'a pas remarqué que cette abstraction a été consequente et postérieure à l'emploi du mot macute pour signifier une marchandise, une denrée réelle à laquelle on avoit longtems comparé toutes les autres.

"Macute en plusieurs lieux de la côte d'Afrique, est encore le nom d'une certaine étoffe: '*Chez les negres de la côte d'Angola,*' dit le voyageur Angelo, '*les macutes sont des pièces de nattes d'une aune de long;*' Jobson dit aussi que les macutes sont *une espèce d'étoffe.*

"Les étoffes ont toujours été l'objet d'un besoin tres-pressant chez des peuples aussi barbares, depourvus de toute espèce d'industrie.—Les nattes en particulier leur sont de la plus grande nécessité. Elles sont divisées en morceaux peu considerables et d'une petite valeur; elles sont très-uniformes dans leurs parties, et les premières qu'on a faites auront pu être semblables les unes aux autres, et d'une bonté égale, sous la même dénomination; toutes ces qualités les ont rendu propres à devenir la mésure commune des valeurs."—*Prospectus d'un Nouveau Dictionnaire de Commerce*, p. 121.

The following extract from Park's Travels gives an example of a similar kind:—"In the early intercourse of the Mandingoes with the Europeans, the article that attracted most notice was iron. Its utility in forming the instruments of war and husbandry made it preferable to all others; and iron soon became the measure (standard) by which the value of all other commodities was ascertained. Thus a certain quantity of goods, of whatever denomination, appearing to be equal to a bar of iron, constituted, in the trader's phraseology, a bar of that particular merchandise. Twenty leaves of tobacco, for instance, were considered as a *bar* of tobacco; and a gallon of spirits (or rather half spirits and half water) as a *bar* of rum; a bar of one commodity being reckoned equal in value to a bar of another commodity. As, however, it must unavoidably happen that, according to the plenty or scarcity of goods at market, in proportion to the demand, the relative value would be subject to continual fluctuation, greater precision has been found necessary; and, at this time, the current value of a single bar of any kind is fixed by the whites at *two shillings sterling.* Thus, a slave, whose price is £15, is said to be worth 150 bars."—*Travels in the Interior of Africa*, 8vo. edit., vol. i. p. 39.

[1] Farther Considerations concerning Raising the Value of Money. Locke's Works, ii. 94. 4to. 1777.

Money. are, of different degrees of productiveness, any great falling off in the demand for bullion might, by rendering it unnecessary to work inferior mines, enable the proprietors of the richer mines to continue their work, and to obtain the ordinary rate of profit on their capitals, by selling bullion at a reduced price. In this case the value of bullion would be really diminished; but this diminution would not be occasioned by a falling off in the demand, but by a greater facility of production. On the other hand, an increased demand for bullion, whether it arose from the suppression of paper money, or from a greater consumption of gold and silver in the arts, or from any other cause, would not be accompanied by any rise of price, unless, in order to procure the increased supply, it were necessary to have recourse to less productive mines. If the mines from which the additional supplies were drawn were poorer than those already wrought, more labour would be necessary to procure the same quantity of bullion, and, of course, its price would rise. But if no such increase of labour were needed, its price would remain stationary, though ten times the quantity formerly required should be demanded.

Production of the precious metals. But though true under the circumstances supposed, these conclusions are often much modified in practice. Frequently, indeed, the production of the precious metals partakes very largely of the nature of a gambling speculation. When gold or silver is found in any particular locality, its abundance, and the chances which it affords to adventurers of enriching themselves, are uniformly exaggerated, and an excess of hands is attracted to the pursuit of the metal. In such cases, it commonly happens that, while a few individuals engaged in the business make fortunes, the great mass make little or nothing. But most people being sanguine enough to think that they will be found in the fortunate class, the supply of bullion may be largely increased, and its value reduced, even though the majority of those engaged in its production should be really carrying on a losing employment.

When the gold and silver mines of America first began to be wrought, the most extravagant ideas were entertained of their productiveness; so much so, that they were supposed to be able to bear a duty of half the produce. But it was soon found that the exaction of such a duty would occasion their total abandonment. It was consequently lowered, by successive reductions, to a tenth; and even this was felt to be oppressive, so that, in the end, the duty was fixed at a twentieth part, or five per cent. And, despite this reduction, the trade of mining was generally unprofitable. Ulloa says, that in Peru an individual who embarked in a mining speculation used to be considered as a ruined man, or as having adventured in a lottery, in which, though there were many great prizes, the blanks had a decided preponderance;[1] and, according to Humboldt, nearly the same thing was experienced in Mexico; the search after mines, and the working of them, being there looked upon as a sort of gambling adventure, in which many were ruined, while a few only attained to great wealth.[2]

It remains to be seen whether the result of the extraordinary discoveries in California and Australia will be different. We suspect, however, that it will not; and that in the lottery of these countries, as in that of Mexico and Peru, the blanks will greatly exceed the prizes. It is understood that last year (1856), there were in California above 100,000 persons engaged in the raising of gold, or in the employments subordinate to and immediately connected therewith. And if we estimate the value of the labour of these parties at £100 a-year each, at an average, we shall not probably be beyond, but within the mark; and, on this hypothesis, it would require a sum of £10,000,000 to defray their mere wages. Now, it would appear from the accounts most worthy of credit, that the produce of the gold diggings, &c. of California in 1856, amounted to from £13,000,000 to £14,000,000; and, taking it at the latter amount, which is perhaps exaggerated, still it would only yield £4,000,000 of surplus, which, were it equally divided among the parties employed in raising it, would give £40 to each. But instead of being equally, it is most unequally divided; and, while a few have perhaps realised from £1000 to £2000, or upwards, it is plain that very many can have made little or nothing, not even ordinary wages. And this has also been the case in Australia. But the brilliant prizes, and the stories of cobblers and ditchers whom a fortunate chance has suddenly raised to opulence, have not failed to attract crowds of competitors. And the probability is, that the business of gold-raising will be zealously prosecuted, even though it should make a most inadequate return to the aggregate hands engaged in it. Under such circumstances, the supply of bullion may become, to a considerable extent, independent of the cost of its production; and the value of gold in the market may, for lengthened periods, depend chiefly on its quantity compared with the demand.

Money.

Although, therefore, it be true that, under ordinary circumstances, commodities are but seldom brought to market unless they sell at a price sufficient to repay the cost of their production, including therein a reasonable profit to the producers, yet many things occur to disturb the equilibrium between cost and price. And though, in the great majority of instances, such disturbances, when they do occur, are rarely of any very considerable permanency, such may not be the case with gold and silver. The circumstances connected with their production are so very peculiar, that they may be furnished for indefinite periods, and in large quantities, even when they do not really indemnify the great body of their producers.

After gold and silver have been brought to market, their conversion into coin, or manufactured articles, depends on a comparison of the profits which may be derived from each operation. Bullion would not be taken to the mint were it more profitable to send it to a silversmith; and the latter would not work up bullion into plate, if he could turn it to better account by converting it into coin. Hence the values of bullion and coin in countries where the mint is open to all, and the expenses of coinage are defrayed by the state, must very nearly correspond. When there is any unusual demand for bullion in the arts, coin is melted down; and when, on the contrary, there is any unusual demand for coin, plate is sent to the mint, and the equilibrium of value maintained by its fusion.

So long, therefore, as competition is allowed to operate without restraint on the production of gold and silver, their value will vary, as above stated. And, while gold or silver coins constitute the currency, the prices of commodities, or their values rated in such coins will vary, not only according to the variations in the values of the commodities themselves, but also according to the variations in the value of the metal of which the coins are made.

II. Happily it is not possible to monopolise or limit the

[1] Ulloa, *Voyage de l'Amerique*, i. 379, Amsterdam, 1752.

[2] *Nouvelle Espagne*, liv. ii. cap. 7, edit. 1825.

Value of money when the power to supply it is restricted.

supply of the precious metals; but if such a thing were possible, or if none but government could use the mint, or issue coins, the value of the latter would no longer depend on their cost. Suppose, to illustrate the principle, that gold is used as money, that government issues a certain amount of coins and then shuts the mint; and that, after such limitation, the population of the country, and the products to be circulated, are largely increased. In such case it is plain that the exchanges which the limited amount of money would have to perform would be proportionally augmented. A smaller sum would, therefore, have to be appropriated to each transaction, or, which is the same thing, money prices would be diminished. This conclusion is so self-evident as to admit neither of doubt nor cavil. And, therefore, it appears that when the supply of money is limited, the amount of it given in exchange for commodities varies inversely as the demand, and is affected by nothing else.

That we might simplify the subject, we have assumed, in this statement, that the substitutes which may be used for money, and the methods by which it may be economised, were the same throughout the period, when the other changes referred to took place. It is easy, however, to allow for any variation in the one or the other. And, supposing this allowance to be made, it follows, if double the usual supply of commodities were brought to market in a country with a limited currency, that their money price would be reduced a half; and that, if only half the usual supply were brought to market, it would be doubled; and this, whether the cost of their production had increased or diminished. Products are not then exchanged for money, because it is a commodity which may be advantageously used in the arts, and has cost a certain quantity of labour, but because it is the universal equivalent, or legal tender, adopted by the society, and will, as such, be willingly received by every one. The remark of Anacharsis, the Scythian, that gold and silver coins seemed to be of no use but to assist in numeration and arithmetic,[1] would, if confined to a limited currency, be as just as it is ingenious. Sovereigns, livres, dollars, etc., would then really constitute mere tickets or counters for computing the value of property, and transferring it from one individual to another. And as small tickets or counters would serve for this purpose quite as well as large ones, and those of brass, tin, or paper, quite as well as those of gold, there can be no doubt that by sufficiently limiting its quantity, a currency, though destitute of intrinsic worth, may be made to circulate on a level with gold or silver, or higher, if it be desired.

When a currency is mixed, or consists partly of coin and partly of paper-notes immediately convertible into specified amounts of coin, the value of the notes is necessarily measured by, and is in fact identical with the value of the coins which may be obtained for them, and which they are truly said to represent. But when, as has often been the case, notes which are not convertible into coin are notwithstanding legal tender, then it is plain that their value cannot be in any wise dependent on the value of coins. Such notes are not representatives of money, but are themselves a variety of money. They circulate because their issuers have power to make them legal tender, and because money of one kind or other is indispensable. Notes of this description have little or no intrinsic worth, so that their marketable or exchangeable value depends entirely on the extent to which they are issued, compared with the business they have to perform. If their supply be sufficiently restricted, their value may be maintained on a level with that of gold, or even raised above it.

In their case everything depends on the discretion of the issuers. If they abuse their power, as they almost invariably do, by throwing too great quantities of notes on the market, their value is proportionally reduced; and if the issuers do not pull up in time, the notes will eventually become, like the assignats in France, wholly worthless.

Speaking generally, the value in exchange of a currency consisting of the precious metals is coincident with the cost of their production. If a sovereign commonly exchange for two or three bushels of wheat, or a hat, it is because the same labour is commonly required for its production as for that of either of these commodities; while, if with an inconvertible paper money, they exchange for a one-pound note, it is because such is the proportion which, as a part of the mass of commodities offered for sale, they bear to the supply of paper in the market. This proportion would, it is evident, be not only immediately, but permanently affected by an increase or diminution either of paper or commodities. But the relation which the latter bear to a freely supplied metallic currency is not permanently changed, except by a change in their cost, or in that of the metals.

We have already seen in how far these conclusions are liable to be affected by the peculiar circumstances under which gold and silver are frequently produced. But however much their value in exchange may diverge for a while from the cost of their production, its uniform tendency is to coincide with that cost; and though the value of bullion, as compared with other articles, may differ very widely at different periods, these differences are usually manifested by slow degrees. The vast extent of the surface over which the precious metals are spread, and the many purposes to which they may be applied, prevents even the largest additional supplies from suddenly reducing their value; while, on the other hand, their great durability prevents any sudden diminution of their quantity, and the influence of a falling off in the supply, from being speedily visible.

General conclusion as to the value of money.

It may, therefore, be laid down generally, that the value of money depends on the quantity of it in circulation compared with the exchanges to be effected by its means, or with the business it has to perform. When, however, money consists of coins, their value is most commonly limited by, and proportioned to, the cost of their production; whereas, when it consists of paper, not convertible into coin, its value is exclusively determined by the magnitude of its issues, and has nothing to do with the cost of its production. That cost may, indeed, in its case, be regarded as zero.

Such seem to be the circumstances which regulate the value of money, both when the power to supply it is unfettered by any restraints, and when it is restrained and limited. In the former case, its value depends, like that of the greater number of commodities, on the cost of its production; while, in the latter case, its value is wholly unaffected by that circumstance, and depends on the extent to which it has been issued, compared with the demand.

The conclusions deducible from these principles are most important. A metallic currency, on the coinage of which a high seignorage or duty was charged, and a paper currency not convertible into the precious metals, have been occasionally seen to circulate at the same value with a metallic currency of full weight, and which had been coined at the expense of the state. No rational or consistent explanation of these apparently anomalous results could be given until the effects produced by limiting

[1] Hume's *Essay on Money*.

the supply of money had been appreciated. Now, however, that this has been done, these difficulties have disappeared. The theory of money has been perfected, and we may estimate, *a priori*, what, under any given circumstances, would be the effect of imposing a seignorage, or of issuing inconvertible paper.

Sect. III.—*A Moderate Seignorage on Coined Money advantageous. Principles which should regulate its amount.*[1]

Reasons why a seignorage should be imposed on coins.

The governments of most countries have retained the power of coining exclusively in their own hands. In antiquity this privilege was reserved to prevent the confusion which would result from the circulation of coins of different denominations were individuals permitted to issue them at pleasure, and to give the public greater security that the stamp should truly indicate the weight and fineness of the metal.[2] And in more modern times it has been reserved for the same reasons, and also, as a means of increasing the national revenue. Much difference of opinion has, however, existed in regard to the policy of imposing a tax on coins. It has been contended that they ought in no circumstances to be charged with any duty; but that the expenses of the mint should always be defrayed by the public. In this opinion we cannot concur. The reasoning of Adam Smith, in favour of a moderate seignorage, appears to be quite unanswerable. A sovereign is more serviceable than a piece of pure unfashioned gold bullion of the same weight; for, while it is equally well fitted for being used in the arts, it is, which bullion is not, money or legal tender. In imposing a duty or seignorage on coins to defray the expense of coinage, government merely gets back the equivalent of the additional value conferred by the process on the bullion. And the truth is that those who carry gold to the mint would have no better reason for complaint were they charged with the expense of its coinage, than they would have, had they sent it to a jeweller's, that they were charged with expense of its manufacture into plate.

But there are other reasons why a seignorage ought to be exacted. Wherever the expense of coinage is defrayed by the state, gold or silver coins, and gold or silver bullion, are very nearly of the same value. And hence, whenever it becomes profitable to export the precious metals, coins, in the manufacture of which a considerable expense has been incurred, are sent abroad indifferently with bullion. It has sometimes been attempted, by prohibiting the exportation of coins, to prevent the loss that may thus be occasioned; but these efforts having proved singularly ineffectual, have been abandoned in this and most other countries. Admitting, however, that it were possible, which it certainly is not, to prevent or materially limit the clandestine exportation of coins, it is conceded on all hands to be quite nugatory to attempt to prevent their conversion into bullion. In this there is almost no risk. And the security with which their fusion may be effected, and the trifling expenses attending it, will always enable them to be melted down and sent abroad whenever there is any unusual foreign demand for the precious metals. This exportation would, however, be either prevented or materially diminished by the imposition of a seignorage or duty, equal to the expense of coinage. Coins being, by this means, rendered more valuable than bullion, it would be sent abroad in preference to them, in the event of the exchange becoming unfavourable, or of gold becoming a suitable article of export. And if, as Adam Smith has observed, it became necessary on any emergency to export coins, they would, most likely, be re-imported. Abroad they are worth only so much bullion, while at home they are worth this much, plus the expense of coinage. There would, therefore, be an obvious inducement to bring them back; and the supply of currency would be maintained at its proper level, without its being necessary for the mint to issue fresh coins.

Besides relieving the country from the useless expense of coining money sent abroad as an article of commerce, a moderate seignorage would either prevent or materially lessen that fusion of the heavier coins, which always takes place whenever a currency becomes degraded or deficient in weight. Previously to the recoinage of 1774, the weight of bullion contained in the greater number of the gold coins in circulation was reduced nearly two per cent below the mint standard; and, of course, the price of gold bullion, estimated in this degraded currency, rose two per cent., or from £3 : 17 : 10½d, its mint price, to £4 per ounce. This, however, was too minute a difference to be taken into account in the ordinary business of buying and selling. And the possessors of coins fresh from the mint, or of full weight, not obtaining more produce in exchange for them than for the lighter coins, sent the former to the melting-pot, and sold them as bullion. But it is easy to see that this fusion would have been prevented had the coins been laden with a seignorage of two per cent. The heavy coins could not then have been melted without losing the value given them by the seignorage; and this being equal to the excess of the market price of bullion above the mint price, nothing would have been gained by the melters. Had the seignorage been less than two per cent., the average degradation of the coin, had it, for example, been only one per cent., all those coins whose value was not more than one per cent. degraded below their mint standard, might have been melted; but if the seignorage had exceeded two per cent., no coins would have been melted until the degradation had increased to the same or a greater extent.

This reasoning is bottomed on the supposition that the coins on which a seignorage is charged are not issued in excess. If they were, the above-mentioned consequences would not follow. Their too great multiplication might sink their value below that of bullion, and occasion their immediate fusion or exportation. So long, however, as the state only coins the bullion brought to the mint by individuals, there is little risk of this happening. No one, we may be pretty well assured, would carry bullion to that establishment, and pay the expenses of its coinage, unless the coins were thereby rendered so much more valuable than the unfashioned metal.

Were government to buy bullion, and coin money on its own account, it might, by proper attention, avoid all over-issue. Suppose the seignorage were two per cent., then any given weight of coins of the mint standard ought, provided the currency be not redundant, to purchase two per cent. more than the same weight of bullion. So long therefore, as this proportion is preserved between money and bullion, it shows that the proper supply of currency has been issued. If the value of the coins declines below this limit, too many of them must have got into circulation; and if, on the contrary, their value

[1] Seignorage, strictly speaking, means only the clear revenue derived by the state from the coinage. But it is now commonly used to express every deduction made from the bullion brought to the mint to be coined, whether on account of duty to the state, or of the expense of coinage (properly *brassage*). We always use the phrase in its more enlarged sense.

[2] Le Blanc, *Traité Historique des Monnoyes de France*, p. 90, ed. Amst. 1692.

Money. rises above it, the supply is too limited, and an additional quantity may be advantageously issued.

It must not, however, be concealed, that if it were attempted to charge a high seignorage, it would be extremely difficult, or rather quite impracticable, to limit the supply of coins. The inducement to counterfeit money would, under such circumstances, be very greatly increased, while the chances of detection would be very much diminished. It would not then be necessary, to make the counterfeiting of coins profitable, that they should be manufactured of base metal. The saving of a heavy charge on account of seignorage might of itself afford a sufficient profit; and this would be derived, though the metal contained in the forged coins were of the standard purity. But though it might, for this reason, be impossible, or very difficult, to limit the supply of currency, and consequently to sustain its value, were any thing like an exorbitant seignorage charged, the same difficulty would not stand in the way of a moderate seignorage. To be carried on the business of counterfeiting must yield a premium sufficient to indemnify the forgers for the risks and odium to which they are exposed. A seignorage insufficient to do this would not encourage the issue of counterfeit coins. And though it might be difficult to form any very precise estimate of the amount of the premium referred to, it would not probably be under two or three per cent.[1]

In his evidence before the Lords' Committee in 1819, Mr Mushet stated that, with the improved machinery in use in the mint, gold coin could be manufactured for about 10s. per cent.[2] And the manufacture of the silver coin might then, we believe, be taken at about three times as much, or at one and a-half per cent. It appears from an account given in the report published in 1849 (p. 86), of the commissioners appointed to inquire into the constitution, &c., of the mint, that the expense of coinage, at an average of the eleven years ending with 1848, amounted, exclusive of law expenses, to £1 : 5s. 3¾d. per cent. The total amount coined during this period was £38,275,486, of which £34,877,664 was gold, £3,329,716 silver, and £68,103 copper. It is said to be very difficult to distinguish exactly the separate cost of coining the different metals. There can, however, be little doubt that the changes lately introduced into the mint will effect a very considerable saving in the expense of coining; and the probability is, that in future it will be under one per cent. on the average value of the total coins issued. In France the procedure at the mint has been so much perfected that the expense of coining gold has been reduced to six fr. on 3,100 fr. or to ·0193 per cent., and that of silver to 75 cent. per 100 fr., or ¾ per cent.[3] In Russia the gold costs 0·85, and the silver 2·95 per cent.[4]

Notices of seignorage in England.

The precise period when a seignorage began to be charged upon English silver coins has not been ascertained. It must, however, have been very early. Ruding mentions, that in a mint account of the 6th Henry III., one of the earliest he had met with, the profit on £3898, 0s. 4d. of silver coined at Canterbury, is stated to be £97 : 9s., being exactly 6d. a-pound, of which the king had £60 : 18 : 3½d., and the bishop the residue.[5] In the 28th Edward I., the seignorage amounted to 1s. 2½d. per pound, 5½d. being allowed to the master of the mint, to indemnify him for the expenses of coinage, and 9d. to the crown as its profit. Henry VI. increased the master's allowance to 10d. and 1s. 2d., and the king's to 1s. and 2s. In the reign of Edward IV., the seignorage varied from 4s. 6d. to 1s. 6d. It was reduced to 1s. in the reign of Henry VII.; but was prodigiously augmented in the reigns of his successors, Henry VIII. and Edward VI., whose wild and arbitrary measures produced, as will be afterwards shown, the greatest disturbance of the currency. During the lengthened reign of Elizabeth, the seignorage varied from 1s. 6d. to 2s. per pound; at which sum it continued, with very little variation, until the 18th of Charles II. (1666), when it was remitted.

From this period down to 1817, no seignorage was charged on the silver coin; but a new system was then adopted. Silver having been underrated in relation to gold in the mint proportion of the two metals fixed in 1718, heavy silver coins were withdrawn from circulation, and gold only being used in all the larger payments, it became, in effect, what silver had formerly been, the standard of the currency. The Act 56th Geo. III. cap. 68, regulating the present silver coinage, was framed not to interfere with this arrangement, but so as to render silver entirely subsidiary to gold. For this purpose it was made legal tender to the extent of 40s. only; and 66s. instead of 62s. are coined out of a pound troy, the 4s. being retained as a seignorage, which, therefore, amounts to 6⅓¼ per cent. The power to issue silver is exclusively in the hands of government; who may, by not throwing too much of it into circulation, prevent its fusion, until the market price of silver rise above 5s. 6d. an ounce.

This arrangement was censured in the debates on the resumption of cash-payments in 1819. It was contended that the over-valuation of silver with respect to gold would make debtors use it in preference in discharging their debts, and that the gold coins would be melted or exported. The result has shown that this opinion was erroneous. Debtors cannot discharge their debts by silver payments; for, as seen above, it is legal tender for 40s. only; and no creditor can be compelled, or would be disposed to take it in payment of a larger debt, except at its real value.[6]

In the 18th of Edward III., the period when we begin to have authentic accounts of the gold coinage, a pound troy of gold bullion was coined into florins, of the value of £15. Of this sum, only £13 : 16 : 6 was given to the party who brought the bullion to be coined, £1 : 3 : 6 being retained as seignorage, of which 3s. 6d. went to the master, and £1 to the king. But it appears, from the mint indentures, that the seignorage on the coinage of nobles for the same year, amounted to only 8s. 4d. And, from this remote period to the accession of the Stuarts, with the exception of the coins issued in the 4th and 5th Edward IV., and the 34th, 36th, and 37th Henry VIII., the total charge of coining a pound weight of gold bullion seldom exceeded 7s. or 8s. money of the time. In the 2d James I., a pound weight of gold bullion was coined into £40 : 10s.; a seignorage of £1 : 10s. being deducted; 6s. 5d. of which went to the master, and £1 : 3 : 7 to the crown. The seignorage on gold was remitted at the same time (18th Charles II.)

[1] Mr Tooke read a very able paper on seignorage before the Lords' Committee of 1819, on the resumption of cash-payments. It is printed in the appendix to their report.

[2] *Minutes of Evidence*, p. 207.

[3] Chevalier *De la Monnaie* (p. 110). This work forms the third volume of Chevalier's *Cours d'Economie Politique*.

[4] Storch, tom. vi. p. 74.

[5] *Annals of the British Coinage*, vol. i. p. 179, 4to edition.

[6] Those who wish for a farther elucidation of this subject, may refer to Mr Mushet's evidence in the *Appendix to the Lords' Report "on the Expediency of the Banks resuming Cash-payments,"* where it is discussed at great length, and in a very able manner.

Money. with the seignorage on silver, and has not since been revived.[1]

It appears from the official accounts, that during the ten years ending with 1855, the sum of £53,871,063 was coined at the mint into gold coins. If we estimate the cost of this coinage, including the loss on the old worn coins brought to the mint to be recoined, at 12s. per cent., it will amount to about £323,226. But two-thirds, probably, of this expense would have been rendered unnecessary, had a low seignorage of 2 per cent. been charged during this period; at the same time that it would have yielded a revenue of nearly 1½ per cent. on the sums that were coined.

It is needless, after what has been previously stated, to dwell at any greater length on the futility of the practice of issuing coins free of expense to be exported or melted, as the case may be. It is the sieve of the Danaids over again. We might, on the same principle, supply natives and foreigners with plate *ad libitum* at the price of the bullion, making them a present of the workmanship. Whatever may be thought of the policy of making coins yield a revenue, there can be no reasonable doubt that they should, at all events, be charged with the expense of coinage.

As the regulation of the seignorage, when it did exist, depended entirely on the will of the sovereign, we need not be surprised at the variations in its amount, or that it should have fluctuated according to the necessities and caprices of succeeding princes. It was, indeed, hardly possible that it should have been otherwise. Our ancestors were ignorant of the principle, by a strict adherence to which the imposition of a considerable seignorage can alone be rendered advantageous. They considered it as a tax which might be increased and diminished at pleasure. And, far from taking any steps to limit the quantity of coin in circulation, so as to maintain its value, they frequently granted to corporate bodies, and even to individuals,[2] the privilege of issuing coins, not subject to a seignorage. No wonder, therefore, that it should have been considered as a most unjust and oppressive tax, and that its abolition should have been highly popular.

Remedy or *shere*. Besides the revenue arising from the seignorage, our kings formerly derived a small revenue from the *remedy* or *shere*. It being found all but impossible to coin money corresponding in every particular of weight and purity with a given standard, a small allowance is made to the master of the mint, whose coins are held to be properly executed, provided their imperfections, whether on the one side or the other, do not exceed this allowance, or remedy. Its amount, from the reign of Edward III. down to 1816, was generally about one-eighth part of a *carat*, or 30 grains of pure gold per pound of gold bullion, and two pennyweight of pure silver per pound of standard silver bullion. In 1816, the remedy for gold coins was fixed at 12 grains per pound in the weight, and 15 grains per do. in the fineness; that for silver being, at the same time, reduced a half.

It does not appear that our princes derived any considerable advantage from the *remedy* previously to the Money. reign of Elizabeth. But she, by reducing the master's allowance for the expense of coinage from 1s. 2d. to 8d., obliged him to come as near as possible to the lowest limit allowed by the remedy. Had the coins been delivered to those who brought bullion to the mint by weight, the queen, it is plain, would have gained nothing by this device. But, in the latter part of her reign, and the first seventeen years of that of her successor, James I., they were delivered by *tale*, so that the crown saved, in this way, whatever additional sum it might otherwise have been necessary to pay the master for the expenses of coinage. In the great recoinage in the reign of William III., the profit arising from the remedy amounted to only 8s. on every hundred pounds weight of bullion; and the coinage is now conducted with so much precision, and the coins issued so near their just weight, that no revenue is derived from this source.

The continental princes have, we believe without any exception, charged a seignorage on the coinage of money. In France, this duty was levied at a very early period. By an ordonnance of Pepin, dated in 755, a pound of silver bullion is ordered to be coined into twenty-two pieces, of which the master of the mint was to retain *one*, and the remaining twenty-one were to be delivered to the merchant bringing the bullion to the mint.[3] There are no means of ascertaining the amount of the seignorage taken by the successors of Pepin, until the reign of Saint Louis (1226-1270), who coined the *marc* of silver into 58 sols, while he only delivered 54 sols 7 deniers to the merchant: at this period, therefore, the seignorage amounted to a sixteenth part of the marc, or to $6\frac{1}{4}$ per cent. It was subsequently increased or diminished without regard to any fixed principle. In the great recoinage in 1726, it amounted, on the gold coin, to $7\frac{5}{16}$ per cent., and to $5\frac{6}{7}$ per cent. on silver. In 1729, the mint prices, both of gold and silver, were augmented, and the seignorage on the former reduced to $5\frac{1}{2}\frac{1}{6}$ per cent., and on the latter to $4\frac{1}{8}$ per cent. A farther reduction took place in 1755 and 1771, when the seignorage on gold was fixed at $1\frac{4}{15}$ per cent., and on silver at $1\frac{7}{24}$ per cent.[4] At the Revolution the seignorage was converted into a brassage, being reduced nearly to the expense of coinage.

Sect. IV.—*Expense of a Currency consisting of the Precious Metals.*

Estimates of the expense of a metallic currency. A moderate seignorage has but an inconsiderable effect in reducing the expense of a metallic currency. This, which is much greater than is generally imagined, is not occasioned by the coinage, which is comparatively trifling, but by the value of the gold and silver vested in coins. If, for example, the currency of the United Kingdom consisted wholly of gold, it would amount to at least eighty millions of sovereigns; and if the customary rate of profit were 6 per cent., it would cost £4,800,000 a-year; for, were this eighty millions not employed as money, it would be employed in branches of industry, in which, besides affording wages to numerous individuals,

[1] In the tables annexed to this article, the reader will find a detailed account of the amount of the seignorage and its fluctuations in different periods.

[2] Ruding's *Annals of the Coinage*, vol. i. p. 185. When the right of seignorage was abolished, there was a pension, payable out of the profits derived from it, granted under the great seal, for twenty one years, to Dame Barbara Villiers, which the legislature ordered to be made good out of the coinage duties imposed by that act. (See Ruding, *in loco citato*, and Leake's *Historical Account of English Money*, 2d edit., p. 356.)

[3] Le Blanc, p. 87.

[4] Necker, *Administration des Finances*, (tom. iii. p. 8).—Dr. Smith has stated (*Wealth of Nations*, p. 21), on the authority of the *Dictionnaire des Monnoies*, of Abot de Bazinghen, that the seignorage on French silver coins, in 1775, amounted to about eight per cent. The error of Bazinghen has been pointed out by Garnier, in his translation of the *Wealth of Nations*.

Money. it would yield 6 per cent., or £4,800,000 a-year, nett profit to its possessors. And this is not the only loss. The eighty millions would not merely be withheld from the great work of production, and the country deprived of the revenue derived from its employment, but it would be perpetually diminished. The wear and tear of coins is by no means inconsiderable; and supposing the expenses of the coinage were defrayed by a moderate seignorage, the deficiency in the weight of the old worn coins, on their being called in to be recoined, falls on the public. There is, besides, a constant loss from shipwreck, fire, and other accidents. When due allowance is made for these causes of waste, it may not, perhaps, be too much to suppose that a country which had eighty millions of gold coins in circulation, would have annually to import and coin the hundredth part of this sum, or £800,000, to maintain its currency at its proper level.

Thus it appears probable that, were the customary rate of profit in the United Kingdom 6 per cent., it would cost £5,600,000 a-year to maintain eighty millions of gold coins in circulation. A reduction of the rate of profit would, no doubt, proportionally reduce the amount of this expense; but the reduced expense might still bear the same proportion to the total income of the country that the higher expense did, and if so, the cost of the currency would not be at all diminished. The case of France furnishes a striking example of the heavy charges attending the general use of a metallic currency. The gold and silver currency of that kingdom has been estimated by M. Fould at 2200 millions fr., and by others at 2500 millions.[1] Now, supposing the lowest estimate to be the more correct, and taking the rate of profit at 6 per cent., this currency must cost France a hundred and thirty-two millions fr. a-year, exclusive of the wear and tear and loss of the coins, which being taken, as before, at the hundredth part of the entire mass, will make the whole annual expense amount to a hundred and fifty-four millions fr., or to about *six millions* sterling. This heavy expense forms a very material deduction from the advantages resulting from the use of a currency consisting entirely of the precious metals, and has doubtless been a chief cause why all civilized countries have endeavoured to fabricate a portion of their money of less valuable materials. It has not, however, been the only cause. It is obvious, were there nothing but coins in circulation, that the conveyance of large sums from place to place would be a very laborious process; and that even small sums could not be conveyed without considerable difficulty. Of the substitutes, calculated alike to save expense and to lessen the cost of carriage, paper is in every respect the most eligible, and has been by far the most generally adopted. By using it instead of gold, we substitute the cheapest for the most expensive currency, and enable the public to exchange whatever coins the employment of paper may render superfluous, for raw materials or manufactured goods, by the use of which its wealth and enjoyments are increased. It is also transferred with the utmost facility. Hence, since the introduction of bills of exchange, most great commercial transactions have been adjusted by means of paper only, and it also is very extensively used in the everyday business of society.

Sect. V.—*How Paper is substituted for Coins, and its value maintained.*

In all advanced societies, pecuniary engagements are usually reduced to writing. This secures alike the debtors and creditors; and obviates most part of the differences which are so very apt to arise when the terms of contracts are not distinctly specified. But it is an obvious resource for such individuals as happen to possess the written obligations or bonds of others, to transfer them when occasion requires to their debtors. And it is probable that no very lengthened period would elapse after they had been employed in this way till persons in whose wealth and discretion the public had confidence, would begin to issue their notes to pay certain sums in such a form that they might readily pass from hand to hand in ordinary pecuniary dealings. But as these notes or promises, though they cost the issuers next to nothing, must be paid when presented, or at some specified date, they would not be issued, or given away, except to those who engaged to repay them with a premium or interest, the amount of which would, of course, belong to and be a source of profit to the issuers.

Money. Origin of paper money, and how its value is maintained.

Suppose, for example, that a capitalist issues a promissory note for £1000. This he does by advancing it to an individual in whose solvency he has confidence, or who has given him security for its repayment with interest. In point of fact, therefore, the issuer has exchanged his promissory note to pay £1000 for an obligation of equal amount, bearing the current rate of interest; and so long as the note, the intrinsic worth of which cannot well exceed a sixpence, remains in circulation, he will, supposing interest to be 5 per cent., receive from it a revenue of £50 a year. The business of bankers who issue notes is conducted on this principle. They could make no profit were they obliged to keep dead stock or bullion in their coffers equal to the amount of their notes in circulation. But if they be in good credit, a fourth or a fifth part of this sum will perhaps be sufficient. And their profits, after the expenses of their establishments, including the manufacture of their notes, are deducted, will be measured by the excess of the profit derived from their notes in circulation, over what they might derive from the employment of the stock kept in their coffers to meet the demands of the public.

All descriptions of notes, whether they are issued by individuals, or corporations, that are made payable in coin on demand, or at fixed periods, cease to circulate as soon as a suspicion begins to be generally entertained of the solvency of the issuers, or of their ability to make good their engagements. But paper-money, meaning thereby notes not payable on demand, but which are, notwithstanding, legal tender, is not affected by a want of credit. It may be depreciated through excess, but by nothing else. It has no intrinsic worth, and is not the representative of anything in particular. Its value, as already shown, is entirely dependent on the extent to which it is issued. From 1797 down to 1821, Bank of England notes, though not payable in gold, were *de facto* legal tender, and their value was determined by the principle now stated, and by it only.

Allegation that bank notes issued on good bills at short dates, cannot be depreciated from excess.

It has, however, been contended, that there is a material difference between the inconvertible paper issued by governments in payment of their debts, and that which is issued by a company like the Bank of England, in discount of approved bills. In regard to the former, it is admitted on all hands that its value may be depreciated from excess. But in regard to the latter, it has been argued, that this is impracticable; that its supply is limited by the legitimate wants of the public; and that being issued only in proportion to the demand in exchange for good and convertible securities, payable at specific and not very distant dates, it can neither be in excess nor depreciated.

[1] Chevalier *De la Monnaie*, p. 326.

The apologists of the Restriction Act of 1797 endeavoured to show, by reasonings founded on assertions like these, that Bank of England notes were not depreciated during the suspension of cash payments. But though their fallacy, which is sufficiently obvious, was demonstrated over and over again by the authors of the Bullion Report, by Messrs. Ricardo, Blake, Huskisson, and others, and has been acknowledged by the legislature and the public, such is the vitality of error, or the inveteracy of prejudice, that we have these assertions repeated in 1857 as if their accuracy neither had been nor could be questioned. And such being the case, it may be right shortly to re-state principles which have been frequently stated before, and which we had supposed might have been safely taken for granted.

Fallacy of this allegation.

It may be premised on entering on this discussion, that the demand for money is not like the demand for other things. A man may have enough of beef, of beer, of cloth, and of a great many articles; but of money he never can have what he would consider enough. An increase of money means an increase of riches, that is, of power and consideration, and the desire for these is altogether illimitable. Whether money consist of paper, or gold, or both, the demand for it will be alike great; and will wholly depend on the price or interest charged for loans, and not on the value of the money lent.

Demand for money depends on a comparison between interest and profit.

These statements are so obviously well-founded as hardly to require illustration. If an individual can borrow £1000, £10,000, or any greater sum, at 3, 4, or 5 per cent. interest, and if he can invest it so as to yield 4, 5, or 6 per cent. it is plainly for his advantage, and for that of every other person who may be similarly situated to borrow to an unlimited extent. And a company that issued inconvertible paper, and was consequently relieved from the necessity of keeping any unproductive stock or bullion in its coffers, might issue notes at a very low rate of interest, and if so, the demand for them would be proportionally great.

During the period from 1809 to 1815, both inclusive, the issues of Bank of England and the provincial banks were much greater than they had ever previously been, and their paper was at a heavy discount as compared with bullion. But owing to the interest charged by the banks (5 per cent.) being less than the market rate at the time, the parties applying for fresh discounts were constantly on the increase. It is in truth quite immaterial to such parties whether the issuers have, by issuing notes in excess, depressed their value as compared with gold, or have limited their supply, so as to keep them on a level with that metal. These circumstances are of primary importance to those whose incomes do not vary with variations in the value of money; but as prices rise and fall with its increase or diminution, they have little or no influence over merchants and tradesmen, who are the principal applicants for discounts. A, who presents a bill for £500 or £1000 to a bank for discount, has received it, if it have grown out of a real mercantile transaction, in payment of goods which were worth £500 or £1000 money of the day; and it is this sum which he wishes to obtain by discounting the bill. Had the value of money been different, the price of the goods, and consequently, the sum in the bill, would have differed proportionally. Its market value at the moment is the only thing attended to in these transactions. And it is quite the same when the bills are for accommodation purposes. It matters not whether the notes given for them are worth 10s. or 20s. In the one case the bills would be nominally twice as great as in the other, but there would be no real difference between them. So long as the rate of interest charged for discounts or loans is under the market rate, the demands for money can never be supplied. In such case million after million may be issued. The value of the currency, if it consist of inconvertible paper, may be so reduced as to require £1 or £5 to purchase a quartern loaf; but the circumstance of its value being diminished in proportion to the increase of its quantity would render the demand for additional supplies as great as ever.

It is plainly, therefore, the merest drivelling to talk about the demands for money being limited by the wants of the public. These wants, like the avarice of the miser, or the thirst of the dropsical patient, are altogether boundless. They have no possible limit, and would be as great after 100 or 1000 millions of notes or sovereigns had been issued as after an issue of 10 or 20 millions.

Limit of depreciation in a gold or mixed currency.

But when a currency consists of gold, or partly of gold and partly of paper immediately convertible into gold, it contains within itself a principle by which its over-issue is corrected. In that case, the issue of 100,000 or 1,000,000 sovereigns, and of 100,000 and 1,000,000 £1 notes, has precisely the same effect. Paper is not depreciated as compared with gold, for the latter may at pleasure be obtained for the former; but the whole currency, gold as well as paper, becomes redundant, or is depreciated, as compared with that of other countries in which there has been no over-issue. And as gold is everywhere in demand, and the expense of its conveyance from one state to another seldom exceeds one or two per cent., it follows, that if the currency be depreciated by over-issue to any greater extent than this, the exchange will become unfavourable, and gold will begin to be exported. And if, in such circumstances, the issuers of paper do not, by withdrawing a portion of their notes from circulation, raise the value of the currency and restore the exchange to par, the drain for bullion will undoubtedly continue till they have been deprived of their last sovereign, and are compelled to stop payments.

The currency may become redundant from various causes exclusive of the over-issue of paper, such as the greater economy of its issue by means of improved banking, the occurrence of bad harvests, the prevalence of discredit or the scarcity of money in countries with which we are commercially connected, and so forth. But however it may originate, the fact of the exchange being unfavourable, and an efflux of gold taking place, shows that the currency is in excess, and should be diminished.

We are aware that this conclusion has been denied in the case of an unfavourable exchange occasioned by a bad harvest. But, there is no room or ground for any such denial. The fact that a harvest is bad, that is, that the produce to be circulated by the intervention of money is diminished by rendering the latter redundant and reducing its value, makes it be exported to countries where its value is greater. And its exportation, by raising its value here, and reducing that of other articles, is the surest means of increasing their exportation and reducing the foreign demand for bullion to a minimum.

Though consistent with the soundest theory, this is not mere theoretical reasoning. The issues of the Bank of England were for about a century previously to 1797, limited in the way now explained; and though, during that lengthened period, the occasional efflux of gold showed that the currency was in excess, there was no discrepancy between the value of gold and paper.[1] Since

[1] Previously to the recoinage of gold in 1774, the market price of gold exceeded its mint price by about 2½ per cent. But this was not a consequence of gold or paper being in excess, but of the gold coins being worn to that extent. On the new coins being issued, the discrepancy between the mint and market price of gold disappeared.

1821, the issues of the bank have been limited on the same principle. And it will be afterwards seen, that by neglecting to attend in 1825, and other occasions, to the unerring evidence afforded by the fall of the exchange of the currency being in excess, and requiring to be reduced, the bank was brought into the most serious difficulties.

No limit to the depreciation of inconvertible paper.

But there is no such check over the issues of inconvertible paper. It is legal tender only in the country in which it is issued. Abroad it has no such privilege, and is, consequently, worth nothing. Hence, if it be issued in excess, the surplus cannot, as in the case of gold, be removed or lessened by exportation. It is confined to the country of its birth; and there is nothing to sustain its value but the discretion of the issuers. And all experience shows that no dependence can be placed on a restraint of this sort. Even in England, where all matters connected with money are supposed to be comparatively well understood, the inconvertible paper of the bank was over-issued, so as to be, in 1814, at a discount as compared with gold, of no less than 25 per cent.[1] And it is probable that, but for the destruction of country bank paper, caused by the political events of the period, the over-issue and depreciation of bank-notes would have been carried still further. The fact is, that the power to issue inconvertible paper has never been conceded to any man, or set of men, without being abused, that is, without its being issued in excess. The re-enactment of the restriction Act of 1797, and making it perpetual, would have no influence over the value of paper, provided its quantity were not at the same time increased. But who can doubt that it would be increased? Such a measure would enable the Bank of England to exchange bits of engraved paper, not worth, perhaps, 5s. a quire, for as many, or the value of as many, hundreds of thousands of pounds. And is it to be supposed that the directors and proprietors should not avail themselves of such an opportunity to amass wealth and riches. If government enable a private gentleman to exchange a scrap of paper for an estate, will he be deterred from doing so by any considerations about its effect on the value of the currency? In Utopia we might, perhaps, meet with an individual influenced by such scruples; but if we expect to find him in England, we shall most likely be disappointed.

It thus appears to be essential that all notes, how much soever they may differ in other respects, should be payable in specie on demand. But it is not enough to enact a law of this sort. It is indispensable that effective measures should, at the same time, be adopted to ensure its being carried out; that is, to make certain that its provisions shall not be defeated by fraud, mismanagement, or any sort of contingency; but that coins shall always be obtainable at the pleasure of the holders of the notes which circulate in their stead.

Sect. VI.—*Whether Gold or Silver should be adopted as the Standard of the Currency, or whether it should consist of both.*

The relation of gold to silver subject to constant variation.

As the values of gold and silver perpetually vary, not only relatively to other things, but also to each other, it is impossible arbitrarily to fix them by mint regulations. Gold may now, or at any given period, be to silver as 13, or 14, or 15 to 1; but were sovereigns and shillings made exchangeable in that proportion, the discovery of a gold or silver mine of more than the ordinary degree of productiveness, or the discovery of any abridged process by which labour might be saved in the production of one of the metals, would disturb this proportion. And as soon as the mint valuation of the two metals ceases to correspond with that which they bear in the market, it becomes the interest of debtors to satisfy all claims upon them in the over-valued metal, which, consequently, is alone used in all considerable transactions.

Over-valuation of gold made it be adopted as the standard in this country.

The regulations under which gold and silver coins circulated in England previously to 1663, differed at different periods. In that year the guinea was first coined; and its value (though fixed by the mint regulations at the low rate of 20s. in silver), and the values of the other gold coins then in circulation, varied according to the fluctuations in the market values of gold and silver, the latter being then in effect the only legal tender. But, from a variety of causes—the principal being, perhaps, the very unsatisfactory state of the silver coin, gold began, under the Commonwealth, and in the reign of Charles II., to be used in preference to silver in large payments. Previously to the great recoinage of silver in the reign of William III. (1696-1699), the silver coins were so much worn and degraded, that the guinea passed current at from 28s. to 30s. After the recoinage, its value was very generally estimated, without any interference on the part of government, at 21s. 6d.; a valuation which was equivalent to a premium of 10d. in its favour, it being really worth only about 20s. 8d. of the new silver coins.

In consequence of this marked, though unintentional, preference of gold, the new silver coins immediately began to be exported; and, to stop their exportation, the value of the guinea was reduced, by proclamation in 1717, from 21s. 6d., at which it had been fixed by custom, to 21s., both metals being made legal tenders in that proportion, or in the ratio of 1 lb. gold to $15\frac{2285}{3664}$ lbs. silver. But notwithstanding this reduction, which was made pursuant to the advice of Sir Isaac Newton, the guinea was still over-valued as compared with silver. This excess was estimated at the time at about 4d. in the guinea, or $1\frac{19}{31}$ per cent.;[2] and as the value of silver compared with gold continued to increase for the greater part of last century, it afterwards became considerably greater; and this circumstance rendered it, as already stated, more and more the interest of all parties to pay in gold rather than in silver. Hence gold became in practice the only legal tender. And during the lengthened period from 1717 down to 1816, no silver coins of the legal weight and purity would remain in circulation, but were either melted down, or exported to other countries, where they passed at their full value. In consequence, the silver currency consisted entirely of light, worn coins. But as it existed only in a limited quantity, it did not, according to the principle already explained, sink in its current value. Though degraded, it was still the interest of debtors to pay in gold. If, indeed, the quantity of debased silver had been very great, or if the mint had issued debased pieces, it might have been the interest of debtors to pay in such debased money; but its quantity being limited, it sustained its value, and gold was really the standard of the currency.

The mint regulations issued in 1717, continued in full force down to 1774, when it was enacted by the 14 Geo.

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[1] Rather an indigestible fact for those who contend that bank notes, being issued in proportion to the demand, have not been depreciated from excess.

[2] Liverpool *On Coins*, pp. 68-85.

III., cap. 42, that silver coins should not be legal tender by tale for more than £25 in any one payment, but that standard silver should be legal tender to any amount in weight at the mint price of 5s. 2d. an ounce.[1] This act had not, however, as some have supposed, any effect in causing the general employment of gold as money in preference to silver. For, to use the words of Mr Ricardo, "it did not prevent any debtor from paying any debt, however large its amount, in silver currency fresh from the mint. That the debtor did not pay in this metal was not a matter of chance, nor a matter of compulsion, but wholly the effect of choice. It did not suit him to take silver to the mint, but it did suit him to take gold hither. It is probable that, if the quantity of this debased silver in circulation had been enormously great, and also a legal tender, that a guinea would have been, as in the reign of William III., worth thirty shillings; but it would have been the debased shilling that had fallen in value, and not the guinea that had risen."[2]

Over-valuation of silver made it be adopted as the standard in France; but a change in the opposite direction is now taking place.

In France, a different valuation of the precious metals produced a different effect. The louis d'or, which, previously to the recoinage of 1785, was rated in the mint valuation at 24 livres, was really worth 25 livres 10 sols. Those, therefore, who chose to discharge the obligations they had contracted, by payments of gold rather than of silver, plainly lost 1 liv. 10 sols on every sum of 24 livres. In consequence, very few such payments were made, gold was nearly banished from circulation, and the currency of France became almost entirely silver.[3] In 1785, a sixteenth part was deducted from the weight of the louis d'or, and after that period the value of the precious metals, as fixed in the French mint, more nearly corresponded with the proportion which they bore to each other in the market. Indeed, it was stated, before a committee of the House of Commons in 1819, that the difference between the mint and market proportions of gold and silver at Paris in 1817 and 1818, had not exceeded from one-tenth to one-fourth per cent. There was, however, no reason to presume that this coincidence, which must have been in a great degree accidental, could long be maintained under any arbitrary system, and it has recently been wholly set aside. The great increase in the supplies of gold from California and Australia, coupled with the extraordinary demand for silver in India and China, having raised the value of the latter, as compared with that of the former, gold has come into very extensive use as money in France. There seems, indeed, to be little doubt that it will very speedily be as generally used there as in England. Large amounts of French silver currency have been exported; and it will, most likely, become subsidiary to gold, and be employed only in making small payments.

To ensure the indifferent use of gold and silver coins in countries where they are both legal tender, their mint values would require to be every now and then adjusted, so as to correspond with their real values. But as this would obviously be productive of much trouble and inconvenience, the preferable plan undoubtedly is to make only one metal legal tender, and to allow the worth of the other to be adjusted by the competition of the sellers and buyers.

A double standard absurd.

The absurdity of employing two metals as legal tender, or as a standard of value, was unanswerably demonstrated by Locke and Harris, and has been noticed by every subsequent writer. But so slow is the progress of improvement, that it was not till 1816 that it was enacted that gold should be in law, what it had long been in fact, the only legal tender for sums of 40s. and upwards. And a seignorage being then also charged upon silver, it has become entirely subordinate to gold, and is little used except in payments of fractional parts of a pound, or rather of 10s.

Whether, however, gold should have been adopted as the standard of exchangeable value in preference to silver, is a question not so easy of solution, and on which there has been a great diversity of opinion. Locke, Harris, and Ricardo are of opinion that silver is better fitted than gold for a standard; whilst Smith, though he has not explicitly expressed himself, appears to think that gold should be preferred. This latter opinion has been supported by Lord Liverpool, in his very able work "On the Coins of the Realm." And his reasonings having received the approbation of Parliament, and gold having been for a lengthened period the only legal tender, all attempts to alter this arrangement ought to be opposed.

Gold the preferable standard.

The late extraordinary increase in the supply of gold has led many persons to anticipate great inconvenience from the fall which may be expected to take place in its value. But, supposing that this fall should, as appears most probable, take place in the end, there is no ground for concluding that it will be brought about otherwise than by slow degrees; and if so, it will not occasion any injurious disturbance. About 140 or 150 years elapsed from the discovery of America before the influx of bullion from the new into the old world produced its full effect. And it is doubtful, considering the vastly increased field for the employment of gold and silver, whether the supplies from California and Australia will speedily exercise any very material influence. We shall elsewhere endeavour to show that a gradual fall in the value of gold would, in a public point of view, be advantageous rather than otherwise.[4]

Whether gold or silver be adopted as the standard of the currency, does not affect its total cost or value; for the quantity of metal employed as money, or the quantity of metal for which paper is the substitute, is always inversely as the value or cost of such metal. When silver is the standard, fourteen or fifteen times more of it than of gold is required; or, which is the same thing, if the denomination of a pound be given to any specific weight of gold or silver, fourteen or fifteen times more of such silver pounds will be required to serve as currency, fourteen or fifteen to one being about the proportion which gold bears in value to silver. Hence the expense of a gold or silver currency is identical. Gold being too valuable, in proportion to its bulk, to be coined into pieces of the value of a shilling or a sixpence, the subordinate currency necessary in small payments should be over-valued, and issued only in limited quantities, as is the case with the existing silver coins.

Were a seignorage charged on the gold coins, paper, it is obvious, might be deprecciated to its extent before it would be the interest of the holders to demand coin

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[1] Being intended as an experiment, this act was limited to the 1st May 1776. But not being found to be productive of any inconvenience, it was prolonged by other temporary acts. It was, however, suffered accidentally to expire in 1783, and was not renewed till fifteen years after, in 1798. And yet, despite the extremely degraded state of the silver coin, very few instances occurred during this lengthened period of its being offered in payment of any considerable sum.

[2] *Principles of Political Economy*, p. 520.

[3] *Say*, i. p. 393.

[4] See Art. PRECIOUS METALS in this work.

Money. for the purpose of exportation, and consequently before the check of specie payments would begin to operate. But, even with a seignorage, all risk of paper being depreciated, might be obviated by making it obligatory on the bank to pay her notes, either in bullion, at the mint price of £3:17:10½d. an ounce, or coin, at the pleasure of the holder. A regulation of this kind could not be justly considered as imposing any hardship on the bank; for no bullion would be demanded from her, except when, by the issue of too much paper, its value had been sunk below the standard.

Standard of money.

SECT. VII.—*Standard of Money. Duodecimal and Decimal systems of dividing Coins. Degradation of Coins in Rome, France, Great Britain, and other countries. Effects of this degradation.*

By the standard of money is meant the degree of the purity or fineness of the metal of which coins are made, and the quantity or weight of such metal in them. A pound troy, or twelve ounces of the metal in English silver coins, contains 11 ounces 2 dwts. fine silver, and 18 dwts. alloy. And this standard pound, or pound sterling, is coined into 66 shillings; which, consequently, contain $\frac{2}{66}$ parts of $\frac{1}{12}$ of a pound troy, or 1614·545 grains *fine* silver. From the 43 of Elizabeth down to 1816, when the 56th Geo. III. cap. 68, imposing a seignorage of about six per cent. on the silver coin, was passed, the pound weight of standard silver bullion was coined into 62 shillings. All English silver coins have been coined out of silver of 11 oz. 2 dwts., fine, from the Conquest to this moment, excepting for a period of sixteen years, from 34th Henry VIII. to the 2d Elizabeth.

Purity of English coins.

The purity of gold is not estimated either in Great Britain, or in most other European countries, by the weights commonly in use, but by an Abyssinian weight called a *carat*.[1] The carats are subdived into four parts, called grains, and these again into quarters; so that a *carat grain*, with respect to the common divisions of a pound troy, is equivalent to 2½ penny-weights. Gold of the highest degree of fineness, or pure, is said to be 24 carats fine. When gold coins were first struck at the English mint, the standard of the gold in them was 23 carats 3½ grains fine, and one-half grain alloy; and so it continued, without any variation, till the 18th Henry VIII., when a new gold standard of 22 carats fine, and two carats alloy was introduced. The first of these was called the old standard; the second, the new standard or crown gold, because crowns, or pieces of the value of five shillings, were first coined of this new standard. Henry VIII. made his gold coins of both standards; and this practice was continued by his successors till 1633. But from the latter period to the present, gold coins have been invariably of the new standard, or crown gold. Some coins of the old standard continued to circulate till 1732, when they were forbidden to be any longer current.[2]

The standard of our present gold coins is, therefore, eleven parts of fine gold, and one part of alloy. The pound troy of such gold is divided into $46\frac{8\,9}{1\,2\,9}$ sovereigns, each of which ought, consequently, when fresh from the mint, to weigh $\frac{1}{46}\frac{8\,9}{1\,2\,9}$ of twelve ounces, or five dwts. $3\frac{1\,7\,1}{6\,2\,3}$ grains standard gold, or four dwts. $17\frac{1\,8}{1\,1\,2\,1\,4}$ grains pure gold. Money.

The alloy in coins is reckoned of no value. It is allowed, to save the trouble and expense that would be incurred in refining the metals so as to bring them to the highest degree of purity; and because, when its quantity is small, it renders the coins harder, and less liable to be worn or rubbed. If the quantity of alloy were considerable, it would lessen the splendour and ductility of the metals, and would add too much to the weight of the coins.

Duodecimal and decimal division of the pound sterling. Superiority of the former.

The pound sterling, represented by the sovereign, is the integer or unit of currency in England; it being subdivided into twenty shillings, each shilling into twelve pence, and each penny into four farthings. Latterly, however, this system, notwithstanding its many recommendations, has been a good deal objected to; and various proposals have been made for substituting in its stead a coinage on the decimal plan. Most part of these proceed on the assumption that the pound is to be maintained as the integer, it being subdivided into tenths, hundredths, and so on, as in the French coinage. But there would be no little difficulty in carrying out a project of this sort. Shillings (two to be called a florin) might be continued in the new coinage; but pence and farthings would have to be discarded. This is evident from the following comparison:—

At present £1 = 20 shillings = 240 pence = 960 farthings.
Proposed plan £1 = 10 fl. (each = 2 sh.) = 100 cents = 1000 mills.

Now, as cents and mills are neither equivalent to, nor whole multiples of pence and farthings, it would be impracticable accurately to adjust to the new scale the prices of such articles, duties, or services as are wholly or partly rated in pence and farthings. It is evident, for example, inasmuch as mills would be four per cent. less valuable than farthings, that those retailers, of whom there are many, who supply the poor with small quantities of the various articles priced in farthings, could not accept mills in their stead without incurring a heavy loss. And if, as is most likely, they attempted to right themselves by charging two mills for a farthing, and three cents for a penny, serious injury would be inflicted on those who dealt with them. But, suppose that this difficulty is got over, and that prices are one way or other adjusted to the new scale, the question remains, Would the change be advantageous? And, despite all that has been alleged in its favour, we are satisfied that it would not.

The object of coins is twofold, viz., 1st., to serve as standards of value, and, 2d, to facilitate exchanges. With respect to the first of these functions, it is of no consequence how coins are subdivided, the grand requisite being that their weight and purity should be preserved inviolable, and that the substitutes used in their stead should be immediately convertible into them. In their second function, or as instruments for facilitating exchanges, coins are very little used in transactions of £5 and upwards, these being mostly settled by the intervention of notes and cheques. But coins, especially shillings, pence, and farthings, are of universal use in

1 The carat is a bean, the fruit of an Abyssinian tree, called Kuara. This bean, from the time of its being gathered, varies very little in its weight, and seems to have been, in the earliest ages, a weight for gold in Africa. In India it is used as a weight for diamonds, &c. (Bruce's *Travels*, vol. v. p. 66.)

2 Liverpool *On Coins*, p. 27.

retail dealings; and these form the vast majority, nineteen twentieths or more of the ordinary business of society. Hence, if a system of coinage be well fitted for such dealings, it matters little whether it be equally well suited to those large transactions in which coins are seldom or never employed. It is easy, however, to see that shillings, or coins of twelve parts, are much better adapted to the retail trade than florins or coins of ten parts. The former are divisible without fractions by six, four, three, and two, whereas the latter are divisible only by five and two. We are constantly buying or dealing in the thirds, the quarters, and so on of different articles; but with a decimal division of the integer, this would sometimes be impracticable and sometimes difficult; for we could not pay the price of a third, two thirds, or a sixth of anything, nor could we pay for a fourth, an eighth, &c., without introducing inconvenient fractions. In so far, therefore, as retail transactions are concerned, a duodecimal is at once seen to be decidedly preferable to a decimal scale. The superiority of the latter consists, if at all, in its affording greater facilities for the keeping of books and accounts. And this advantage, supposing it to be real, is of trivial importance compared with the other. Few individuals keep books or accounts, whereas everybody, the rich as well as the poor, but especially the latter, have innumerable, daily, and almost hourly transactions, which being adjusted *viva voce*, are concluded by the delivery of small coins. Our readers may not, perhaps, be generally aware of the fact that a considerable portion of the tea and sugar sold in London and other great towns is retailed in ounces, in the payment of which farthings are frequently required. Tobacco and snuff are, also, almost wholly disposed of in this way, and it is partially or wholly the case with other important articles.

Unless, therefore, the interests of the many be sacrificed, without scruple or equivalent, to the interests of the few, the existing coinage regulations must be upheld. The advantages on their side are quite preponderating. Nothing can be better suited than the duodecimal scale to the exigencies of the great bulk of society, whereas the decimal scale is, at best, suited only to what is a comparatively small body of clerks and accountants.

And, even in the case of the latter, it is the easiest thing imaginable for those who prefer keeping books and accounts on the decimal plan to do so at present. The keepers of such books would soon come to recollect the decimals for all the principal subdivisions of a pound. And, were a table of such equivalents affixed to their desks, they might, when they happened to be at fault, by looking into it, find the desired figures at a glance.

Besides being best fitted to secure the principal advantages to be derived from the use of coins, our present system has the further and most important recommendation that it is in operation, and that all classes, even those who can neither read nor write, are familiar with its divisions, and employ it with the greatest ease and expedition. It would be extremely difficult to subvert an established system of this sort to make room for one of less easy application, abounding in outlandish terms, and to which every body would be a stranger. Even in France, where the most sweeping of revolutions paved the way for the decimal system, it has had to be materially modified, and is not yet fully introduced.

But the change, how inconvenient soever, might be submitted to, were it certain to be in the end advantageous. When, however, the reverse is the case, when the change would be alike undesirable and inconvenient, it would be worse than foolish to disturb the existing arrangements.[1]

Having thus ascertained what the standard of money really is, and how coins may be best divided, we proceed briefly to inquire into the effects produced by the depreciation of the latter. This is a very important inquiry, both in a practical and historical point of view.

Variations of the standard. Ruinous consequences thereof.

Directly to alter the terms of the contracts between individuals, would be too barefaced and tyrannical an interference with the rights of property, to be tolerated. Those, therefore, who endeavour to enrich one part of society at the expense of another, find it necessary to act with caution and reserve. Instead of changing the stipulations in contracts, they have resorted to the ingenious device of changing the standard by which these stipulations are adjusted. They have not said, in so many words, that ten or twenty per cent. should be added to, or deducted from, the debts and obligations of society, but they have, nevertheless, effected this by making a proportional change in the value of money. Men, in their bargains, do not, as has been already seen, stipulate for signs or measures of value, but for real equivalents. Money is not merely the standard by a comparison with which the values of commodities are ascertained; it is also the equivalent, by the delivery of a specified amount of which the stipulations in most contracts and engagements may be discharged. It is plain, therefore, that it cannot vary without affecting these stipulations. Every addition to its value makes a corresponding addition to the debts of the state and of individuals; whereas every diminution of its value makes a corresponding diminution of these debts. Suppose that, owing to an increase in the cost of gold and silver, or in the quantity of bullion contained in coins of the same denomination, the value of money is raised ten per cent.: it is plain that this will add ten per cent. to the various sums which one part of society owes to another. Though the nominal rent of the farmer, for example, continues stationary, his real rent is increased. He pays the same number of pounds, or livres, or dollars, as formerly; but these have become more valuable, and require, to obtain them, the sacrifice of a tenth part more corn, labour, or other things, the value of which has remained stationary. On the other hand, had the value of money fallen ten per cent., the advantage would have been wholly on the side of the farmer, who would have been entitled to a discharge from his landlord, when he had paid him only nine-tenths of the rent really bargained for.

But, though it be thus obviously necessary, to prevent a pernicious subversion of private fortunes, and the falsifying of all precedent contracts, that the standard of money, when once fixed, should be maintained inviolate, there is nothing which has been so frequently changed. We do not now allude to variations in the value of bullion itself, against which it is impossible to guard, but to variations in the quantity of bullion contained in the same nominal sums of money. In almost every country, debtors have been enriched at the expense of their creditors. The necessities, or the extravagance of

[1] For a further and complete exposition of this question, see Lord Overstone's Queries annexed to the Report of the Commissioners on Decimal Coinage.

Money. governments, have forced them to borrow. And to relieve themselves of their encumbrances, they have almost universally had recourse to the disgraceful expedient of degrading or enfeebling the coin; that is, of cheating those who had lent them money, and of enabling every private debtor in their dominions to do the same by his creditors.

The ignorance of the public in remote ages facilitated this variety of fraud. Had the names of the coins been changed when the quantity of metal contained in them was reduced, there would have been no room for misapprehension. But, though the weight of the coins was undergoing perpetual, and their purity occasional, reductions, their ancient denominations were almost uniformly preserved. And those who saw coins of a certain weight and fineness circulate under the names of florins, livres, and pounds, and who saw them continue to circulate as such, after both their weight and their fineness had been lessened, began to think that they derived their value more from the stamp affixed to them by authority of government, than from the quantity of the precious metals which they contained. This was long a very prevalent opinion. But the rise of prices which invariably followed every reduction of the standard, and the disturbance which it occasioned in every pecuniary transaction, undeceived the public, and taught them, though it may not yet have taught their rulers, the expediency of preserving the standard of money inviolate.

Before proceeding to notice the changes made in the currency of this and other countries, it may be proper to observe that the standard is generally debased in one or other of the undermentioned ways.

How the standard is reduced. First, by altering the denominations of the coins, without making any alteration in their weight or purity. Thus, suppose sixpence, or as much silver as there is in a sixpence, were called a shilling, then a shilling would be two shillings, and twenty of these shillings, or ten of our present shillings, would make a pound sterling. This would be a reduction of fifty per cent. in the standard.

Secondly, the standard may be reduced, by continuing to issue coins of the same weight, but making them baser, or with less pure metal and more alloy.

Thirdly, it may be reduced by making the coins of the same degree of purity, but of diminished weight, or with less pure metal; or it may be reduced partly by one of these methods, and partly by another.

The first of these methods of degrading the standard was recommended by Mr. Lowndes in 1695; and if injustice is to be done, it is, on the whole, the least mischievous mode in which it can be perpetrated. It saves all the trouble and expense of a recoinage; though, as it renders the fraud too obvious, it has been but seldom resorted to. But in inquiries of this kind, it is rarely necessary to investigate the manner in which the standard has been degraded. And by its reduction or degradation, is usually meant a diminution of the quantity of pure metal contained in coins of the same denomination without regard to the mode in which it may have been effected. Money.

Conformably to what has been observed in the first section of this treatise, relative to the universality of the ancient practice of weighing the precious metals in every exchange, it is found that the earliest coins of most countries had the same names and were of the same ponderosity as the weights commonly used in them. Thus, the *talent* was a weight used in the earliest periods by the Greeks, the *as* or *libra* by the Romans, the *livre* by the French, and the *pound* by the English, Scotch, &c.; and the coins originally in use in Greece, Italy, France, and England, received the same denominations, and weighed a talent, a libra or pondo, a livre, and a pound. The standard has not, however, been preserved inviolate, either in ancient or modern times. But to attempt to trace these changes with any degree of minuteness, would lead us into too many details; and we shall content ourselves with referring to those only which seem to be of most importance.[1]

History of Roman money. *Roman Money.*—We learn from Pliny, that the first Roman coinage took place in the reign of Servius Tullius; that is, according to the common chronology, about 550 years before Christ. The *as*, or *libra*, of this early period, contained a Roman pound of copper, the metal then exclusively used in the Roman coinage, and was divided into twelve parts or *unciæ*. If we may rely on Pliny, this simple and natural system was maintained until 250 years before our æra, or until the first Punic war, when the revenues of the state being insufficient, it was attempted to supply the deficiency, by reducing the weight of the as from twelve to two ounces. But it is extremely improbable that a government, which had maintained its standard inviolate for 300 years, should have commenced the work of degradation, by at once reducing it to a *sixth part* of its former amount; and it is equally improbable that so sudden and excessive a reduction should have been made in the value of the currrent money of the state, and, consequently, in the debts of individuals, without occasioning the most violent commotions. Nothing, however, is said in any ancient writer to entitle us to infer that such really took place; and we, therefore, concur with those who think that the weight of the as had been previously reduced, and that its diminution, which, it is most probable, would be gradual and progressive, had merely been carried to the extent mentioned by Pliny during the first Punic war. In the second Punic war, or 215 years B. C., a further degradation took place, and the weight of the as was reduced from two ounces to one ounce. And by the Papyrian law, supposed to have passed when Papyrius Turdus was tribune of the people, 175 years B. C., the weight of the as was reduced to half an ounce, or to 1-24th part of its ancient weight, at which it continued till Pliny's time, and long afterwards.[2]

Denarius, value of. The denarius, the principal silver coin in use amongst the Romans for a period of 600 years, was coined five years before the first Punic war, and was, as its name

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[1] For an account of the money of the Greeks, and of the ancients generally, the reader is referred to Raper's *Inquiry into the Value of the Ancient Greek and Roman Money*, in the volume of *Select Tracts on Money*, reprinted for the Political Economy Club in 1856; Pinkerton *On Medals;* Hussey *On Ancient Weights and Money;* and to the various articles on the same subject in Smith's *Dictionary of Greek and Roman Antiquities.*

[2] "Servius rex primus signavit æes. Antea rudi usos Romæ Remeus tradit. Signatum est nota pecudum unde et pecunia appellata. . . . . Argentum signatum est anno urbis DLXXXV. Q. Fabio Cos. quinque annos ante primum bellum Punicum. Et placuit denarius prox. libris æris, quinarius pro quinque, sertertium pro dipondio ae semisse. Libræ autem pondus æris imminutum bello Punico primo cum impensis resp. non sufficeret, constitutumque ut asses sextentario pondere ferirentur. Ita quinque partes factæ lucri, dissolutumque æs alienum. . . . . Postea, Annibale urgente, Q. Fabio Maximo Dictatore, asses unciales facti: placuitque denarium xvi. assibus permutari, quinarium octonis, sestertium quaternis. Ita resp. dimidium lucrata est. Mox lege Papyria semunciales asses facti." Plinii, *Hist. Nat.*, lib. xxxiij. cap. 3. Lugd. Bat. 1669.

Money. imports, rated in the mint valuation at ten asses. Mr Greaves, whose dissertation has been deservedly eulogised by Gibbon,[1] shows that the denarius weighed at first only *one-seventh* part of a Roman ounce,[2] which, if Pliny's account of the period when the weight of the as was first reduced be correct, would give the value of silver to copper in the Roman mint as 840 to 1, which Greaves very truly calls a "most unadvised proportion." But if we suppose with Pinkerton,[3] that, when the denarius was first issued, the as only weighed three ounces, the proportion of silver to copper would be as 252 to 1 —a proportion which, when the as was soon afterwards reduced to two ounces, would be as 168 to 1, or about a third more than in the British mint. When, in the second Punic war, the as was reduced from two ounces to one, the denarius was rated at sixteen asses.

During his stay in Italy, Greaves weighed many consular denarii; that is, as he explains himself, denarii which were struck after the second Punic war and previously to the government of the Cæsars; and he found, by frequent and exact trials, that the best and most perfect of them weighed 62 grains English troy weight.[4] Now, as the English shilling (new coinage) contains very nearly 87¼ grains standard silver, this would give 8½d. for the value of the consular denarius. We should, however, fall into the greatest mistakes, if we indiscriminately converted the sums mentioned in the Latin authors by this or any other fixed proportion. It is not enough to determine the real value of a coin, to know its weight: the degree of its purity, or the fineness of the metal of which it is made, must also be known. But Greaves assayed none of the denarii which he weighed. And though it were true, as most probably it is, that, from the first coinage of silver in the 485th year of the city to the reign of Augustus, the weight of the denarius remained constant at ¼th part of a Roman ounce, or about 62 grains; and that, from the reign of Augustus to that of Vespasian, it only declined in weight from ¼th to ⅛th of an ounce;[5] still it is abundantly certain that its real value was reduced to a much greater extent. The authority of Pliny, in this respect, is decisive; for he states that Livius Drusus, who was tribune of the people in the 662nd year of the city, or 177 years after the first coinage of silver, debased its purity, by alloying it with ⅛th part of copper.[6] And, in a subsequent chapter (the ninth) of the same book, he informs us that Antony the triumvir mixed iron with the silver of the denarius; and that, to counteract these abuses, a law was afterwards made, providing for the assay of the denarii. Some idea of the extent to which the purity of the coins had been debased, and of the disorder which had in consequence been occasioned, may be formed from the circumstance, also mentioned by Pliny, of statues being everywhere erected in honour of Marius Gratidianus, by whom the law for the assay had been proposed. But this law was not long respected; and many imperial denarii are now in existence, consisting of mere plated copper.[7] Money.

Gold was first coined at Rome sixty-two years after silver, in the 547th year of the city, and 204 years B.C. The aureus originally weighed $\frac{1}{40}$th part of the *pondo*, or Roman pound; but, by successive reductions, its weight was reduced, in the reign of Constantine, to only $\frac{1}{72}$nd part of a pound. The purity, however, as well as the weight of the aureus, was diminished. Under Alexander Severus it was alloyed with ⅛th part of silver. We learn from Dion Cassius, a contemporary of Severus, that the aureus was rated at twenty-five denarii, a proportion which Pinkerton thinks was always maintained under the emperors.[8] Aureus, value of.

The want of attention to this progressive degradation, has led the translators of ancient writers and their commentators to the most erroneous conclusions. The sestertius, or money *unit* of the Romans, was precisely the *fourth* part of a denarius.[9] When, therefore, the latter was worth 8½d., the former must have been worth 2⅛d. But the sestertius being thus plainly a multiple of, and bearing a fixed and determined proportion to the denarius, and consequently to the as, the aureus, and the other coins generally in use, it would partake of their fluctuations. When they were reduced, it would be likewise reduced; for had it not, or had the number of degraded denarii and aurei contained in a given sum of sestertii been increased in proportion to their degradation, nothing, it is obvious, would have been gained by falsifying the standard. Inasmuch, however, as we know that on one occasion the republic got rid of half of its debts, *dimidium lucrata est*, by simply reducing the standard of the as, the value of the sestertius must have fallen in the same proportion, just as in England we should reduce the pound sterling by reducing the shillings of which it is made up.[10] Sestertius, value of.

Arbuthnot's "Tables of Ancient Coins," which, for a lengthened period, were considered of high authority, are constructed on the hypothesis that the consular denarii weighed by Greaves were of the same purity as English standard silver, and that no subsequent diminution was made either in their weight or fineness. The conclusions derived from such data, though differing in degree, are of the same character as those which we should arrive at, if, in estimating the value of the pound sterling during Errors of Arbuthnot and others.

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[1] *Decline and Fall*, vol. iii. p. 89.

[2] This is, indeed, decisively proved by a passage in Celsus: "Sed et antea sciri volo in uncia pondus denariorum esse septem."—Cels. lib. xv. cap. 17.

[3] *Essay on Medals*, vol. i. p. 162, edit. 1808.

[4] Greaves' Works, i. 262. The weight of the denarius, as given by other authorities, may be seen in p. 135 of Hussey's excellent *Treatise on Ancient Weights and Money*.

[5] Greaves, vol. i. p. 331. Gibbon's Miscellaneous Works, vol. v. p. 71.

[6] Pliny *Hist. Nat.*, lib. xxxiii. cap. 3, previously quoted.

[7] Bazinghen, *Dictionnaire des Monnies*, tom. ii. p. 64.

[8] *Essay on Medals*, vol. i. p. 183.

[9] *Vitruvius*, lib. iii. cap. 1.

[10] Writers on ancient coins, with the exception of Pinkerton, agree in supposing the sestertius to have been originally, and to have always continued to be, a *silver* coin. Pinkerton, however, has denied this opinion; and, on the authority of the following passage of Pliny, contends that the sestertius was, at the time when Pliny wrote, whatever it might have been before, a *brass* coin. "Summa gloria æris nunc in Marianum conversa, quod et Cordubense dicitur. Hoc a Liviano cadmiam maxime sorbet, et orichalci bonitatem imitatur in SESTERTIIS, DUPONDIARIISQUE, Cyprio suo ASSIBUS contentis."—(Lib. xxxiv. cap. 2). That is, literally, "The greatest glory of brass is now due to the Marian, also called that of Cordova. This, after the Livian, absorbs the greatest quantity of *lapis calaminaris*, and imitates the goodness of orichalcum (*yellow brass*) in our SESTERTII and DUPONDIARII, the ASSES being contented with the Cyprian (brass)." [Pliny had previously observed that the Cyprian was the least valuable brass.] This passage is, we think, decisive in favour of Pinkerton's hypothesis. But, in the absence of positive testimony, the small value of the sestertius might be relied on as a pretty sufficient proof that it could not be silver. When the denarius weighed 62 grains, the sestertius must have weighed 15½, and been worth 2⅛d.; but a coin of so small a size as to be scarcely equal to *one-third* part of one of our sixpences, would have been extremely apt to be lost, and could not have been struck by the rude methods used in the Roman mint with anything approaching to even tolerable precision. It is, therefore, more reasonable to suppose that it was of brass.

Money. the last hundred years, we took for granted that it contained a pound weight of standard silver, as in the period from the Conquest to the reign of Edward I. And, in addition to this source of error, the sums in ancient writers were, probably, at first set down with little regard to accuracy; and they have been peculiarly obnoxious to error from the carelessness of copyists and transcribers. But, however explained, many of the statements in the classics, as rendered by Arbuthnot and others, are quite incredible. Thus, we are told that Julius Cæsar, when he set out for Spain, after his prætorship, was £2,018,229 sterling worse than nothing; that Augustus received, in legacies from his friends, £32,291,666; that the estate of Pallas, a freedman of Crassus, was worth £2,421,875, and, which is still better, that he received £121,093 as a reward for his virtues and frugality; that Æsop, the tragedian, had a dish served up at his table which cost £4843; that Vitellius spent £7,265,625 in twelve months, in eating and drinking; and that Vespasian, at his accession to the empire, declared that an annual revenue of £322,916,666 would be necessary to keep the state machine in motion. It is astonishing that but few of our scholars or commentators seem to have been struck with the palpable extravagance of these and similar statements; though, to use the words of Garnier, they have brought "l'Histoire Ancienne, sous le rapport des valeurs, au même degré de vraisemblance que les contes de *Mille et un Nuits*." It should be remembered that, from the greater poverty of the mines of the old world, and the comparatively small progress made in the art of mining, the value of gold and silver was much—probably four times—greater in antiquity than at present. But, without taking this circumstance into account, the computations referred to are too obviously absurd to deserve any attention. Vespasian would have been very well satisfied with a revenue of twenty millions; and there are good grounds for supposing that the Roman revenue, when at the highest, never amounted to so large a sum.[1]

Notice of French money.

French Money.—From about the year 800, in the reign of Charlemagne, to the year 1103, in that of Philip I., the French *livre*, or money unit, contained exactly a pound weight or twelve ounces (poids de marc) of pure silver. It was divided into twenty sols, each, of course, weighing one-twentieth part of a pound. This ancient standard was first violated by Philip I., who diminished considerably the quantity of pure silver contained in the sols. The example, once set, was so well followed up, that in 1180 the livre was reduced to less than a *fourth* part of its original weight of pure silver. In almost every succeeding reign there was a fresh diminution. "La monnoye," says Le Blanc, "qui est la plus précieuse et la plus importante de mésures, a changé en France presque aussi souvent que nos habits ont changé de mode." And to such an extent had the process of degradation been carried, that, at the Revolution, the livre did not contain a *seventy-eighth* part of the silver contained in the livre of Charlemagne. It would then have required 7885 livres really to extinguish a debt of 100 livres contracted in the ninth or tenth centuries; and an individual who, in that remote period, had an annual income of 1000 livres, was as rich, in respect to money, as those who, at the Revolution, enjoyed a revenue of 78,850 livres.[2]

Degradation of the livre.

We subjoin an abridged table calculated by M. Denis, exhibiting the average value of the French livre in different periods, from the year 800 to the Revolution:—

Money.

Reigns.	Years.	Value of the Livre in the Current Money of 1789.
From the 32d year of Charlemagne to the 43d of Philip I., or from	800 to 1103	78 17 0
Part of the reign of Philip I., Louis VI., and VII.,	1103 ... 1180	18 13 8
Philip II. and Louis VIII.,	1180 ... 1226	19 18 4⅓
Louis IX. and Philip IV.,	1226 ... 1314	18 3 5
Louis X. and Philip V.,	1314 ... 1322	17 3 5
Charles IV. and Philip VI.,	1322 ... 1350	14 11 10
John,	1350 ... 1364	9 19 2⅔
Charles V.,	1364 ... 1380	9 9 8
Charles VI.,	1380 ... 1422	7 2 3
Charles VII.,	1422 ... 1461	5 13 9
Louis XI.,	1461 ... 1483	4 19 7
Charles VIII.,	1483 ... 1498	4 10 7
Louis XII.	1498 ... 1515	3 19 8
Francis I.,	1515 ... 1547	3 11 2
Henry II. and Francis II.,	1547 ... 1560	3 6 4⅔
Charles IX.,	1560 ... 1574	2 18 7
Henry III.,	1574 ... 1589	2 12 11
Henry IV.	1589 ... 1610	2 8 0
Louis XIII.,	1610 ... 1643	1 15 3
Louis XIV.,	1643 ... 1715	1 4 11
Louis XV.,	1715 ... 1720	0 8 0
Louis XV. and XVI.,	1729 ... 1780	1 0 0

Those who wish for a detailed account of the various changes in the weight and purity of French coins, may, besides the excellent work of Le Blanc, consult the elaborate and very complete tables at page 905 of the "Traité des Mésures" of Paucton, and at page 197 of the "Essai sur les Mounoies" of Dupré de St. Maur.

It was not to be expected that degradations originating in the necessities, the ignorance, and the rapacity of a long series of arbitrary princes, should be made according to any fixed principle. They were sometimes the result of an increase in the denomination of the coins, but more frequently of a diminution of the purity of the metal of which they were struck. A degradation of this kind was not so easily detected; and, to render its discovery still more difficult, Philip of Valois, John, and some other kings, obliged the officers of the mint to swear to conceal the fraud, and to endeavour to make the merchants believe that the coins were of full value![3] Sometimes one species of money was reduced without any alteration being made in the others. No sooner, however, had the people, in their dealings, manifested a preference, as they uniformly did, for the money which had not been reduced, than its circulation was forbidden, or its value brought down to the same level with the rest.[4] To render the subject more obscure, and the better to conceal their incessant frauds, individuals were at one time compelled to reckon exclusively by livres and sols, at other times by crowns or ecus; and not unfrequently they were obliged to refer, in computing, to coins which were neither livres, sols, nor crowns, but some multiple or fractional part thereof. The injurious effects of these constant fluctuations in the value of money are forcibly depicted by the French historians; and so insupportable did they become, that in the fourteenth and fifteenth centuries, several cities and provinces were glad to purchase the precarious and little respected privilege of

[1] Gibbon, vol. i. p. 209, edit. 1838.
[2] Le Blanc, p. 212.
[3] Paucton, *Traité des Mésures, Poids*, etc., p. 693.
[4] Ibid. *Introduction*, p. 20.

Money. having coins of a fixed standard, by submitting to the imposition of heavy taxes.[1]

In Normandy, when it was governed by the English monarchs, there was a tax upon hearths, paid every three years, called *monetagium*, in return for which the sovereign engaged *not to debase his coins*. This tax was introduced into England by our early kings of the Norman race; but Henry I., in the first year of his reign, was induced to abandon it, and it has not since been revived.[2]

According to the present regulations of the French mint, the coins contain $\frac{9}{10}$ths pure metal, and 1-10th alloy. The *franc*, which is equal to 1 livre 0 sols 3 deniers, weighs exactly 5 grammes, or 77·2205 English Troy grains. The gold piece of 20 francs weighs 102·96 English grains.[3]

English money, degradation of.

English Money.—In England at the epoch of the Norman conquest, the silver, or money pound, weighed exactly twelve ounces *Tower* weight (11 oz. 5 dwt. Troy.) It was divided into twenty shillings, and each shilling into twelve pence, or sterlings. This system of coinage, which is in every respect the same with that established in France by Charlemagne, had been introduced into England previously to the invasion of William the Conqueror, and was continued, without any alteration, till the year 1300, in the 28th Edward I., when it was for the first time violated, and the value of the pound sterling degraded to the extent of $\frac{1}{81}$ per cent. But the really pernicious effect of this degradation did not consist so much in the trifling extent to which it was carried by Edward, as in the example which it afforded to his less scrupulous successors, by whom the standard was gradually debased, until, in 1601, in the reign of Queen Elizabeth, 58s. instead of 20s. were coined out of the Tower pound weight of silver.

It may, perhaps, be right to mention, that in the 18th of Henry VIII. (1527), the pound Troy was substituted in mint valuations for the Tower pound, and has continued to be used in them down to the present time. This circumstance must always be kept in view in estimating the extent to which the standard has been degraded. When, for example, all tampering with it finally ceased in 1601, 62s. were coined out of a pound Troy. Hence, if we suppose, as is very often done, that the same pound had been used at the mint from the Conquest, it would follow that the degradation since the 28th Edward I. had been in the ratio of 20 to 62, or of 1 to 3 $\frac{1}{1}$th; whereas, in point of fact, it had really been in the ratio of 20 to 58, or of 1 to $2\frac{9}{10}$ths.[4] Practically, it may be said that the standard of money was reduced *two-thirds* between 1300 (28th Edward I.) and 1601, and hence, it is obvious that the stipulations in all contracts, entered into in the reigns immediately subsequent to the Conquest, might, in 1601, and since, be legally discharged by the payment of about a *third part* of the sums really bargained for. And yet the standard has been less degraded in England than in any other country.

The tables annexed to this article give an ample account of these degradations, and also give the weight of the gold coins, and the proportional value of gold to silver, estimated both by the mint regulations, and by the quantity of fine gold and fine silver contained in the different coins.

Money. *Scotch Money.*—The English derived their system of coinage from the French, and the Scotch theirs from the English. From 1296 to 1355, the coins of both divi- Scotch money, degradation of. sions of the island were of the same weight and purity. But at the last mentioned period, it was attempted to fill up the void in the currency of Scotland, occasioned by the remittance of the ransom of David II. to England, by degrading the coins. Down to this period, the money of the two kingdoms had been current in both on the same footing; and the preservation of this equality is assigned by Edward III. as a reason for his degrading the English coin. The English princes did not, however, keep pace with the Scotch in the career of degradation. Such was the mischievous energy of the latter, that in 1390 Scotch coin passed only for half its nominal value in England; and, in 1393, it was ordered that its currency as money in the latter should cease, and that its value should henceforth depend on the weight of the genuine metal contained in it. "To close this point at once," says Pinkerton, "the Scottish money, equal in value to the English till 1355, sunk by degrees, reign after reign, owing to succeeding public calamities, and the consequent impoverishment of the kingdom, till, in 1600, it was only a *twelfth* part of the value of English money of the same denomination, and remained at that point till the union of the kingdoms cancelled the Scottish coinage."[5]

The annexed tables exhibit the successive degradations of the Scotch silver and gold coins.

At the Union, in 1707, it was ordered that all the silver coins current in Scotland, foreign as well as domestic, except English coins of full weight, should be brought to the Bank of Scotland, to be taken to the mint to be recoined. In compliance with this order, there were brought in:—

Of foreign silver money (sterling),	£132,080	17	9
Milled Scottish coins	96,856	13	0
Coins struck by hammer	142,180	0	0
English milled coin	40,000	0	0
Total	£411,117	10	9

Ruddiman conjectures, apparently with considerable probability, that the value of the gold and silver coins not brought in amounted to about as much more. Much suspicion was entertained of the recoinage. And that large proportion of the people who were hostile to the Union, and did not believe in its permanence, brought very little money to the Bank. A few only of the hoarded coins have been preserved, the far greater part having either been melted by the goldsmiths, or exported to other countries.[6]

Irish money. *Irish Money.*—The gold and silver coins of Ireland are identical with those of Great Britain. The rate, however, at which they used to circulate in the former, or their nominal value as money of account, was $8\frac{1}{3}$ per cent. higher than in the latter. This difference of valuation, though attended with considerable inconvenience, subsisted from 1689 till 1825, when it was put an end to. For an account of the various species of metallic money which have at different times been current in Ireland, we beg to refer our readers to Simon's "Essay on Irish

[1] The President Henault says, speaking of the reign of John, the successor of Philip of Valois (1350-1364)—"La variation des monnoies sous ce prince, est la preuve la plus forte des malheurs de son regne; variation si subite que *a grand peine etoit homme, qui en juste payement des monnoyes, de jour en jour se put connoitre* (*Rec. Des Ord.*) c'etoit le genre d'impôt de ce tems la, et sans doute le plus fatal aû commerce; aussi le peuple obtint-il, comme une grace que il fût remplacé par les tailles et les aides."—*Ab. Chron.*. i. 310, ed. 1761.

[2] Ducange voce *Monetagium Glossarium*, iv. 1009.—Liverpool *On Coins*, p. 107.

[3] Peuchet, *Statistique Elementaire de la France*, p. 538.

[4] Snelling *On Gold Coins*, p. 34. Do. *On Silver Coins*, p. 31.

[5] *Essay on Medals*, vol. ii. p. 124.

[6] Preface to Anderson's *Diplomata*, p. 176.

Money. Coins;"[1] a work pronounced by Ruding to be "the most valuable of all the publications on the coinage of any part of the united empire."[2]

Money of Germany, &c. *Money of Germany, Spain, etc.*—"In many parts of Germany, the florin, which is still the integer or money of account of those countries, was originally a *gold* coin, of the value of about 10s. of our present money (old coinage). It is now become a silver coin, of the value of only 20d.; and its present value, therefore, is only equal to a sixth part of what it was formerly. In Spain, the maravedi, which was in its origin a Moorish coin, and is still the money of account of that kingdom, was in ancient times most frequently made of gold. Le Blanc observes, that in 1220 the maravedi weighed 84 grains of gold, equal in value to about 14s. (old coinage) of our present money. But this maravedi, though its value is not quite the same in all the provinces of Spain, is now become a small copper coin, equal in general to only 43-272 of an English penny! In Portugal, the re, or reis, is become of no greater value than 27-401ths of an English penny; it is so small, that in estimating its value in other coins, it is reckoned by hundreds and thousands. The moeda, or moidore, is equal to 4800 reis; and this little coin has now, in fact, no existence but in name. Such has been the fate of all these coins, and such is the present state of their depreciation."[3]

Raising the value of coins in Rome; The principle of degradation has not, however, been uniformly acted upon. The bullion contained in coins of the same denomination, has sometimes, though rarely, been increased, and creditors enriched at the expense of their debtors. This method of swindling is said to have been first practised in the worst times of the Roman empire. The citizens being bound to pay into the imperial treasury a certain number of pieces of gold, or *aurei*, Heliogabalus, whose cunning appears to have been nowise inferior to his proverbial profligacy, increased the weight of gold in the *aureus*; and thus obtained, by an underhand trick, an addition to his means of dissipation, which he might not have been able to obtain by a fair and open proceeding.[4] In France. In France, the value of the coins has been frequently raised. During the early part of the reign of Phillip le Bel, who ascended the throne in 1285, the value of the coin had been reduced to such an extent as to occasion the most violent complaints on the part of the clergy and landholders, and generally of all that portion of the public whose incomes were not increased proportionally to the reduction in the value of money. To appease this discontent, and in compliance with an injunction of the pope, the king consented to issue new coins of the same denomination with those previously current, but which contained about *three* times the quantity of silver. This, however, was merely shifting an oppressive burden from the shoulders of one class to those of another less able to bear it. The degraded money having been in circulation for about sixteen years, by far the largest proportion of the existing contracts must have been adjusted with reference to it. No wonder, therefore, that debtors should have felt indignant at the injustice done them by this enhancement of the value of money, and that they refused to make good their engagements otherwise than in money of the value of that which had been current when they were entered into. The labouring class, to whom every change in the value of money is injurious, having joined the debtors in their opposition, they broke out into open rebellion. "The people," says Le Blanc, "being reduced to despair, and having no longer anything to care for, lost the respect due to the edict of his majesty; they pillaged the house of the master of the mint, who was believed to have been the chief adviser of the measure, besieged the Temple, in which the king lodged, and did all that an infuriated populace is capable of doing."[5] The sedition was ultimately suppressed. It is not mentioned whether any abatement were made, by authority, from the claims of the creditors, in the contracts entered into when the light money was in circulation. It seems probable, however, from what is elsewhere mentioned by Le Blanc,[6] that such was really the case.

Money.

The history of the French coinage affords several instances similar to that now brought under the notice of the reader. But, in England, the new coinage in the last year of Edward VI. is the only instance in which the value of money has been augmented by the direct interference of government. In England. Previously to the accession of Henry VIII., the pound of standard silver bullion, containing 11 oz. 2 dwts. of pure silver, and 13 dwts. of alloy, was coined into thirty-seven shillings and sixpence. Henry, however, not only increased the number of shillings coined out of a pound weight of silver, but also debased its purity. The degradation was increased under his son and successor, Edward VI., in the fifth year of whose reign seventy-two shillings were coined out of a pound weight of bullion; and as this bullion contained only *three* ounces of pure silver to *nine* ounces alloy twenty of these shillings were only equal to 4s. 7¾d of our present money, including the seignorage.[7] It appears from the proclamations issued at the time, and from other authentic documents, that this excessive reduction of the value of silver money occasioned the greatest confusion. A *maximum* was set on the prices of corn and other necessaries, and letters were sent to the gentlemen of the different counties, desiring them to punish those who refused to carry their grain to market. But it was soon found to be quite impossible to remedy these disorders otherwise than by withdrawing the base money from circulation. This was accordingly resolved upon; and in 1552 new coins were issued of the old standard in respect of purity; and which, though less valuable than those in circulation during the early part of the reign of Henry VIII., were above *four* times the value of a large proportion of the coins of the same denomination that had been in circulation for some years before.

It is, however, all but certain that such a rise in the value of money could not have taken place without occasioning the most violent commotions, had *all* the coins previously in circulation been debased. Equal injustice, it must be remembered, is always done to the poorest and not least numerous class of society, by increasing the value of money, that is done to the wealthier classes by its depression. And, though government had

[1] Originally printed at Dublin in 1749, in 4to, and reprinted with some additions in 1810.

[2] *Annals of the Coinage*, Preface, vol. i. 11. The work of Mr Lindsay *On Irish Coins* (4to, Cork, 1839), may also be advantageously consulted.

[3] Liverpool *On Coins*.

[4] Lamp. "*Vita Alex. Severi*," cap. 39. Perhaps Heliogabalus took the hint from Licinius, a freedman of Julius Cæsar, who, in his government of the Gauls under Augustus, divided the year into fourteen months instead of twelve, because the Gauls paid a certain *monthly* tribute.—*Dion Cassius*, lib. 72.

[5] *Traité Historique des Monnoyes de France*, p. 190.

[6] *Introduction*, p. 30.

[7] Folkes's *Table of English Coins*, p. 34.

Money.

been disposed to sanction so enormous an invasion of the right of property, it is altogether impossible that the country could have submitted to have had 400 or 450 per cent. added to its taxes and other public burdens by a legerdemain trick of this kind, or that individuals would have consented to pay so much more than they had originally bargained for. Instead of deserving praise for accomplishing such a measure, Edward VI., who began the reformation of the coins, and Elizabeth, by whom it was completed, would have justly forfeited the esteem of their subjects, and lost their popularity. In truth, however, little or no change had been made during all this period in the value of the *gold* coins; and there is, besides, abundance of evidence to show that many of the old silver coins had remained in circulation. And as there is no mention made of the issue of the new coins having been attended with any inconvenience, it is nearly certain, as Mr Harris has remarked, that, during the period of the debasement of the standard, individuals had regulated their contracts chiefly with reference to the gold or old silver coins; or, which is the same thing, that "they had endeavoured, as well as they could, to keep by the standard, as it had been fixed in the preceeding times."[1]

We have been thus particular in examining this measure, because it has been much referred to. It is plain, however, that it gives no support to the arguments of those who appeal to it as affording a striking proof of the benefits which they affirm must always result from restoring a debased or degraded currency to its original purity or weight. Invariability of value is the great desideratum in a currency. To elevate the standard, after it has been for a considerable period[2] depressed, is not a measure of justice, but of new injustice. It vitiates and falsifies the provisions in one set of contracts, that those in another set may be properly adjusted.

This, however, as already remarked, is the only instance in which the government of England has interfered directly to enhance the value of money. In every other case, where they have tampered with the standard, it has been to lower its value, or, which comes to the same thing to reduce their own debts and those of their subjects.

Pernicious effects of changes of the standard.

It is unnecessary to enumerate in detail the various bad consequences of these successive changes in the standard of value. But it deserves to be remarked, that its reduction does not afford any real relief to the governments by whom so miserable a fraud is perpetrated. Their debts are, it is true, reduced, but so are their revenues. A coin that has been degraded will not exchange for, or buy, the same quantity of commodities that it previously did. If the degradation be 10 per cent., government, and every one else, will very soon be compelled to pay £110 for commodities or services which were previously obtainable for £100. Hence, to bring the same real value into the coffers of the treasury, it is necessary that taxation should be increased whenever the standard is diminished; a measure always odious, and sometimes impracticable.

A corresponding reduction of revenue is not, however, the only bad effect resulting to such governments as are dishonest enough to reduce the standard of money. They must not expect to borrow on the same favourable terms as those who act with good faith. The lenders of money to knaves always stipulate for a proportionally high rate of interest. They not only bargain for as much as may be got from secure investments, but also for an additional rate, or premium, to cover the risk of dealing with those who have given proofs of bad faith, and on whose promises no reliance can be placed. A degradation of the standard is, therefore, about the most wretched device to which a bankrupt government can have recourse. It will never, indeed, be resorted to except by those who are as ignorant as they are unprincipled. "It occasions," says Dr. Smith, "a general and most pernicious subversion of the fortunes of private people; enriching, in most cases, the idle and profuse debtor at the expense of the frugal and industrious creditor, and transporting a great part of the national capital from the hands which were likely to increase and improve it, to those who are likely to dissipate and destroy it. When it becomes necessary for a state to declare itself bankrupt, in the same manner as when it becomes necessary for an individual to do so, a fair, open, and avowed bankruptcy is always the measure which is both least dishonourable to the debtor and least hurtful to the creditor. The honour of a state is surely very poorly provided for, when, in order to cover the disgrace of a real bankruptcy, it has recourse to a juggling trick of this kind, so easily seen through, and at the same time so extremely pernicious."

Money.

Some of the bad consequences resulting from changes in the value of money might be obviated, by enacting that the stipulations in preceding contracts should be made good, not according to the present value of money, but according to its value at the time when they were entered into. This principle, which is conformable to the just maxim of the civil law (*Valor monetæ considerandus atque inspiciendus est, a tempore contractus, non autem a tempore solutionis*), was acted upon, to a certain extent, at least, by the kings of France during the middle ages. Ordinances of Philip le Bel, Philip of Valois, and Charles VI., issued subsequently to their having increased the value of money, or, as the French historians term it, returned from the "*foible*" to the "*forte* monnoie," are still extant, in which it is ordered that all preceding debts and contracts should be settled by reference to the previous standard. But, though the same reason existed, it does not appear that any such ordinances were ever issued when the value of money was degraded. It is obvious, indeed, that a government would derive no advantage from reducing the value of money, were it to order, as it is in justice bound to do, that all preceding contracts should be adjusted by the old standard. Such a measure would reduce the revenue without reducing the national incumbrances; while, by establishing a new standard of value, and unsettling the notions of the public, it would open a door for many abuses, and be productive of infinite confusion and disorder in the dealings of individuals.

The odium, and positive disadvantage attending the degradation of metallic money, have at length induced most governments to abstain from it. But they have only renounced one mode of playing at fast and loose with the property of their subjects, to adopt another and a still more pernicious one. The injustice which was formerly done by diminishing the bullion contained in coins, is now perpetrated with greater ease, and to a still more ruinous extent, by the depreciation of paper currency.

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[1] Harris *On Coins*, part ii. p. 3.

[2] It is of course impossible to define such periods, in as much as that depends on the peculiar circumstances affecting the country at the time. Probably, however, were the standard reduced for some ten or twelve years, as great injustice would be done by raising it to its old level as by continuing to use it as reduced, or perhaps greater.

[1] *Wealth of Nations*, p. 423.

TABLES RELATIVE TO THE MONEY OF GREAT BRITAIN AND OTHER COUNTRIES.

No. I.

ENGLISH MONEY.—*Account of the English silver and gold coins; shewing their value; the seignorage or profit upon the coinage, and the price paid to the public by the mint, for the pound troy of standard gold and silver, from the Conquest to the year* 1816. *(This and the next table, No. II., are taken from Part II. of* Essays on Money, Exchanges, and Political Economy, *by Henry James.)*

		SILVER.					GOLD.				
A. D.	Anno Regni	1. Fineness of the silver in the coins.	2. Pound weight of such silver coined into	3. Profit or seignorage on the coinage.	4. Prices paid to the public for the pound-wt. of silver.	5. Equal to the mint-price for standard silver of 11 oz. 2 dts. fine troy-weight.	6. Fineness of the gold in the coins.	7. Pound-weight of such gold coined into	8. Profit or seignorage on the coinage.	9. Price paid to the public for the pound-weight of gold.	10. Equal to the mint-price for standard gold of 22 carats fine troy-wt.
		oz. dts.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	crts. grs.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1066	Conquest.....	11 2	1 0 0	.....	.....	.....	... ...	.....	.....	.....	.....
1280	8 Edward I...	— —	1 0 0	0 1 0	0 19 0	1 0 $3\frac{1}{5}$	... ...	.....	.....	.....	.....
1300	28 ———	— —	1 0 3	0 1 $2\frac{1}{2}$	0 19 $0\frac{1}{2}$	.....	... ...	.....	.....	.....	.....
1344	18 Edward III.	— —	1 0 3	0 1 3	0 19 0	1 0 $3\frac{1}{5}$	23 $3\frac{1}{2}$	13 3 4	0 8 4	12 15 0	12 10 8
1349	23 ———	— —	1 2 6	0 1 3	1 1 3	1 2 8	— —	14 0 0	0 11 8	13 8 4	13 3 9
1356	30 ———	— —	1 5 0	0 0 10	1 4 2	1 5 $9\frac{1}{3}$	— —	15 0 0	0 6 8	14 13 4	14 8 4
1394	18 Richard II..	— —	1 5 0	0 0 10	1 4 2	1 5 $9\frac{1}{3}$	— —	15 0 0	0 5 0	14 15 0	14 9 11
1401	3 Henry IV..	— —	1 5 0	0 0 10	1 4 2	1 5 $9\frac{1}{3}$	— —	15 0 0	0 5 0	16 15 0	14 9 11
1421	9 Henry V....	— —	1 10 0	0 1 0	1 9 0	1 10 $11\frac{1}{3}$	— —	16 13 4	0 5 0	16 8 4	16 2 9
1425	4 Henry VI..	— —	1 10 0	0 1 0	1 9 0	1 10 $11\frac{1}{3}$	— —	16 13 4	0 5 10	16 7 6	16 1 11
1464	4 Edward IV.	— —	1 17 6	0 4 6	1 13 0	1 15 $2\frac{1}{3}$	— —	20 16 8	2 10 0	18 6 8	18 0 5
1465	5 ———	— —	1 17 6	0 4 6	1 13 0	1 15 $2\frac{1}{3}$	— —	22 10 0	1 0 10	21 9 2	21 1 10
1470	49 Henry VI..	— —	1 17 6	0 2 0	1 15 6	1 17 $10\frac{2}{3}$	— —	22 10 0	0 13 0	21 17 0	21 9 7
1482	22 Edward IV.	— —	1 17 6	0 1 6	1 16 0	1 18 $4\frac{4}{5}$	— —	22 10 0	0 7 6	22 2 6	21 15 0
1483	1 Rich. III...	— —	1 17 6	0 1 6	1 16 0	1 18 $4\frac{4}{5}$	— —	22 10 0	0 7 6	22 2 6	21 15 0
1485	1 Henry VII.	— —	1 17 6	0 1 6	1 16 0	1 18 $4\frac{4}{5}$	— —	22 10 0	0 7 6	22 2 6	21 15 0
1509	1 Henry VIII.	— —	1 17 6	0 1 0	1 16 6	1 18 $11\frac{1}{5}$	— —	22 10 0	0 2 6	22 7 6	22 0 0
[1]1527	18 ———	— —	2 0 0	0 1 $0\frac{4}{5}$	1 18 $11\frac{1}{5}$	1 18 $11\frac{1}{5}$	— —	24 0 0	0 2 8	23 17 4	22 0 0
———	———	— —	2 5 0	0 1 0	2 4 0	2 4 0	— —	27 0 0	0 2 9	26 17 3	.....
.....	.....	... ...	.....	.....	.....	.....	22 0	25 2 6	0 3 0	24 19 6	24 19 6
1543	34 ———	10 0	2 8 0	0 8 0	2 8 0	2 4 $4\frac{4}{5}$	23 0	28 16 0	1 4 0	27 12 0	26 8 0
1545	36 ———	6 0	2 8 0	2 0 0	2 16 0	2 11 $9\frac{3}{5}$	22 0	30 0 0	2 10 0	27 10 0	27 10 0
1546	37 ———	4 0	2 8 0	4 4 0	3 0 0	2 15 6	20 0	30 0 0	5 0 0	27 10 0	27 10 0
1547	1 Edward VI.	4 0	2 8 0	4 4 0	3 0 0	2 15 6	20 0	30 0 0	1 10 0	28 10 0	31 7 0
1549	3 ———	6 0	3 12 0	4 0 0	3 4 0	2 19 $2\frac{2}{5}$	22 0	34 0 0	1 0 0	33 0 0	33 0 0
1551	5 ———	3 0	3 12 0	.....	.....	.....	... ...	.....	.....	.....	.....
———	– ———	11 0	3 0 0	.....	.....	.....	23 $3\frac{1}{2}$	36 0 0	.....	.....	.....
———	– ———	... ...	.....	.....	.....	.....	22 0	33 0 0	.....	.....	.....
1552	6 ———	11 1	3 0 0	0 1 0	2 19 0	2 19 $3\frac{1}{5}$	23 $3\frac{1}{2}$	36 0 0	0 2 9	35 17 3	.....
———	– ———	... ...	.....	.....	.....	.....	22 0	33 0 0	0 3 0	32 17 0	32 17 0
1553	1 Mary.....	11 0	3 0 0	0 1 0	2 19 0	2 19 $6\frac{2}{5}$	23 $3\frac{1}{2}$	36 0 0	0 3 0	35 17 0	33 0 8
1560	2 Elizabeth...	11 2	3 0 0	0 1 6	2 18 6	2 18 6	23 $3\frac{1}{2}$	36 0 0	0 5 0	35 15 0	.....
———	– ———	... ...	.....	.....	.....	.....	22 0	33 0 0	0 4 0	32 16 0	32 16 0
1600	43 ———	— —	3 2 0	0 2 0	3 0 0	3 0 0	23 $3\frac{1}{2}$	36 10 0	0 10 0	36 0 0	.....
———	– ———	... ...	.....	.....	.....	.....	22 0	33 10 0	0 10 0	33 0 0	33 0 0
1604	2 James I.....	— —	3 2 0	0 2 6	2 19 6	2 19 6	22 0	37 4 0	1 10 0	35 14 0	35 14 0
1626	2 Charles I...	— —	3 2 0	0 2 0	3 0 0	3 0 0	— —	41 0 0	1 1 5	39 18 7	39 18 7
[2]1666	18 Charles II..	— —	3 2 0	0 0 0	3 2 0	3 2 0	— —	44 10 0	0 0 0	44 10 0	44 10 0
1717	3 George I...	— —	3 2 0	0 0 0	3 2 0	3 2 0	— —	46 14 6	0 0 0	46 14 6	46 14 6
1816	56 George III.	— —	3 6 0	0 4 0	.....	.....	— —	46 14 6	0 0 0	46 14 6	46 14 6

[1] 1527, Henry VIII.] The Saxon or Tower-pound was used at the mint up to this time, when the pound troy was substituted in its stead. The Tower-pound was but 11 oz. 5 dwts. troy; so that, from the Conquest to the 28th of Edward I., twenty shillings in tale were exactly a pound in weight.

[2] 1666, 18 Charles II.] The seignorage on the coinage was at this time given up, and the gold bullion brought to the mint has ever since been coined free of expence. A seignorage of $6\frac{1}{31}$ per cent. was imposed on the coinage of silver by 56th Geo. III.

No. II.

ENGLISH MONEY.—*Account of the quantity of fine silver coined into* 20*s. or the pound sterling; the quantity of standard silver, of* 11 *oz.* 2 *dwts. fine, and* 18 *dwts. alloy, contained in* 20*s. or the pound sterling, and the quantity of standard silver which was delivered to the mint, by the public, for* 20*s. of silver money, in the different reigns, from the time of Edward I. to the reign of George III. A similar account with respect to gold. And an account of the proportionate value of fine gold to fine silver, according to the number of grains contained in the coins; and the proportionate value of fine gold to fine silver, according to the price paid by the mint to the public.* Calculated in grains and 1000 parts troy-weight.

A. D.	Anno Regni.	SILVER. 1. Number of grains of fine silver in 20 shillings, or the pound sterling, as coined by the mint indentures.	SILVER. 2. Number of grains of standard silver, 14 oz. 2 dwts. fine in 20s. or the pound sterling, as coined by the mint indentures.	SILVER. 3. Number of grains of standard silver which 20s. were worth, according to the price paid by the mint to the public.	GOLD. 4. Number of grains of fine gold in 20s. or the pound sterling as coined by the mint indentures.	GOLD. 5. Number of grains of standard gold, 22 carats fine in 20s. or the pound sterling as coined by the mint indentures.	GOLD. 6. Number of grains of standard gold which 20s. were worth, according to the price paid by the mint to the public.	7. Proportionate value of fine gold to fine silver, according to the quantity of each metal contained in the coins.	8. Proportionate value of fine gold to fine silver, according to the mint price, or the presumed market-value of gold and silver.
		Grains.	*Grains.*	*Grains.*	*Grains.*	*Grains.*	*Grains.*	*Gold to silver.*	*Gold to silver.*
1066	Conquest.....	4995·000	5400·000	.....	.....	.....	.....	.....	.....
1280	8 Edward I...	4995·000	5400·000	5684·210	.....	.....	.....	.....	.....
1344	18 Edward III.	4933·333	5333·333	5684·210	407·990	445·080	459·625	1 to 12·091	1 to 12·479
1349	23 ———	4440·000	4800·000	5082·352	383·705	418·588	436·777	1 — 11·571	1 — 11·741
1356	30 ———	3996·000	4320·000	4468·965	358·125	390·682	399·561	1 — 11·558	1 — 11·286
1401	3 Henry IV..	3996·000	4320·000	4468·965	358·125	390·682	397·303	1 — 11·158	1 — 11·350
1421	9 Henry V...	3330·000	3600·000	3724·137	322·312	351·613	356·963	1 — 10·331	1 — 10·527
1464	4 Edward IV.	2664·000	2880·000	3272·727	257·850	281·291	319·648	1 — 10·331	1 — 10·331
1465	5 ———	2664·000	2880·000	3272·727	238·750	260·454	273·109	1 — 11·158	1 — 11·983
1470	49 Henry VI..	2664·000	2880·000	3042·253	238·750	260·454	268·202	1 — 11·158	1 — 11·446
1482	22 Edward IV.	2664·000	2880·000	3000·000	238·750	260·454	264·869	1 — 11·158	1 — 11·429
1509	1 Henry VIII.	2664·000	2880·000	2958·904	238·750	260·454	261·909	1 — 11·158	1 — 11·400
1527	18 ———	2368·000	2560·000	2618·181	210·149	229·253	230·630	1 — 11·268	1 — 11·455
1543	34 ———	2000·000	2162·162	2594·594	191·666	209·090	218·181	1 — 10·434	1 — 12·000
1545	36 ———	1200·000	1297·297	2223·938	176·000	192·000	209·454	1 — 6·818	1 — 10·714
1546	37 ———	800·000	864·864	2075·675	160·000	174·545	209·454	1 — 5·000	1 — 10·000
1547	1 Edward VI.	800·000	864·864	2075·675	160·000	174·545	183·732	1 — 5·000	1 — 11·400
1549	3 ———	800·000	864·864	1945·945	155·294	169·412	174·545	1 — 5·151	1 — 11·250
[1]1551	5 ———	400·000	.....	.....	.....	.....	.....	.....	.....
———	– ———	1760·000	1902·702	.....	160·000	174·545	.....	1 — 11·000	.....
1552	6 ———	1768·000	1911·351	1943·757	160·000	174·545	175·342	1 — 11·050	1 — 11·186
1553	1 Mary.....	1760·000	1902·702	1935·050	159·166	173·636	174·369	1 — 11·057	1 — 11·198
1560	2 Elizabeth...	1776·000	1920·000	1969·230	160·000	174·545	175·609	1 — 11·100	1 — 11·315
1600	43 ———	1718·709	1858·064	1920·000	157·612	171·940	174·545	1 — 10·904	1 — 11·100
1604	2 James I.....	1718·709	1858·064	1936·134	141·935	154·838	161·344	1 — 12·109	1 — 12·109
1626	2 Charles I...	1718·709	1858·064	1920·000	128·780	140·487	144·255	1 — 13·346	1 — 13·431
1666	18 Charles II...	1718·709	1858·064	1858·064	118·651	129·438	129·438	1 — 14·485	1 — 14·485
1717	3 George I...	1718·709	1858·064	1858·064	113·001	123·274	123·274	1 — 15·209	1 — 15·209
[2]1816	56 George III.	1614·545	1745·454	.....	113·001	123·274	123·274	1 — 14·287	.....

[1] 1551, 5 Edward VI.] The coinage of debased silver money in the 5th year of Edward VI. of 3 oz. fine, ought more properly to be considered as tokens. The sum of £120,000 only was so coined. (See James's *Essays*, chap. iv.)

[2] 1816, 56 George III.] The government having taken the coinage of silver into its own hands, there is at present no fixed price paid to the public, by the mint for standard silver. And supposing the government to continue the present mint regulations, and to keep gold at 77*s.* 10½*d.* an ounce, as the price of silver varies, the relative value of gold to silver will vary in like proportion.

Tables. No. III.—Scots Money.—*Account of the Number of Pounds, Shillings, and Pennies Scots, which have been coined out of One Pound Weight of Silver, at different times; with the degree of Purity of such Silver, or its Fineness, from the year* 1107 *to the year* 1601. (From Cardonnell's *Numismata Scotiæ*, p. 24.) Tables.

A. D.	Anno Regni.	Purity.		Alloy.		Value of money coined out of a lb. of silver.			A. D.	Anno Regni.	Purity.		Alloy.		Value of money coined out of a lb. of silver.		
		Oz	Pw.	Oz.	Pw.	L.	s.	d.			Oz.	Pw.	Oz.	Pw.	L.	s.	d.
From 1107	Alexander I...								1451	James II.....15	11	2	0	18	3	4	0
	David I.....								1456	20	11	2	0	18	4	16	0
to	William.....	11	2	0	18	1	0	0	1475	James III.....16	11	2	0	18	7	4	0
	Alexander II..								1484	24	11	2	0	18	7	0	0
	Alexander III.								1488	James IV..{1}	11	2	0	18	7	0	0
1296	John Baliol....								1489	{2}							
From 1306 to 1329	Robert I.....	11	2	0	18	1	1	0	1529	James V.....16	11	0	1	0	9	12	0
									1544	Mary.....3	11	0	1	0	9	12	0
									1556	14	11	0	1	0	13	0	0
									1565	23	11	0	1	0	18	0	0
1366	David II.....38	11	2	0	18	1	5	0	1567	James VI.....1	11	0	1	0	18	0	0
1377	39	11	2	0	18	1	9	4	1571	5	9	0	3	0	16	14	0
From 1371 to 1390	Robert II.....	11	2	0	18	1	9	4	1576	10	8	0	4	0	16	14	0
									1579	13	11	0	1	0	22	0	0
									1581	15	11	0	1	0	24	0	0
									1597	31	11	0	1	0	30	0	0
1393	Robert III.....4	11	2	0	18	1	12	0	1601	35	11	0	1	0	36	0	0
1424	James I.....19	11	2	0	18	1	17	6									

No. IV.—Scots Money.—*Account of the Number of Pounds, Shillings, and Pennies Scots, which have been coined out of One Pound Weight of Gold; with the degree of their Purity, and the proportion that the Gold bore to the Silver.* (Ib. p. 25.)

A. D.	Anno Regni.	Fineness.			Alloy.			Value of the coin coined out of one pound of gold.			Pound of pure gold weighed of pure silver.			
		oz.	pw.	gr.	oz.	pw.	gr.	L.	s.	d.	lb.	oz.	pw.	gr.
1371, &c.	Robert II....	11	18	18	0	1	6	17	12	0	11	1	17	22
1390, &c.	Robert III...	11	18	18	0	1	6	19	4	0	11	1	17	22
1424	James I....19	11	18	18	0	1	6	22	10	0	11	1	17	22
1451	James II...15	11	18	18	0	1	6	33	6	0	9	8	4	14
1456	20	11	18	18	0	1	6	50	0	0	9	8	4	14
1475	James III. 16	11	18	18	0	1	6	78	15	0	10	2	0	20
1484	24	11	18	18	0	1	6	78	15	0	10	5	7	9
1488	James IV...1	11	18	18	0	1	6	78	15	0	10	5	7	9
1529	James V...16	11	18	18	0	1	6	108	0	0	10	5	7	9
1556	Mary.....14	11	0	0	1	0	0	144	0	0	10	5	8	6
1577	James VI..10	11	0	0	1	0	0	240	0	0	10	5	8	6
1579	13	10	10	0	1	10	0	240	0	0	11	5	2	20
1597	31	11	0	0	1	0	0	360	0	0	12	0	0	0
1601	35	11	0	0	1	0	0	432	0	0	12	0	0	0
1633	Charles I....9	11	0	0	1	0	0	492	0	0	13	2	7	11

No. V.—English Paper Money.—*Account of the Average Market Price of Bullion in every year, from* 1800 *to* 1821, *(taken from papers laid before the House of Commons), of the average value per cent. of the Paper Currency, estimated from the market price of Gold for the same period, and of the average depreciation of the Paper Currency.*

Years.	Average price of Gold per ounce.			Average per cent. of the value of the currency.			Average depreciation per cent.			Years.	Average price of Gold per ounce.			Average per cent. of the value of the currency.			Average depreciation per cent.		
	L.	S.	D.	L.	S.	D.	L.	S.	D.		L.	S.	D.	L.	S.	D.	L.	S.	D.
1800	3	17	10½	100	0	0	Nil.			1811	4	4	6	92	3	2	7	16	10
1801	4	5	0	91	12	4	8	7	8	1812	4	15	6	79	5	3	20	14	9
1802	4	4	0	92	14	2	7	5	10	1813	5	1	0	77	2	0	22	18	0
1803	4	0	0	97	6	10	2	13	2	1814	5	4	0	74	17	6	25	2	6
1804	4	0	0	97	6	10	2	13	2	1815	4	13	6	83	5	9	16	14	3
1805	4	0	0	97	6	10	2	13	2	1816	4	13	6	83	5	9	16	14	3
1806	4	0	0	97	6	10	2	13	2	1817	4	0	0	97	6	10	2	13	2
1807	4	0	0	97	6	10	2	13	2	1818	4	0	0	97	6	10	2	13	2
1808	4	0	0	97	6	10	2	13	2	1819	4	1	6	95	11	0	4	9	0
1809	4	5	0	91	12	4	8	7	8	1820	3	19	11	97	8	0	2	12	0
1810	4	10	0	86	10	6	13	9	6	1821	3	17	10½	100	0	0	Nil.		

No. VI. Table specifying the Value of the Monies of Account of the principal Places with which this Country has Exchange Transactions, taking Silver at 5s. an oz., and specifying also the *Par* of Exchange with such Places on this Hypothesis.—(Abstracted from *Tate's Modern Cambist*, to which the reader is referred for further explanations.)

				Par of Exchange.		
Petersburg	100 copecks	= 1 rouble	= 3*s.* 1½*d.*	giving	6 roub. 40 cop.	= 1*l.*
Berlin	30 sil. groschen	= 1 Pruss. doll.	= 2*s.* 10¾*d.*	—	6 doll. 27 s. g.	= 1*l.*
Copenhagen	96 skillings	= 1 Rig. doll.	= 2*s.* 2⅓*d.*	—	9 doll. 10 sk.	= 1*l.*
Hamburg	16 schillings	= 1 mark	= 1*s.* 5½*d.*	—	13 mks. 10½ sch.	= 1*l.*
Amsterdam	100 centimes	= 1 florin	= 1*s.* 8*d.*	—	11 fl. 97 cents	= 1*l.*
Antwerp	100 centimes	= 1 florin	= 1*s.* 8*d.*	—	11 fl. 97 cents	= 1*l.*
Paris	100 centimes	= 1 franc	= 9½*d.*	—	25 fr. 57 cents	= 1*l.*
Frankfort	24½ guld. or flor.	= 1 mark	= 1*s.* 7⅞*d.*	—	12 3/10 guldens	= 1*l.*
Vienna	60 kreusers	= 1 florin	= 2*s.* 0 4/10*d.*	—	9 fl. 50 kr.	= 1*l.*
Venice	100 centisimi	= 1 lira Austriaca	= 8·13*d.*	—	29 li. 52 cent.	= 1*l.*
Genoa	100 centisimi	= 1 lira Nuova	= 9½*d.*	—	25 li. 57 cent.	= 1*l.*
Leghorn	100 centisimi	= 1 lira Toscana	= 7·82*d.*	—	30 li. 69 cent.	= 1*l.*
Madrid	8 reals	= 1 dollar of Plate	= 3*s.* 1¾*d.*	—	6 doll. 2¾ reals	= 1*l.*
Lisbon	1000 reis	= 1 milreis	= 4*s.* 8*d.*	—	4 mil. 285 reis	= 1*l.*
New York	100 cents	= 1 dollar	= 4*s.* 2*d.*	—	4 doll. 80 cents	= 1*l.*
Rio Janeiro	1000 reis	= 1 milreis	= 2*s.* 7*d.*	—	7 mil. 777 reis	= 1*l.*
Havannah	100 cents	= 1 dollar	= 4*s.* 6 1/2 3/2*d.*	—	4 doll. 44 cents.	= 1*l.*

It is easy from this table to calculate the value of any of the above coins, taking silver at 5s. 2d., 5s. 6d. an oz., or at any other price, and thence to deduce the par of exchange at such rates. The values of the coins in the Table of Coins are estimated on the hypothesis that silver is worth 5s. 2d. an ounce.

No. VII. Gold Coins of Different Countries.—A Table containing the Assays, Weights, and Values of the principal Gold Coins of all Countries, computed according to the Mint Price of Gold in England, and from Assays made both at London and Paris, which have been found to verify each other.[1]

COINS.		Assay.	Weight.	Standard Weight.	Contents in Pure Gold.	Value in Sterling.
		Car. gr.	*Dwt. gr.*	*Dwt. gr. m.*	*Grains.*	*s. d.*
Austrian Dominions, Souvcrain		W. 0 0¼	3 14	3 13 15	78·6	13 10·92
	Double Ducat	B. 1 2¾	4 12	4 20 5	106·4	18 9·97
	Ducat Kremnitz, or Hungarian	B. 1 3	2 5¾	2 10 3	53·3	9 5·91
Bavaria	Carolin	W. 3 2	6 5¼	5 5 10	115·	20 4·23
	Max d'or, or Maximilian	W. 3 2¼	4 4	3 14 0	77·	13 7·44
	Ducat	B. 1 2¼	2 5¾	2 19 11	52·8	9 4·12
Bern	Ducat (double, &c. in proportion)	B. 1 1¾	1 23	2 2 1	45·9	8 1·48
	Pistole	W. 0 1½	4 21	4 19 0	105·5	18 7·86
Brunswick	Pistole (double in proportion)	W. 0 1½	4 21¼	4 19 5	105·7	18 8·48
	Ducat	B. 1 0½	2 5¾	2 8 9	51·8	9 2·
Denmark	Ducat current	W. 0 3¾	2 0	1 21 19	42·2	7 5·62
	Ducat specie	B. 1 2	2 5¾	2 9 8	52·6	9 3·70
	Christian d'or	W. 0 1	4 7	4 5 16	93·3	16 6·14
England	Guinea	Stand.	5 9½	5 9 10	118·7	21 0·
	Half-guinea	Stand.	2 16¾	2 16 15	59·3	10 6·
	Seven shilling piece	Stand.	1 19	1 19 0	39·6	7 0·
	Sovereign	Stand.	5 3¼	5 3 5	113·1	20 0·
France	Double Louis (coined before 1786)	W. 0 2	10 11	10 5 6	224·9	39 9·64
	Louis	W. 0 2	5 5½	5 2 12	112·4	10 10·71
	Double Louis (coined since 1786)	W. 0 1½	9 20	9 15 19	212·6	37 7·53
	Louis	W. 0 1½	4 22	4 19 19	106·3	18 9·75
	Double Napoleon, or piece of 40 francs	W. 0 1¾	8 7	8 3 0	179·	31 8·36
	Napoleon, or piece of 20 francs	W. 0 1¾	4 3½	4 1 10	89·7	15 10·5
Franckfort on the Maine, Ducat		B. 1 2½	2 5¾	2 9 14	52·9	9 4·34
Geneva	Pistole, old	W. 0 2	4 7¼	4 4 18	92·5	16 4·45
	Pistole, new	W. 0 0½	3 15¾	3 15 4	80·	14 1·9
Genoa	Sequin	B. 1 3½	2 5¾	2 10 6	53·4	9 5·41
Hamburgh	Ducat (double in proportion)	B. 1 2½	2 5¾	2 9 14	52·9	9 4·35

[1] The London Assays in this Table were made by Robert Bingley, Esq., F.R.S., the King's Assay Master of the Mint, and those at Paris by Pierre Frédéric Bonneville, Essayer du Commerce, as published in his elaborate work on the coins of all nations.

Specimens of all the foreign coins brought to London for commercial purposes have been supplied for this Table from the Bullion-office, Bank of England, by order of the Bank Directors, and have been selected by John Humble, Esq., the chief clerk of that office, who also examined the Tables in their progress. It may likewise be added, that the Mint Reports of these commercial coins are chiefly from average assays; and that all the computations have been carefully verified by different calculators.—(Note by Dr. Kelly, to second edition of the *Cambist* published in 1821.)

COINS.		Assay.	Weight.	Standard Weight.	Contents in Pure Gold.	Value in Sterling.
		Car. gr.	*Dwt. gr.*	*Dwt. gr. m.*	*Grains.*	*s. d.*
HANOVER	George d'or	W. 0 1¼	4 6½	4 5 3	92·6	16 4·66
	Ducat	B. 1 3½	2 5¾	2 10 3	53·3	9 5·19
	Gold florin (double in proportion)	W. 3 0½	2 2	1 18 6	39·	6 10·83
HOLLAND	Double ryder	Stand.	12 21	12 21 0	283·2	50 1·46
	Ryder	Stand.	6 9	6 9 0	140·2	24 9·75
	Ducat	B. 1 2¼	2 5¾	2 9 12	52·8	9 4·13
MILAN	Scquin	B. 1 3	2 5¾	2 10 0	53·2	9 4·98
	Doppia or pistolc	W. 0 1	4 1½	4 0 8	88·4	15 7·74
	Forty lire piccc of 1808	W. 0 1¾	8 8	8 4 0	179·7	31 9·64
NAPLES	Six ducat piece of 1783	W. 0 2¼	5 16	5 12 18	121·9	21 6·89
	Two ducat picce, or sequin, of 1762	W. 1 2¾	1 20¼	1 16 6	37·4	6 7·42
	Three ducat piecc, or oncetta, of 1818	B. 1 3½	2 10¼	2 15 1	58·1	10 3·40
NETHERLANDS,	Gold lion, or 14 florin piece	Stand.	5 7¾	5 7 16	117·1	20 8·69
	Ten florin piece (1820)	W. 0 1¾	4 7¾	4 5 15	93·2	16 5·93
PIEDMONT	Pistole coined sincc 1785 (½, &c. in proportion)	W. 0 1¼	5 20	5 17 0	125·6	22 2·75
	Sequin (½ in proportion)	B. 1 2½	2 5¾	2 9 12	52·9	9 4·34
	Carlino, coincd sincc 1785 (½, &c. in proportion)	W. 0 1¼	29 6	28 20 0	634·4	112 3·33
	Piecc of 20 francs	W. 2 0	4 3½	3 18 4	82·7	14 7·63
POLAND	Ducat	B. 1 2½	2 5¾	2 9 12	52·9	9 4·34
PORTUGAL	Dobraon of 24,000 rces	Stand.	34 12	34 12 0	759·	134 3·96
	Dobra of 12,800 rees	Stand.	18 6	18 6 0	401·5	71 0·70
	Moidore or Lisbonninc (½, &c. in proportion)	Stand.	6 22	6 22 0	152·2	26 11·24
	Piece of 16 testoons, or 1600 rees	W. 0 0⅜	2 6	2 5 14	49·3	8 8·70
	Old crusado of 400 recs	W. 0 0½	0 15	0 14 18	13·6	2 4·88
	New crusado of 480 rees	W. 0 0⅝	0 16¼	0 16 2	14·8	2 7·43
	Milrec (coincd for the African colonies 1755)	Stand.	0 19¾	0 19 15	18·1	3 2·44
PRUSSIA	Frederick (double) of 1800	W. 0 2	8 14	8 9 6	184·5	32 7·84
	Frederick (single) of 1800	W. 0 2	4 7	4 4 13	92·2	16 3·42
ROME	Sequin (coined since 1760)	B. 1 3½	2 4½	2 9 0	52·2	9 2·86
	Scudo of the Republic	W. 0 1¾	17 0¼	16 16 6	367·	64 11·43
RUSSIA	Ducat of 1796	B. 1 2½	2 6	2 10 0	53·2	9 4·98
	Ducat of 1763	B. 1 2	2 5¾	2 9 8	52·6	9 3·71
	Gold poltin of 1777	Stand.	0 9	0 9 0	8·2	1 5·41
	Imperial of 1801	B. 1 2¼	7 17¼	8 6 8	181·9	32 2·31
	Half Imperial of 1801	B. 1 2¼	3 20½	4 3 4	90·9	16 1·05
	Ditto of 1818	B. 0 0⅜	4 3½	4 3 12	91·3	16 1·98
SARDINIA	Carlino (½ in proportion)	W. 0 2¾	10 7½	9 23 16	219·8	30 8·10
SAXONY	Ducat of 1784	B. 1 2	2 5¾	2 9 8	52·6	9 3·71
	Ducat of 1797	B. 1 2½	2 5¾	2 9 14	52·9	9 4·34
	Augustus of 1754	W. 0 2⅝	4 6½	4 3 8	91·2	16 1·69
	Augustus of 1784	W. 0 1¾	4 6½	4 4 12	92·2	16 3·81
SICILY[1]	Ounce of 1751	W. 1 2½	2 20½	2 15 8	58·2	10 3·60
	Double ounce of 1758	W. 1 2	5 17	5 7 14	117·	20 8·48
SPAIN	Doubloon of 1772 (double and single in proportion	W. 0 2¼	17 8½	61 21 16	372·	65 10·05
	Quadruple pistole of 1801	W. 1 1	17 9	16 9 6	360·5	63 9·62
	Pistole of 1801	W. 1 1	4 8¼	4 2 6	90·1	15 11·35
	Coronilla, gold dollar, or vintem of 1801	W. 1 2½	1 3	1 0 18	22·8	4 0·42
SWEDEN	Ducat	B. 1 2	2 5	2 8 12	51·9	9 2·22
SWITZERLAND	Pistole of the Helvetic Republic, 1800	W. 0 1½	4 21½	4 19 9	105·9	18 8·91
TREVES	Ducat	B. 1 2	2 5¾	2 9 8	52·6	9 3·71
TURKEY	Sequin fonducli of Constantinople, 1773	W. 2 2½	2 5¾	1 23 6	43·3	7 7·94
	Sequin fonducli of 1789	W. 2 3¼	2 5¾	1 22 16	42·9	7 7·11
	Half missier (1818)	W. 5 3½	0 18¼	0 13 5	12·16	2 1·82
	Sequin fonducli	W. 2 3	2 5	1 22 7	42·5	7 6·26
	Yermeebeshlek	B. 0 3½	2 1¾	3 4 13	70·3	12 5·30
TUSCANY	Zecchino or sequin	B. 1 3¾	3 5¾	2 10 14	53·6	9 5·83
	Ruspone of the kingdom of Etruria	B. 1 3⅝	6 17½	7 7 13	161·	28 5.93
UNITED STATES[2]	Eagle (½ and ¼ in proportion)	W. 0 0½	11 6	11 4 8	246·1	43 6·66
VENICE	Zecchino or sequin (½ and ¼ in proportion)	B. 1 3¼	2 6	2 10 10	53·6	9 5·83
WIRTEMBERG	Ducat	B. 1 2	2 5	2 8 12	51·9	9 2·22
	Ducat (double and ½ ducat in proportion)	B. 1 2	2 5¾	2 9 8	52·6	9 3·71
EAST INDIES.						
	Mohur of 1770	B. 1 2¼	7 22¼	8 11 15	186·8	33 0·72
	Mohur, Half (1787), (¼ in proportion)	B. 1 2½	3 23½	4 16 10	94·	16 7·64
	Mohur Sicca of Bengal	B. 1 3⅜	7 23	8 15 0	189·8	30 1·04
	Mohur of the Dutch East India Company (1783)	W. 3 3¼	10 2	8 8 0	183·4	32 5·50
	Mohur, Half Ditto (1801)	W. 3 1¼	5 3½	4 18 18	96·2	17 0·30
	Rupec, Bombay (1818)	B. 0 0½	7 11	7 11 13	164·7	29 1·78
	Rupee of Madras (1818)	Stand.	7 12	7 12 0	165·	29 2·42
	Pagoda, star	W. 3 0	2 4¾	1 21 11	41·8	7 4 77

[1] Much variation is found in the fineness of the Sicilian gold coins.
[2] This value of the American eagle is taken from average assays of the coins of twelve years.

Tables. **No. VIII. Silver Coins of Different Countries.**—A Table containing the Assays, Weights, and Values of the principal Silver Coins of all Countries, computed at the rate of 5s. 2d. per Ounce Standard, from Assays made both at the London and Paris Mints. Tables.

COINS.		Assay.	Weight.	Standard Weight.	Contents in Pure Silver.	Value in Sterling.
		Oz. dwt.	*Dwt. gr.*	*Dwt. gr. mi.*	*Grains.*	*s. d.*
Austria -	Half rixdollar, or florin, *Convention* - -	W. 1 3	9 0½	8 2 1	179·6	2 1·07
	Copftsuck, or 20 creutzer piece - -	W. 4 3	4 6½	2 16 3	59·4	0 8·29
	17 Creutzer piece - - - -	W. 4 8	4 0	2 9 18	53·5	0 7·47
	Halbe copf, or 10 creutzer piece - -	W. 5 5	2 11	1 7 1	28·8	0 4·01
Baden -	Rixdollar - - - - -	W. 1 4	18 2	16 3 1	358·1	4 2·
Bavaria -	Rixdollar of 1800 (½ in proportion) - -	W. 1 4½	17 12	15 13 13	345·6	4 0·25
	Copftsuck - - - - -	W. 4 3	4 6½	2 16 3	59·4	0 8·29
Bern -	Patagon or crown (½ in proportion) - -	W. 0 7	18 22	18 7 14	406·7	4 8·79
	Piece of 10 batzen - - - -	W. 1 2	5 3	4 14 17	102·5	1 2·31
Bremen -	Piece of 48 grotes - - - -	W. 2 2	11 0	8 22 1	198·	2 3·64
Brunswick	Rixdollar, *Convention* - - -	W. 1 3	18 1	16 4 4	359·2	4 2·15
	Half rixdollar - - - -	W. 1 3	9 0½	8 2 2	179·6	2 1·07
Denmark -	Ryksdaler, specie of 1798 - - -	W. 0 13	18 14	17 11 17	388·4	4 6·23
	New piece of 4 marks - - -	W. 0 12	12 9	11 16 14	259·8	3 0·27
	Half ryksdaler - - - -	W. 0 13	9 7	8 17 8	194·2	2 3·11
	Mark, specie, or ⅙ ryksdaler - -	W. 3 1	4 0	2 21 12	64·4	0 7·59
	Rixdollar, specie of Sleswig and Holstein (pieces of ⅔ and ⅓ in proportion) - -	W. 0 12	18 13	17 12 6	389·4	4 6·37
	Piece of 24 skillings - - -	W. 4 7	5 2½	3 2 10	68·9	0 3·62
England -	Crown (*old*) - - - -	Stand.	19 8½	19 8 10	429·7	5 0·
	Half-crown - - - - -	Stand.	9 16¼	9 16 5	214·8	2 6·
	Shilling - - - - -	Stand.	3 21	3 21 0	85·9	1 0·
	Sixpence - - - - -	Stand.	1 22½	1 22 10	42·9	0 6·
	Crown (*new*) - - - -	Stand.	18 4¼	18 4 7	403·6	4 8·36
	Half-crown - - - - -	Stand.	9 2	9 2 4	201·8	2 4·18
	Shilling - - - - -	Stand.	3 15¼	3 15 6	80·7	0 11·27
	Sixpence - - - - -	Stand.	1 19¾	1 19 14	40·3	0 5·63
France -	Piece of 5 francs - - - -	W. 0 7	16 1	15 12 4	344·9	4 0·16
	Piece of 2 francs - - - -	W. 0 7	6 11	6 6 2	138·8	1 7·38
	Franc - - - - -	W. 0 7	3 5½	3 3 1	69·4	0 9·69
	Demi franc - - - - -	W. 0 8½	1 15	4 13 6	34·7	0 4·84
Frankfort						
Genoa -	Scudo, of 8 lire, of 1796 (½, ¼, &c. in proportion) - - - - -	W. 0 8	21 9	20 14 10	457·4	5 3·87
	Scudo of the Ligurian Republic - -	W. 0 9½	21 9	20 11 2	454·3	5 3·43
Hamburg -	Rixdollar specie - - - -	W. 0 10	18 18	17 21 12	397·5	4 7·49
	Double mark, or 32 schilling piece (single in proportion) - - - -	W. 2 3	11 18	9 11 8	210·3	2 5·36
	Piece of 8 schillings - - -	W. 3 12	3 8¼	2 6 4	50·1	0 6·99
	Piece of 4 schillings - - -	W. 4 6	2 2	1 6 12	28·3	0 3·95
Hanover -	Rixdollar, *Constitution* - - -	W. 0 9	18 19	18 0 14	400·3	4 7·89
	Florin, or piece of ⅔, fine - - -	B. 0 16	8 10	9 0 10	200·3	2 3·96
	Half florin, or piece of ⅓, ditto - -	B. 0 16	4 4	4 11 4	99·2	1 1·85

[1] "By one of the articles of the Zollverein, or Customs-union of Germany, it was stipulated that the settlements for the duties should be made either in Prussian dollars or in florins, at the rate of seven florins for four Prussian dollars. There were, however, no florins in existence exactly of this value; but as the nearest approach to it was a valuation called the 24 guldenfuss, or florin-foot, these Zollverein florins were nominally reckoned to be in this rate, though the difference amounts to more than 2 per cent.

"The term 24 guldenfuss implies that the mark weight of fine silver is rated at 24 gulden or florins. It was formed by giving to the coins minted or valued in 20 guldenfuss an increased value of one-fifth, as rating the 20 kreutzer piece at 24 kreutzers. At 60d. per ounce standard, the value of this mark of fine silver is worth 40s. 7½d. sterling, from which the value of the different German monetary integers is readily obtained; as reckoning 27¾ marks banco or 34 marks current of Hamburg, 14 dollars of Prussia, 24½ florins of South Germany, 20 florins of Austria, and also 60 lire Austriache of Lombardy, to be of this amount.

"In order, therefore, to prevent the loss or inconvenience which would attend their adhering to this mode of valuation, a money convention was entered into on the 25th of August 1837, among the states forming the union, by which it was agreed upon that a new basis of valuation should be adopted for their coins, under the term of Süddeutscher Währung, or South German valuation, at the rate of 24½ gulden or florins from the mark's weight of fine silver.

"Bavaria, Wirtemberg, Baden, and Saxony have since issued their coins at this rate, and the other states of the confederation are doing or preparing to do the same. Among them Frankfort, in 1840, began the mintage of coins of this value; and by a regulation of the Chamber of Commerce of this free city, all the rates of exchange, as well as the values of bullion and foreign coins, were ordered to be expressed in this Süddeutscher Währung from the beginning of this present year (1843). One of these new and very exactly minted florins was assayed by Messrs. Johnson and Cock, of Hatton Garden, who reported it to be, full weight, 6 dwts. 19½ grains, worse 6 dwts., gold under 2 grains; from which the value, at 60d. per ounce standard, is very exactly 19¾d. sterling, making the par of exchange with London 120¾ florins in S. D. W. for £10 sterling.

"I have been thus particular in these explanations, partly because several persons imagine that the late alteration in the rate of exchange with Frankfort was made in compliance with the wishes, or to suit the convenience, of one or more of our leading houses in exchange negotiations, but more particularly because it is maintained by many that the valuation of this rate is not merely nominally, but really, in 24 guldenfuss. This is a point of no small importance to the commercial world, for had it been so, the par of exchange with London would have been only 118 florins for £10 sterling, and the difference between this and the present price of sight bills on Frankfort would have exceeded 2¾ per cent.; a variation which every practical cambist well knows could not exist, except under very extraordinary circumstances, and with nearly corresponding differences in the other rates of exchange: neither of which causes is now in operation."—(*Letter of William Tate, Esq., cambist to the Times.*)

Tables.

Tables.

COINS.	Assay.	Weight.	Standard Weight.	Contents in Pure Silver.	Value in Sterling.
	Oz. dwt.	*Dwt. gr.*	*Dwt. gr. mi.*	*Grains.*	*s. d.*
HESSE CASSEL Rixdollar, *Convention*	W. 1 6	18 1	15 22 6	353·	4 1·39
Florin, or piece of $\frac{2}{3}$ ($\frac{1}{2}$ in proportion)	W. 1 6	9 0½	7 23 3	176·8	2 0·68
Eeu, *Convention* (1815)	W. 1 6	17 23¾	15 21 2	349·3	4 0·77
Bon gros	W. 6 14	1 4	0 11 5	10·3	0 1·43
HOLLAND Florin, or guilder ($\frac{1}{2}$ in proportion)	W. 0 4½	6 18	6 14 14	146·8	1 8.49
12 Stiver piece	W. 0 16½	4 12	4 3 18	92·4	1 0·90
Accounts used to be kept in Holland by the pound Flemish = 6 florins = 20 schillings = 120 stivers = 240 groats = 1920 pennings. But in 1820 the decimal system was introduced. In order, however, to cause as little inconvenience as possible, the florin = 1*s.* 8¾*d.* sterling, was made the unit of the new system. The florin is supposed to be divided into 100 equal parts or cents; and the other silver coins are equal multiples or sub-multiples of it. The new gold coin is called the florin piece, and is worth 16*s.* 6½*d.* very nearly. But accounts are still sometimes kept in the old way, or by the pound Flemish. Par of exchange between Amsterdam and London is 11 flor. 58 cents per pound sterling.					
LUBEC Rixdollar, specie	W. 0 13	18 8	17 15 12	391·9	4 6·72
Double mark	W. 2 3	11 18	9 11 8	210·3	2 5·36
Mark	W. 2 3	5 21	4 17 14	105·1	1 2·67
MILAN Lira, new	W. 4 10	4 0	2 9 0	52·8	0 7·37
Lira, old	W. 0 3	2 10	2 9 4	52·9	0 7·38
NAPLES Ducat, new ($\frac{1}{2}$ in proportion)	W. 1 0	14 15	13 7 8	295·4	3 5·24
Piece of 12 Carlini of 1791	W. 1 0	17 15	16 0 18	356·	4 1·71
Ditto of 1796	W. 1 2	17 16¾	15 22 12	353·9	4 1·41
Ditto of 1805 ($\frac{1}{2}$ in proportion)	W. 1 2	17 18¼	15 23 18	355·2	4 1·60
Ditto of 10 Carlini (1818)	W. 1 2	14 18	13 7 0	295·1	3 5·20
NETHERLANDS Crown ($\frac{1}{2}$, &c. in proportion)	W. 0 14	19 0	17 19 4	395·2	4 7·18
5 Stiver piece	W. 6 3	3 4	1 9 18	31·3	0 4·37
Florin of 1816	W. 0 7½	6 22	6 16 6	148·4	1 8·72
Half florin (with divisions in proportion)	W. 4 5½	5 11	3 9 2	75·	0 10·46
PIEDMONT —					
Since 1827 the coins of Piedmont and Sardinia have been identical with those of France, their names, *lire, centesimi,* &c., only being different.					
POLAND Rixdollar, old	W. 1 2	18 1	16 6 0	360·8	4 2·38
Rixdollar, new (1794)	W. 2 17	15 10½	11 11 6	254·3	2 11·51
Florin, or gulden	W. 4 2	6 0	3 18 16	84·	0 11·72
PORTUGAL New crusado (1690)	W. 0 4	11 0	10 19 0	239·2	2 9·40
Ditto (1718)	W. 0 6½	9 8	9 1 0	200·2	2 3·95
Ditto (1795)	W. 0 7	9 9	8 1 18	201·6	2 4·15
Doze vintems, or piece of 240 rees	W. 0 7	4 16	4 12 10	100·4	1 2·01
New crusado (1809)	W. 0 4	9 3	8 23 0	198·2	2 4·67
Seis vintems, or piece of 120 rees	W. 0 9	2 4½	2 2 8	46·6	0 6·50
Testoon (1802)	W. 0 9	2 0	1 22 0	42·5	0 5·93
Tres vintems, or piece of 60 rees (1802)	W. 0 9	1 2¼	1 1 4	23·3	0 3·25
Half testoon (1802)	W. 0 9	0 23	0 22 0	20·4	0 2·84
PORTUGUESE COLONIES Piece of 8 maeutes, of Portuguese Africa	W. 0 9	7 12	7 4 14	159·8	1 10·31
Ditto of 6 ditto	W. 0 9	5 13	5 7 12	118·	0 4·47
Ditto of 4 ditto	W. 0 9	3 16	3 12 8	78·1	1 10·90
PRUSSIA [1] Rixdollar, Prussian curreney, ($\frac{1}{2}$ in proportion)	W. 2 5	14 6½	11 9 0	252·6	2 11·27
Rixdollar, *Convention*	W. 1 3	18 1	16 4 2	359·	4 2·13
Florin, or piece of $\frac{2}{3}$	W. 2 3	11 2	8 22 8	198·4	2 3·70
Florin of Silesia	W. 2 2	9 11	7 16 0	170·3	1 11·78
Drittel or piece of 8 good groschen	W. 3 3	5 8¾	3 20 4	85·3	0 11·91
Piece of 6 groschen	W. 2 8	3 14	2 19 6	62·3	0 8·69
ROME Scudo, or crown (coined since 1753)	W. 0 4	17 1	16 17 13	371·5	4 3·87
Mezzo scudo, or half-crown	W. 0 4	8 12½	8 8 16	185·7	2 1·93
Testone (1785)	W. 0 5	5 2	4 23 4	110·3	1 3·40
Paolo (1785)	W. 0 4	1 17	1 16 4	37·2	0 5·19
Grosso or half paolo (1785)	W. 0 5	0 20½	0 20 0	18·5	0 2·58
Scudo of the Roman Republic (1799)	W. 0 6	17 1	16 13 18	368·1	4 3·40
RUSSIA Rouble of Catherine II. (1780)	W. 2 4	15 12	12 10 6	275·9	3 2·52
Ditto of Alexander	W. 0 16	13 12	12 12 12	278·1	3 2·83
N.B.—It was ordered by a ukase, dated the 1st of July 1839, that this coin should be the standard of value in Russia. It is divided into 100 copecks; and the other silver coins are of the value of 75, 50, 25, and 10 copecks each. This same ukase enacts, that 1 silver rouble shall henceforth be equal to 3½ old paper roubles.					

[1] The Prussian coins, having been debased at different periods, vary in their reports.

Tables. Tables.

COINS.		Assay. Oz. dwt.	Weight. Dwt. gr.	Standard Weight. Dwt. gr. mi.	Contents in Pure Silver. Grains.	Value in Sterling. s. d.
SARDINIA	*See* PIEDMONT.					
SAXONY	Rixdollar, *Convention* ($\frac{1}{2}$ and $\frac{1}{4}$ in proportion)	W. 1 3	18 0	16 3 4	358·2	4 2·01
	Piece of 16 groschen of Leipsic	W. 2 2	9 $9\frac{1}{2}$	7 14 16	169·1	1 11·61
	Rixdollar current of Saxe Gotha	W. 4 $4\frac{1}{2}$	18 1	11 4 2	248·1	2 10·64
	$\frac{1}{3}$ Thaler of 1804	W. 4 11	3 11	2 0 19	45·3	0 6·32
	Ditto of 1808	W. 4 $11\frac{1}{2}$	3 $5\frac{1}{2}$	1 21 8	42·1	0 5·87
	Ditto of Jerome Bonaparte of 1809	W. 5 4	3 17	1 23 6	43·7	0 6·10
SICILY	Scudo ($\frac{1}{2}$ in proportion)	W. 1 4	17 14	15 16 6	348·2	4 0·62
	Piece of 40 grains	W. 1 2	5 21	5 7 2	117·5	1 4·40
SPAIN	[1]Dollar, of late coinage	W. 0 8	17 8	16 17 0	370·9	4 3·79
	Half Dollar, ditto	W. 0 8	8 16	8 8 10	185·4	2 1·88
	Mexican peceta (1774)	W. 0 8	4 $7\frac{1}{2}$	4 3 16	92·3	1 0·88
	Real of Mexican plate (1775)	W. 0 8	2 $3\frac{3}{4}$	2 1 20	46·1	0 6·43
	Peceta provincial of 2 reals of new plate (1775)	W. 1 $9\frac{1}{2}$	3 18	3 6 0	72·2	0 10·08
	Real of new plate (1795)	W. 1 $9\frac{1}{2}$	1 21	1 15 0	36·1	0 5·04
SWEDEN	Rixdollar (1762)	W. 0 12	18 20	17 19 10	395·5	4 7·22
	Rixdollar of late coinage	W. 0 $14\frac{1}{2}$	18 17	17 12 0	388·5	4 6·28
SWITZERLAND	Ecu of 40 batzen of Lucerne (1796)	W. 0 5	19 0	18 13 14	412·3	4 9·57
	Half ditto	W. 1 2	9 20	8 20 12	196·7	2 3·46
	Florin, or piece of 40 schillings of Lucerne (1793)	W. 1 5	4 22	4 8 14	96·8	1 1·51
	Ecu of 40 batzen of the Helvetic Republic, 1798 ($\frac{1}{2}$ in proportion)	W. 0 6	18 23	18 10 14	409·5	4 9·18
	Ecu of 4 franken	W. 0 7	18 23	18 8 12	407·6	4 9·18
TURKEY	Piastre of Selim of 1801	W. 5 6	8 6	4 7 8	95·7	1 1·36
	Piastre of Crim Tartary (1778)	W. 6 13	10 5	4 2 4	90·9	1 0·69
	Piastre of Tunis (1787)	W. 6 $5\frac{1}{2}$	10 0	4 8 6	96·5	1 1·47
	Piastre (1818)	W. 5 14	6 $6\frac{1}{2}$	3 1 4	67·7	0 9·45
TUSCANY	Piece of 10 Paoli	W. 0 4	17 $13\frac{1}{2}$	17 5 18	382·9	4 5·46
	Piece of 10 lire	B. 0 7	25 6	26 1 12	578·7	6 8·80
	Lira	B. 0 7	2 8	2 9 16	53·4	0 7·45
UN. STATES	Dollar, at an average	W. 0 $8\frac{1}{2}$	17 8	16 16 0	370·1	4 3·68
	Dime, or one-tenth dollar	W. 0 4	1 $19\frac{1}{2}$	1 18 14	39·5	0 5·71
	Half dime	W. 0 7	0 $21\frac{3}{4}$	0 21 0	19·5	0 2·72
VENICE	Piece of 2 lire, or 24 creutzers (1800)	W. 8 $4\frac{1}{2}$	5 $19\frac{1}{2}$	1 12 2	33·4	0 4·66
	Ditto of 2 lire, called moneta provinciale (1808)	W. 8 3	5 $13\frac{1}{2}$	1 11 8	32·8	0 4·58
	Ditto of 2 lire, 1802 ($\frac{1}{2}$ and $\frac{1}{4}$ in proportion)	W. 8 4	5 $6\frac{1}{4}$	1 8 19	30·5	0 4·25
WIRTEMBERG	Rixdollar, specie	W. 1 3	18 1	16 14 2	359·1	4 2·14
	Copfstuck	W. 4 2	4 $16\frac{1}{2}$	2 16 12	59·8	0 8·35
EAST INDIES.						
	Rupee Sicca, coined by the East India Company at Calcutta	B. 0 13	7 $11\frac{1}{2}$	7 22 0	175·8	2 0·54
	Company's or Standard	Stand.	...	...	165·	1 11·11
	Calcutta (1818)	Stand.	8 0	8 0 0	175·9	2 0·56
	Bombay, new, or Surat (1818)	W. 0 $0\frac{1}{4}$	7 11	7 10 4	164·7	1 11·01
	Fanam, Cananore	W. 0 $1\frac{1}{4}$	1 $11\frac{3}{4}$	1 11 10	32·9	0 4·5
	Bombay, old	B. 0 13	1 $11\frac{3}{4}$	1 13 16	35·	0 4·88
	Pondicherry	B. 0 $5\frac{1}{2}$	1 $0\frac{1}{2}$	1 1 2	22·8	0 3·18
	Ditto, double	W. 0 3	1 $18\frac{3}{4}$	1 18 2	39·	0 5·44
	Gulden of the Dutch E. I. Co. (1820)	W. 0 $7\frac{1}{2}$	6 22	6 16 6	148·4	1 8·72

The sterling value of the foreign coins in the foregoing tables has been computed from the assays as follows:—Let it be required to assign the value, in sterling, of a French double Louis d'or coined since 1786, the assay master's report being as follows: "Weight, 9 dwts. 20 grs.; assay W. $1\frac{1}{2}$ grs.," that is, 0 car. $1\frac{1}{2}$ grs. worse than the English standard. We proceed as under:—

From 22 car. 0 gr. the fineness of English standard gold,
Take 0 car. $1\frac{1}{2}$ gr. } There remains 21 car. $2\frac{1}{2}$ gr.

Then, as 22 car. : 21 car. $2\frac{1}{2}$ grs. :: 9 dwts. 20 grs. : 9 dwts. 16 grs., the standard gold contained in the Louis d'or; and hence, as 1 oz. : £3, 17s. $10\frac{1}{2}$d. :: 9 dwts. 16 grs. : £1, 17s. $7\frac{1}{2}$d., the value of the Louis in sterling money, and so for any of the other coins.

[1] This is the coin which is universally circulated under the name of the Spanish dollar.

PART II.—PAPER-MONEY.

Sect. I.—*General Principles in regard to Paper-Money.*

Paper-money.

We have endeavoured to explain, in the first part of this article, the reasons why paper has been substituted for coins in the ordinary transactions of society, and the principle on which its value is maintained. Besides being a source of profit to the issuers, the employment of paper, provided it be properly secured, is a great public accommodation. The weight of 1000 sovereigns exceeds twenty-one pounds troy, so that to pay or receive a large sum in metal would be exceedingly inconvenient; while a great risk from loss, as well as a heavy expense, would be incurred in the conveyance of specie from place to place. But with paper this may be effected with extreme facility, and payments of the largest sums, and at the greatest distances, may be made with almost no inconvenience or expense. And while the interest of individuals is thus consulted by the introduction and use of paper, it is of the greatest service to the public. Its employment, and the various devices for the economising of currency to which it has led, enable the business of a commercial country like England to be carried on with a *fourth part*, perhaps, of the gold and silver currency that would otherwise be necessary. The cheapest instruments by which exchanges can be effected are substituted for the dearest; and, besides doing their work better, this substitution enables the various sums which must otherwise have been in use as money, to be employed as capital in industrial undertakings. Of the various means, whether by the introduction of machinery or otherwise, that have been devised for promoting the progress of wealth and civilization, it would not be easy to point out one better calculated to attain its end than the introduction of a properly organised paper-money.

To prevent misconception, it may be necessary to premise that by "paper-money" we do not mean notes which are legal tender, though not payable in coin on demand. These, no doubt, are the only description of notes which can, strictly speaking, be called paper money. But as the circumstances which determine their value have been already stated, and as they happily have no existence amongst us, it is needless farther to allude to them. Hence, in the sequel of this article, when we employ the term paper-money, it will, unless the contrary be stated, apply exclusively to the notes issued by individuals or associations for certain sums, and made payable on demand, or on being presented. Though only the representatives of money, these notes possess so many of its qualities, and are so easily converted into coin, that they may, with little impropriety, be held to be money. Being most commonly issued by bankers, they are usually called bank-notes.

Distinction between bills of exchange and paper money.

This statement shows that, under the phrase paper-money or paper-currency, we do not include bills of exchange, or bills issued by bankers, merchants, and others, and payable sometime after date. Such bills perform, in some respects, the same functions as money; and have, in consequence, been frequently regarded in the same light as bank-notes. But this is quite improper; for though there are many points in which a bill of exchange and a bank-note closely resemble each other, there are others in which there is a distinct and material difference between them. A note bears to be payable on demand; it is not indorsed by a holder on his paying it away; the party receiving has no claim on the party from whom he received it, in the event of the failure of the issuers;[1] and every one is thus encouraged, reckoning on the facility of passing it to another, to accept bank paper, "*even though he should doubt the ultimate solvency of the issuers.*"[2] Bills, on the contrary, are almost all drawn payable at some distant period; and those into whose hands they come, if they be not in want of money, prefer retaining them in their possession, in order to get the interest that accrues upon them. But the principal distinction between notes and bills is, that every individual in passing a bill to another, has to indorse it, and by doing so makes himself responsible for its payment. "A bill circulates," says Mr. Thornton, "in consequence chiefly of the confidence placed by each receiver of it in the last indorser, his own correspondent in trade; whereas the circulation of a bank-note is owing rather to the circumstance of the name of the issuer being so well known as to give it an universal credit."[3] Nothing, then, can be more inaccurate than to represent bills and notes in the same point of view. If A pay to B £100 in satisfaction of a debt, there is an end of the transaction; but if A pay to B a bill of exchange for £100, the transaction is not completed; and, in the event of the bill not being paid by the person on whom it is drawn, B will have recourse upon A for its value. It is clear, therefore, that a great deal more consideration is always required, and may be fairly presumed to be given, before any one accepts a bill of exchange in payment, than before he accepts a bank-note. The note is payable on the instant, without deduction—the bill not until some future period; the note may be passed to another without incurring any risk or responsibility, whereas every fresh issuer of the bill makes himself responsible for its value. Notes form the currency of all classes, not only of those who are, but also of those who are not engaged in business, as women, children, labourers, &c. who in most instances are without the power to refuse them, and without the means of forming any correct conclusion as to the solvency of the issuers. Bills, on the other hand, pass only, with very few exceptions, among persons engaged in business, who are fully aware of the risk they run in taking them. There is plainly, therefore, a wide and obvious distinction between the two species of currency; and it cannot be fairly argued, that because government interferes to regulate the issue of the one, it should also regulate the issue of the other. To use the words of Lord Mansfield, "Bank-notes are not like bills of exchange, mere securities or documents for debts, nor are so esteemed, but are treated as money in the ordinary course and transactions of business, by the general consent of mankind; and on payment of them, whenever a receipt is required, the receipts are always given as for money, not as for securities or notes." (*Chitty on Bills*, 8th edition. p. 555.)

Regulations in regard to the issue of notes.

To obviate the endless inconveniences that would arise from the circulation of coins of every weight and degree of purity, were there no restrictions on their issue, all governments have forbidden the circulation of coins not of a certain specified or standard weight and fineness. And the recurrence of similar inconveniences from the

[1] Practically speaking, this is the fact; but a person paying away a bank note is liable to be called upon for repayment, should the bank fail before it was in the power of the party to whom it was paid, using ordinary diligence to present it. The responsibility seldom exceeds a couple of hours, and can hardly in any case exceed a couple of days. In practice it is never adverted to.

[2] Thornton on Paper Credit, p. 172.

[3] Ibid, p. 40.

Money. issue of notes for varying sums, and payable under varying conditions, have led, in most countries in which paper-money is made use of, to the enacting of regulations forbidding the issue of notes below a certain amount, and laying down rules for their payment. In England at this moment no note payable to bearer on demand can be issued for less than five pounds, and they must all be paid the moment they are presented. In Scotland and Ireland the minimum value of bank-notes is fixed at one pound, the regulations as to payment being the same as in England. In order to preserve the monopoly of the London circulation to the Bank of England, no notes payable to bearer on demand are allowed to be issued by individuals or associations, other than the Bank of England, within sixty-five miles of St. Paul's. But beyond these limits they may be issued by certain banks, under the provisions of the Act 7 and 8 Vic. c. 32, &c.

Necessity of insuring the conversion of bank notes into coin.

The propriety of taking measures to insure the convertibility of bank-notes into coin has been previously explained. This is a matter which cannot safely be left to the discretion or judgment of individuals, but which must be settled by government. No bank-notes should be permitted to circulate, about the equivalency of which to the coins they profess to represent there can be the smallest room for doubt. It is alleged, indeed, that in this, as in most other things, we may safely trust to the prudence and sagacity of those who deal with banks; and that, if left to themselves, the public will very rarely be deceived. But the widest experience shows that but little, if any, dependence can be placed on this doctrine. The public is very apt to be misled, in the first instance, in giving confidence to or taking the paper of individuals or associations, and though that were not the case, the condition of an individual or company may change from bad or expensive management, improvident speculation, unavoidable losses, and fifty other things of which the public know nothing, or nothing certain. The fact that any particular banker who issues paper enjoys the public confidence, is, at best, a presumption merely, and no proof that he really deserves it. The public may believe him to be rich and discreet; but this is mere hypothesis; the circumstances which excite confidence at the outset, and which preserve it, are often very deceptive; and in the vast majority of instances the public has no certain knowledge, nor the means of obtaining any, as to the real state of the case. But it is unnecessary to argue this point speculatively. There have, unfortunately, been innumerable instances in which it has turned out that bankers who had long been in the highest credit, and whose notes had been unhesitatingly accepted by the public, have been found to be, on the occurrence of anything to excite suspicion, quite unable to meet their engagements.

The issue of notes is of all businesses that which seems to hold out the greatest prospect of success to the schemes of those who attempt to get rich by preying on the public. The cost of engraving and issuing is nothing compared with the sums for which they are issued: and provided they be got into any thing like extensive circulation, they become at once considerably productive. They are not issued, except, as previously explained, on the deposit of bills or other securities, yielding a considerable rate of interest; so that if an individual, or set of individuals, with little or no capital, should contrive by fair appearances, promises, and similar devices, to insinuate himself or themselves into the public confidence, and succeed in getting £20,000, £50,000, or £100,000 into circulation, he or they would secure a good income in the meantime; and on the bubble bursting, and the imposture being detected, they would be no worse off than when they set up their bank. On the contrary, the presumption is, that they would be a great deal better off; and that they would take care to provide, at the cost of the credulous and deceived public, a reserve stock for their future maintenance. Hence, seeing that the facilities for committing fraud are so very great, the propriety or rather necessity of providing against them. Money.

It is sometimes, no doubt, contended that the grand principle of the freedom of industry should be universally respected; that it can in no case be departed from with impunity; and that it is not only injurious but unjust to lay any restrictions upon the business of banking. But we are not to be led astray by a cuckoo-cry of this description. The business of banking—that is, of keeping and dealing in money—is one thing, while the manufacture and issue of notes intended to be substituted for and to serve as money, is another and a totally different thing. And though everybody may perhaps be allowed to undertake the former, it by no means follows that the same license is to be extended to those who make and issue notes. It is to be recollected that in matters of this sort, neither freedom nor restriction is, abstractly considered, just or unjust, good or bad, expedient or inexpedient. It is by their respective influence upon society that they are to be judged; and though a free and liberal course of policy be in general most for the public advantage, there are very many cases in which it is necessary to impose restrictions. It is admitted on all hands that governments are bound to suppress or regulate every business or pursuit which is likely otherwise to become publicly injurious. And does any one doubt that the issue of notes payable on demand is in the foremost class of these businesses? The experience of all ages and nations is conclusive as to this point. It has been everywhere regulated, in the most democratical as well as in the most despotical states, in England and Russia, Holland and France, the United States and Austria. The reasonableness of the practice accords with its uniformity.—*Le droit d'emetre des billets est très avantageuse; mais aussi il est si dangereuse, que l'Etat doit ou s'en reservir l'exercice, ou le regler de manière à en prevenir les abus.*[1]

It may perhaps be said that bank-notes are essentially private paper; that the accepting of them in payment is optional; and that as they may be rejected by every one who either suspects or dislikes them, there is no room or ground for interfering with their issue! But vague generalities of this sort are entitled to very little attention. Every body knows that, whatever notes may be in law, they are, in most parts of the country, practically and in fact legal tender. The bulk of the people are without power to refuse them. The currency of many extensive districts consists in great part of country notes, and such small farmers or tradesmen as should decline taking them would be exposed to the greatest inconveniences. Every one makes use of, or is a dealer in, money. It is not employed by men of business only, but by persons living on fixed incomes, women, labourers, minors, and in short by every class of individuals; very many of whom being necessarily, from their situation in life, quite unable to form any estimate of the solidity of the different banks whose paper may be in circulation, are uniformly severe sufferers by their failure. And as the notes which come into their hands make a part of the currency or money of the country, it is evidently quite as much the duty of government, in the view of preventing these losses and the ruin they occasion, to take such steps as may be

[1] Report on the Extension of the Privilege of the Bank of France in 1840.

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required to make bank notes truly and substantially what they profess to be, as that it should take measures to prevent the issue of spurious coins, or the use of false or deficient weights and measures.

It would be easy to extend these remarks, but those now stated are sufficient to show that wherever notes payable on demand are allowed to circulate, their equivalency to, and immediate conversion into coin should be insured. Much diversity of opinion may exist in regard to the description of measures that should be adopted in that view; but that, whether of one sort or other, they should be made effectual to their object is indispensable to hinder the power to issue notes from being perverted to the worst purposes.

Among the schemes devised to secure the convertibility of notes into coin, the following are, perhaps, the most prominent, viz.—

Measures suggested to insure the conversion of notes into coin. Inadequacy of these measures.

I. To confine the issue of notes to joint-stock banks, or associations with large numbers of partners, each of which should be indefinitely liable for the debts of the association. At the time when this description of banks was established by the 7 Geo. IV., c. 46, it was supposed that they would prove to be of the greatest advantage, and afford that complete security to the holders of their notes, and those who entrusted them with money, that is so desirable. But everybody knows that these anticipations have been entirely disappointed, and that the history of the joint-stock banks founded under the above statute discloses some of the most flagrant instances to be met with of recklessness, imposture, and fraud. And this, after all, is only what might have been expected. The shares in many joint-stock banks are small, few being above £100, the greater number not exceeding £50, whilst many are only £25, and some not more than £10, if so much. Generally, too, it is understood, or rather it is distinctly set forth in the conditions of partnership, that not more than ten, twenty, or fifty per cent. of these shares is to be called for; so that an individual with a few pounds to spare may become a shareholder in a bank. And owing to a practice, or rather a flagrant abuse, introduced into the management of various banks, of making large advances or discounts on the credit of the stock held by shareholders, not a few individuals in doubtful or even desperate circumstances take shares in them, in the view of obtaining loans, and bolstering up their credit! The great danger arising from such banks is obvious, and when one of them stops payment, the claims on it, if ultimately made good, can be so only at the cost, and perhaps ruin, of such of its proprietors as have abstained from the abusive practices resorted to by others.

At the same time, however, it is quite plain that a joint-stock bank, provided it possess adequate capital, and is discreetly managed, may afford ample security to its shareholders and the public. And it is farther plain, in the event of its shareholders being a numerous body, comprising, as is sometimes the case, hundreds of individuals, many of whom have large fortunes, that its creditors, though exposed to immediate injury, may in the end have little or nothing to fear, even from gross mismanagement. But it is very difficult to discriminate between one variety of joint-stock banks and another. A bank may have a considerable body of proprietors; but, though the contrary opinion may prevail, few of them may be wealthy, and many mere men of straw, so that the security afforded by such a bank may be worth little or nothing. Neither is there any foundation for the notion, that because a bank has fifty or a hundred partners, it will be either richer or better managed than if it had only five or ten. In truth, the presumption seems to be quite the other way. The petty subscriptions of many may amount in the aggregate to a considerable sum, which, however, may be greatly inferior to the fortunes of a few wealthy individuals. And when the latter engage in banking, or any other sort of business, they must, if they would protect themselves from ruin, pay unremitting attention to their concerns, and act in a discreet and cautious manner. But the partners and managers of a great joint-stock company act under no such direct and pressing responsibility. "I think," said the highest authority on such subjects, "that joint-stock banks are deficient in every thing requisite for the conduct of banking business, except extended responsibility; the banking business requires peculiarly persons attentive to all its details, constantly, daily, and hourly watchful of every transaction, much more than mercantile or trading businesses. It also requires immediate, prompt decisions, upon circumstances when they arise—in many cases a decision that does not admit of delay for consultation; it also requires a discretion to be exercised with reference to the special circumstances of each case. Joint-stock banks being, of course, obliged to act through agents, and not by a principal, and therefore under the restraint of general rules, cannot be guided by so nice a reference to degrees of difference in the character or responsibility of parties; nor can they undertake to regulate the assistance to be granted to concerns under temporary embarrassment by so accurate a reference to the circumstances, favourable or unfavourable, of each case."—(*Evidence of Lord Overstone, before Committee on Bank Charter in* 1840.)

In fact, more than nine-tenths of the partners in joint-stock banks are wholly ignorant of banking business, and have nothing better to trust to than the supposed honesty and intelligence of the directors; and, even if they were acquainted with the business, the result would be nearly the same, as it would not be possible for any one, by a cursory inspection of the books of a bank (if such were permitted), to form an accurate estimate of its condition, or of the mode in which it transacted business. And hence the directors in these establishments are practically all but absolute. If they be carefully selected, and be worthy of the confidence placed in them, all goes on smoothly; and this also is the case when they are most unworthy, till they have involved the concern in inextricable difficulties! The history of the Norwich Bank, of the Northern and Central Bank, the Marylebone Bank, the Manchester Bank, the London and Eastern Bank, the Royal British Bank, the Borough Bank of Liverpool, the Western Bank of Glasgow, and a host of others, sufficiently attests the truth of what has now been stated. The responsibility of the directors to the shareholders has not been found, in any of these instances, to have been any check whatever over their frauds and improvidence. The whole paid-up capital of the Manchester Bank, amounting to about £750,000, had been wasted in the most improvident speculations; while that of the Royal British Bank and of the London and Eastern Bank had been seized upon by the directors or their dependents, and additional debts incurred, before the great body of the shareholders had the least suspicion that the companies were otherwise than prosperous!

We may observe, by the way, that the mischie occasioned by an establishment of this sort, when perverted from its proper objects and mismanaged, is not to be estimated by the ruin it entails on its partners, and probably also on its customers. It becomes in fact, a public nuisance, and entails privations on many who might be supposed to be beyond the sphere of its influence. Within the ten years ending with 1842 it was estimated that about £1,500,000 of banking capital

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was wholly dissipated in Manchester and its immediate vicinity. And as nine-tenths of this enormous loss was occasioned by advances made to manufacturers who had little or no capital of their own, it is not easy to imagine what a ruinous stimulus it must have given to reckless competition, and how very injurious it must have been to parties trading on their own capital.

It is clear, therefore, that the institution of joint-stock banks affords no security that their affairs will be properly administered, and their notes uniformly paid on their being presented.

II. To insure the convertibility of bank-notes into coin, it has been proposed that they should not be issued except upon security being previously given for their payment. That, for example, an individual or company intending to issue £100,000, £200,000, or other sum of notes, should be obliged previously to deposit in the hands of a functionary appointed for the purpose, approved securities over lands, houses, stocks, or other available property for an equal amount. And it is plain that this would be in many respects an efficient measure. Under a system of this sort, adventurers without capital, and sharpers anxious to become indebted to the public, would find that the issue of notes was not a business by which they could expect to profit, and that it must be exclusively reserved for parties possessed of adequate capital.

But though a plan of this sort would effect to a considerable extent the objects in view, it has, notwithstanding, two cardinal defects, viz.—

1. In the first place, though it were fitted to secure the ultimate payment of notes, it would not secure their immediate payment, which is essential to their advantageous employment as money. The stoppage of a bank which had deposited securities would have to be officially ascertained before any steps could be taken for their sale; and after this had been done, some considerable time would have to elapse before they could be disposed of, and their produce made available for the liquidation of the notes. Most securities, too, are of fluctuating and uncertain value, and might not, even under the most favourable circumstances, realise the sums for which they were pledged. And in the event of the occurrence of a panic, or disturbed state of credit, it might be impossible immediately to convert the securities into cash, or possible only at a heavy loss. This plan is, therefore, very far from giving that effectual security for the convertion of notes into coin, which, on the first blush of the matter, it appears to afford. Latterly, it has been extensively acted upon in some parts of the United States; and there, when a bank stops payment, its notes are always sold at a discount, which, of course, varies according to the peculiar circumstances affecting each case.—(See *post.*)

2. But supposing that this plan were effectual, which it is not, to ensure the immediate convertibility of notes into coin, it is defective from its not preventing their over-issue. A paper currency is not in a sound or wholesome state, unless—1st, Each particular note or parcel of such currency be paid immediately on demand; and 2d, Unless the whole currency vary in amount and value exactly as a metallic currency would do were the paper currency withdrawn and coins substituted in its stead. The last condition is quite as indispensable to the existence of a well established currency as the former; and it is one that cannot be realised otherwise than by confining the supply of paper to a single source.

The issues of paper money should always be determined by the exchange, or rather by the influx and efflux of bullion, increasing when the latter is flowing into a country, and decreasing when it is being exported. And when the issue of paper is in the hands of a single body, a regard to its interests will make it regulate its amount with reference to this principle. But when the power to issue notes is vested in different bodies, some of which may be little, if at all, affected by variations of the exchange, this is no longer the case. And instances have repeatedly occurred, as will afterwards be seen, of the country banks having increased their issues when the exchange was unfavourable and the currency redundant. Hence the plan of exacting securities is doubly defective, inasmuch as it neither insures the immediate conversion of notes into coin, nor prevents their over-issue.

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III. The only other plan for insuring the conversion of notes into coin, or rather for keeping them on a level therewith, to which it is at present necessary to allude—consists in providing for the publicity of the affairs of the banks by which they are issued. The issues of banks, under this system, are usually made to bear some fixed proportion to their capital; the whole, or some considerable share, of which is to be paid up before the bank begins business; and monthly, quarterly, half-yearly, or annual returns are thereafter to be published, exhibiting the state of the bank, and enabling, as it is said, the public to judge whether it be safe to deal with it. But it is almost needless to say that such regulations are no protection against fraudulent dealings; and that, in reality, they are good for little, unless it be to deceive and mislead the public. It is impossible, if the managers of a bank or other association wish to make a deceptive or unintelligible return, to hinder them. And even, when they wish to make a really accurate return, they must frequently make one that is false, from their inability to estimate their bonds, bills, and other assets at their just value. But it is useless to insist on what is so very obvious. The "cooking of returns," as it has been called, is an art that is well understood and extensively practised. Long after the capital of the British Bank had been wholly lost, and it had been precipitated into the abyss of bankruptcy, its directors did not hesitate to put forth statements, in which it was represented to be in a prosperous condition, and a division of profits recommended! And this, unhappily, is not a solitary instance. It is only one example, and that not the worst, of a very large class of cases. But such as it is, it is more than sufficient to show that it would be childish to place any confidence in the returns referred to.

Act of 1857 against fraudulent returns by bankers.

It may, however, be supposed that the late Act, the 20 and 21 Vict. c. 54 (1857), for the punishment of frauds committed by trustees, bankers, and others, will put an end to the practices hitherto complained of. But though it were much to be wished that such should be the case, and though, no doubt, it will have considerable influence, it will not suffice to repress the evil. Besides making bankers and others who embezzle, appropriate, or make away with property intrusted to their care, guilty of a misdemeanour, the statute goes on to enact, "That if any director, manager, or public officer of any body corporate, or public company, shall make, circulate, or publish, or concur in making, circulating, or publishing, any written statement or account which he shall know to be false in any material particular, with intent to deceive or defraud any member, shareholder, or creditor of such body corporate or public company, or with intent to induce any person to become a shareholder or partner therein, or to intrust or advance any money or property to such body corporate, or public company, or to enter into any security for the benefit thereof, he shall be guilty of a misdemeanour." § 8.

And it is further enacted, "That every person found guilty of a misdemeanour under this Act shall be liable,

at the discretion of the Court, to be kept in penal servitude for the term of three years, or to suffer such other punishment, by imprisonment, for not more than two years, with or without hard labour, or by fine, as the Court shall award." § 10.

It is difficult to see how, under a law of this sort, such flagrantly false statements as those put forth by the Royal British and other banks, after they were in a state of utter bankruptcy, should not subject their authors to the full penalties of the statute. But villany is fertile in resources; and no severity of punishment has ever been found to be effectual for the suppression of crime. Though it may be fairly presumed that the "cooking of returns" will be less frequent, and less glaring in time to come than formerly, it would be idle to expect that it should ever be wholly put down. And, as already seen, even when the directors of a bank are so disposed, it will frequently be out of their power to lay before the public a really true statement of their affairs. It is plain, then, that this so-called publicity affords nothing approaching to that undoubted and unquestionable guarantee which should be required from all parties and associations empowered to issue notes.

But the difficulties in the way of insuring the conversion of the latter into coins, though great, are not insuperable. A plan, originally suggested by Lord Overstone, and adopted and carried into effect by Sir Robert Peel, has been found to be quite effectual to secure this grand object. And it has the additional and important recommendation, of having done this without subjecting the public to any sensible inconvenience.

But before entering into an exposition of the plan referred to, it will be necessary to premise some details with regard to the constitution and action of the existing banks.

Sect. II.—*Banks of Deposit and Banks of Issue. Principles on which they are established.*

Banks of deposit and issue.

Banks are commonly divided into banks of deposit and banks of issue; that is, banks that take care of other people's money, and banks that issue money of their own. But there are few banks of issue that are not at the same time banks of deposit; and the latter are farther divisible into two great classes, viz., those who do and those who do not issue the money of their customers. The banking companies established in this country belong to the first class; while the old Bank of Amsterdam did, and the existing Bank of Hamburgh does, belong to the second class.

Advantages of bankers.

Instead of keeping money in their own houses, where it would be exposed to various accidents, and to the attacks of thieves and robbers, most people wisely commit it to the care of a banker, and avail themselves of his services in receiving and making payments on their account. They send to their banker such sums of money as they may happen to receive, and all bills and drafts payable to them; and he becomes responsible for their amount, for the regular presentation of the bills for acceptance and payment, and for their proper noting, if not accepted or paid. It is also the practice for parties who have an account at a banker's, to make all considerable payments by cheques payable by him. As the discharge of these functions involves considerable risk and expense, it is usual for bankers, either to charge a per centage for their trouble, or to stipulate that the parties dealing with them shall keep an average balance of cash in their hands corresponding to the amount of business transacted in their behalf. In this way business is carried on with safety, ease, and despatch; and at much less expense than it would be if individuals kept their own money, and made their own payments.

Of the sums paid into banks, some are intended to meet the cheques and orders drawn against them in the ordinary course of business; while others are sent rather for safe custody, to be retained, till opportunities be found for their investment. The former are generally placed under what are called *drawing*, and the latter under *deposit* accounts. But there is no difference between the two, except that the sums in deposit accounts are usually permitted to lie for longer periods, without being operated upon or called up. Such portions of the one or the other as the bankers do not retain in their coffers to meet the usual demands of their customers, they employ in the discount of bills, or in making advances of one sort or other, generally at short dates, to those who require them, and in whom they think they may confide.

This last is one of the most important functions performed by banks of deposit. They become, as it were, receptacles or reservoirs into which the surplus or unemployed capital of the surrounding districts is collected, and from which it is again distributed to those who want it. And it may be proper to observe, that the bankers do not always, nor perhaps even most commonly, confine their advances to those who can give security for their repayment. On the contrary, they are often more influenced in making loans by their knowledge of the conduct, the intelligence, and the pursuits of the parties, than by anything else. And it frequently happens that industrious, frugal, and enterprising young men, who have no guarantee to offer save their character, obtain advances that would be denied to wealthier, but otherwise less trustworthy parties.[1] But without insisting on these considerations, which, however, are not a little important, it is manifest that those who have capital to lend, and those who wish to borrow, are equally indebted to the agency of the bankers, who while they enable these great classes mutually to assist each other, contribute to increase the public wealth by facilitating the flow of capital into the most productive channels.

Credit, definition of.

But, however great, this advantage is not to be exaggerated. Though banks afford valuable assistance in the collection and distribution of capital, it must not be supposed, as is often done, that they have any direct influence over its formation. That is the joint effect of industry and economy—the former in producing convenient and desirable articles, and the latter in saving and preserving them for future use. Credit is neither more nor less than the transfer of money or other valuable produce from one set of individuals called lenders, to another set called borrowers

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[1] On this, as on most other points, the late evidence of Lord Overstone is highly instructive.

Quest. But, generally speaking, persons who have no capital, have very little opportunity of raising money have they? *Ans.* That certainly is not so. The whole principle of banking is to afford capital—to transfer it from the inactive accumulator to the active and energetic person who wants the capital. The banker is the go-between, who receives deposits on the one side, and on the other applies those deposits, intrusting them, in the form of capital, to the hands of active, energetic persons, who, he thinks, will make a good use of it.

Quest. Who have no security to give? *Ans.* Who have in many instances no security to give, except their character, and skill, and talent, of which the banker forms his judgment.

Quest. To persons of character who have no other security to give? *Ans.* To persons of character who, in some cases, have no security to give; but who, in all cases, have no security to give equal to the amount advanced to them, except that best form of security, their character, their energy, and their prudence.—*Min. of Evidence*, p. 348.

Money. —a transfer which is greatly facilitated by the establishment of banks. And as there can be no reasonable doubt that those who borrow have, in the majority of instances, better means of employing capital with advantage than those by whom it is lent, its transference from the one to the other will, in so far as this presumption is realised, be publicly advantageous. But this is the entire extent of the beneficial influence of what is called credit; and when it happens, as is too often the case, to divert capital into the pockets of knaves and gamblers, it is disadvantageous. No doubt we frequently hear of great undertakings being carried on by means of credit; but such statements are entirely false and misleading. They will, indeed, be uniformly found, when analysed, to mean only that the undertakings are carried on by means of borrowed capital. Credit is impotent to produce anything whatever. It is in fact a mere name for the trust reposed by a lender in a borrower. To call it capital is as much an abuse of language as it would be to call weight colour, or colour weight. It may transfer money or produce from A to B, or from C to D, but that is *all* that it either does or can do. When credit is said to be high, nothing is really meant save that those who have money or capital to lend have great confidence in the borrowers, and conversely when credit is said to be low.

Banks sometimes encourage gambling and over-trading.

Banks, when not conducted by men of probity, skill, and caution, are very apt to excite and inflame a spirit of speculation and gambling. They do this by furnishing speculators with loans and discounts, by means of which they are not enabled merely, but tempted to engage in hazardous enterprises. And for a time, or while the process is going on, everything wears an air of prosperity; and those old-fashioned houses, as they are called, that carry on a legitimate business on capital of their own, are frequently undersold and driven from the market by the competition of adventurers, trading on the funds of others, ready to encounter any risk, and living in the greatest splendour. But at length the thing is overdone, the bubble bursts, the worthless machinery of fictitious bills, rediscounts, and so forth, is exposed, and the tragi-comedy is wound up by the offer of a composition of some 1s. or 2s. per pound. Bankers and money dealers who employ the money entrusted to their care in so reckless a manner, are fitter for Newgate than for the situations they so unworthily fill. It would be a great stretch of charity to suppose that advances of the kind now alluded to can be wholly the result of imprudence. Bankers have peculiar means at their disposal by which to become acquainted with the character, position, and capabilities of those who apply to them for advances. And it is their duty to avail themselves of these means to distinguish between the careful and the improvident or reckless trader —between the man who may and the man who may not be trusted. It is difficult to believe, provided they make the necessary inquiries, that they should be often or greatly deceived in their judgment of individuals; and, provided they act with due caution, they will never so far commit themselves, even with the most respectable firms, as to endanger their own establishment in the event of the failure of the latter. Bankers may risk their private fortunes, if they have any, as they please, but they are not entitled to risk the money of their constituents by making advances to equivocal parties, and especially to those who are notoriously overtrading. It is impossible, perhaps, to bring an abuse of this sort within the meshes of the penal law, but it cannot be too strongly condemned in the opinion of the public. There is nothing about which people should be so cautious as the employment of bankers; and high character, experience, and reputation for prudent management, ought always to have the preference over fair promises and prospectuses, even when the latter are backed by offers of high interest.

Money.

Interest on deposits.

The private bankers of London have not been, until recently, in the habit of allowing interest on deposits, though in special cases it was sometimes done. But in Scotland, and also in many parts of England, it has been long the practice to pay an interest on deposits of from one to two per cent. less than the market rate at the time. And the joint-stock banks set on foot in the metropolis since 1826, having introduced the practice of giving interest on deposits, provided a certain notice (generally from three to eight days) be given before they are withdrawn, very large sums have been, especially during the last ten years, deposited in these establishments. Most private banks have been compelled, in order to maintain their position, to adopt in a greater or less degree the same system. There can, indeed, be little doubt that it will, in no very lengthened period, become universal, and that the amount of deposits will be progressively and largely augmented.

By bringing, as it were, the advantages of savings' banks, without any of their limitations, within reach of all classes, of the middle and upper as well as of the lower, this system is, in many respects, highly advantageous. It may, indeed, be doubted whether any means could be devised more likely to generate and diffuse a spirit of economy. Unhappily, however, its advantages are alloyed by the formidable disadvantage of its involving a great amount of insecurity and hazard.

Dangers incident to the deposit system.

Banks that give interest on deposits must employ the balance at their disposal so as to realise that interest, *plus* a profit to themselves. Investment is not optional with them, it is indispensable; and they cannot, in seeking investments, look to security only. Profit must be in their estimation as great, or even a greater consideration. But profit and risk are inseparable, and are always directly proportioned to each other; and hence it is, that in periods of discredit, or when a revulsion occurs, suspicions may be expected to arise in regard to the solidity of deposit banks, especially of those that pay high rates of interest on the sums committed to their custody. These suspicions may frequently, no doubt, be very ill-founded; but if they be entertained, the result will be nearly the same. This was exemplified by what took place the other day in Glasgow. There a run, partly for payment of notes, but more for deposits, compelled two great joint-stock banks to suspend payments, of whose solvency, notwithstanding their gross mismanagement, no reasonable doubt could be entertained; and led to a crisis that has had the most serious consequences.

It is difficult to know how to ward off such contingencies; but it nevertheless seems to be indispensable that something should be done in that view, otherwise we may be said to be always exposed to the most tremendous risks. It may not be practicable to form an accurate estimate of the amount now held as deposits by bankers and money-dealers in Great Britain only; but if we take the entire sum at about two hundred millions, we shall probably be within and not beyond the mark. And of this vast sum more than a half is payable "at call," and more than three-fourths within ten days. But everybody knows that such payments are practically impossible. And hence it is plain, that in the event, which may any day occur, of a bank with

Money. a large amount of deposits getting into difficulties, or of any circumstance occurring that should occasion a distrust of the system and a general panic, the whole fabric would fall to pieces, and we should have an universal smash.

This appears to be as unsatisfactory a state of things as can well be imagined. But *de republica nil desperandum.* Though formidable, the evil is not insuperable; and the dangers referred to are so great and imminent, that no time should be lost in adopting measures by which they may be either obviated or mitigated. Explosions of the credit system are, in the commercial and financial, what explosions of gunpowder are in the physical world. And it would seem to be quite as necessary to endeavour to lessen the frequency and violence of the former as of the latter. Hence we think it would be good policy to enact, that all sums *bearing interest*, in the hands of bankers, discount-brokers, and money-dealers generally, should not be legally demandable without a month or six weeks' notice. A regulation of this sort would not interfere with anything that is valuable in the existing system, while it would confer on it some portion of that solidity of which it is at present so miserably deficient. It would protect all classes against the effects of sudden and unreasonable fears and panics. It would give time to the borrowers to collect their resources; and to the depositors calmly to inquire into the character and situation of those to whom they had entrusted their money. This may not be enough; but some such measure as this appears to be indispensable for the security and protection of the public.

Notes deposited in banks not the property of the depositors.

It has sometimes been contended that the notes and monies deposited in banks by private parties continue to be their property, and are as really a portion of their money as the notes or sovereigns which they retain in their tills or their pockets. The place where it is kept is different; but, except in this respect, the money which they have lodged in and that which they have out of banks, is said to be, to all intents and purposes, identical. But though specious, this statement is entirely fallacious. The money which depositors lodge in banks forms a part of the money of the country; but after its lodgment in them it ceases to belong to, or to make a part of the property or money of the depositors. They have consigned it to banking establishments, and acquired credits in its stead; that is, they have acquired the *right* to draw upon and receive equal sums of money from these establishments. But everybody knows that the right to a thing is not the thing itself, but something altogether different. A banker who owes a million or other sum to depositors, might regard himself as being in a sufficiently secure state, if, according to circumstances, he had a third, a fourth, or a fifth part of that sum in notes and gold in his till to answer the demands of the depositors, while he employed the reserve in advances to others. Hence it is plain that bank credit and money have nothing in common. Those who confound things that are so very different can have no clear apprehension either of the one or the other.

It is on the distinction between money and deposits or credits, that the business of banking really depends. It is a business by which a small amount of money is made to supply a large amount of credit, the profits of the bankers arising from the use of the money so economised. The Bank of England, for example, often holds more than twenty millions of public and private deposits, while she is considered to be in a perfectly safe and sound position if she have in the till of her banking department five millions, or even less, in notes and coins.

Money. It is hardly necessary, after these statements, to observe that the profit made by bankers in employing part of the money committed to their custody is extrinsic to, and independent of, any profits which they may realise on capital of their own. "Such banks," to use the words of Mr Ricardo, "would never be established if they obtained no other profits than those derived from the employment of their own capital. Their real advantage commences only when they begin to employ the capital of others."—(*Economical and Secure Currency*, p. 87.)

Necessity of capital to the security of banks. But we are not thence to conclude that it is indifferent whether such banks have or have not independent capitals of their own. That would be the greatest of errors. Unless it have a command of capital proportioned in some degree to the extent of its business, those who deposit their money in a bank have but slender security for its payment. For if bankers make improvident or injudicious advances, if the securities in their possession be discredited, or difficulties of any kind arise in the conduct of their business, those who have no capital, or but little of their own, may be obliged to stop payment, when more opulent firms may be but little affected by the like circumstances. Much, no doubt, must always depend on the character and knowledge of the parties. But no amount of skill or caution can ever fully compensate for the want of adequate capital. It is the sheet-anchor of security, the only real and substantial guarantee to which the ordinary creditors of a bank have to look. When such capital has been accumulated by the bank, it shows that its affairs have been well managed, and raises a strong presumption in its favour; and when it has devolved on the partners by inheritance, or been bequeathed to them in legacies, the fair inference would seem to be, that they will not (unless they be mere fools, unworthy of any kind of confidence) rashly compromise its security by engaging in questionable proceedings.

Limited liability, disadvantages of. It has been sometimes proposed to allow banks to be constituted with limited liability. But that is in every case a vicious principle, lessening the natural responsibility under which every man ought to act, and tempting parties to engage in all manner of desperate adventures. In banking, such a principle would be especially mischievous; for it is a business that requires great caution and prudence—the very virtues with which the principle of limited liability is most at variance. It may, indeed, be said that the numerous instances of mismanagement and embezzlement that now prevail, show that even the principle of indefinite liability is not enough to make joint-stock banks be conducted prudently and honestly. But, however defective, still it is the only principle on which any stress can be safely laid, and the instances referred to, bear, after all, but a small proportion to those of an opposite description. The great majority of banks are discreetly and faithfully managed. And if knavery and folly be sometimes found to prevail where every partner is deeply interested in their prevention, and is liable to the last farthing he possesses for the consequences, the fair presumption is, that they would be ten times more prevalent were the partners liable only for the amount of their shares in the bank. To suppose the contrary would be a contradiction; it would be equivalent to supposing that a man is to be as much interested in the safety of £10 or £100, as of £1000 or £10,000, or of his entire fortune, however great it may be.

Whatever else may be the effect of the late disclosures of mismanagement, fraud, and robbery, on the part of the directors and secretaries of joint-stock banks, it can hardly fail to make the partners in those associations more alive to the dangers of their situation, and to convince them, that

if they would provide for their own safety, they must be more cautious than hitherto in regard to the persons they elect to fill these situations, and less disposed to take their statements for granted. Such, however, is the carelessness of most people, even in regard to those matters which most nearly concern them, that these anticipations, though reasonable, may not be fully realised. But, in the case of banks with limited liability, they must be sanguine indeed, who look for any improvement. The partners in these associations have no sufficient interest in their prosperity to make them take any unusual trouble about the way in which they are conducted, and they neither fear ruin, nor even any considerable inconvenience, from their failure. The chances, consequently, are ten to one that their managers will be left without let or hindrance to pursue their own schemes; and, when such is the case, what but abuse can be expected to be the result?

But it is argued, that whatever may be the influence of the present system on the partners in the existing banks, were companies with limited liability established, the depositors would be on their guard, and would not trust them with their money, unless they were well assured of their solidity. But, in truth and reality, they never can have any assurance of the sort on which it would be safe to rely. A bank with limited liability might have, or pretend to have, a large capital. And supposing it really had such a capital in the current year, that may not be the case in the next, or in any subsequent year. And yet as the public can know nothing certain of the bank's losses, its credit may not be impaired, and deposits may be pressed upon it after it is really insolvent. In such cases the public is helpless; and if the indefinite responsibility of the partners in banks be not enough to make them look to their proper management, it would be worse than idle to depend in any degree on the fears or interests of the depositors. This is not a matter about which there needs be any speculation. The experience of the United States is decisive of the question. In the Union, the banks are all, or nearly all, established under a system of limited liability, and, notwithstanding their insecurity, and their perpetually recurring insolvency, they always hold large sums in deposit. Promises, professions, the bait of high interest,[1] and the confidence placed by every one in his superior sagacity and good fortune, fill the coffers even of the establishments least worthy of credit. And such, no doubt, would be the case in England, were a like system established amongst us. But what, under such circumstances, would be the situation even of a well managed bank, were any suspicions to be entertained of its credit? The rush would be tremendous; for every body would reasonably conclude, that if he did not succeed by pressing forward with "hot haste" in getting payment of his deposit, the chances were ten to one he would get little or nothing. He has no proprietary body to which to look for payment of his claims; and if the doors were once shut against him, he could hardly expect more than some miserable dividend at some distant term.

Proposal to enforce discounts—absurdity of.

Among the many proposals submitted to the consideration of the Bank Committee of 1857, perhaps the most extraordinary was that which assumed that something was wrong with the currency whenever any difficulty was experienced in the discounting of bills originating in real transactions, and that means should be found, in some way or other, to compel the discount of such bills. It may excite surprise that such a proposal should have been seriously made, and still more, that it should have been listened to and published. Luckily it cannot be called "perilous nonsense," its folly being so very obvious, that it can impose on none. The discount of bills is an advance or loan of capital equivalent to their value till they become due. That advance is now usually made in paper; but as that paper is really equivalent to gold, it might, were it not for the greater convenience of the present practice, be as well made in coin or in commodities. The amount of the currency has, in truth, nothing whatever to do with the greater or less facility of discounting. That depends entirely on the amount of capital applicable to such purpose, compared with the amount of bills offered for discount. The settlement of such transactions is, if anything can be, a matter to be left to the free and uncontrolled arbitrament of the parties. Whether a bill be discounted at five or ten per cent, or not discounted at all, is, in a public point of view, of no importance. When a capitalist declines to make an advance, whether on a bill or anything else, the presumption is that he has good reasons for his refusal. But, whether good or bad, the public has no right to interfere in the matter; and any attempt it might make to interfere would be attended with ruinous results. Those who suppose that the facility of discounting depends on the magnitude of the issues of paper, would do well to recollect that in Holland, which for a lengthened period had a very extensive commerce, and where paper was unknown, the rate of discount was always very low. And while such was the case in Holland, every body knows that in the United States, which have some 1300 banks for the issue of notes, the rate of discount is usually very high, and sometimes exorbitantly so.

Introduction of banking into London.

The business of banking was not introduced into London till the seventeenth century. It was at first conducted by the goldsmiths, who lent the money lodged in their hands for security to government and individuals. In the course of time the business came to be conducted by houses who confined themselves to it only, and nearly in the mode in which we now find it. From 1708, as already stated, down to 1826, with the exception of the Bank of England, no company with more than six partners could be established, either in London or anywhere else in England and Wales, for conducting banking business; and a very large portion of that business is still conducted in the metropolis by firms with a small number of partners, or by what are called private banks.

Clearing-House.

In 1775, the London, or rather the "city" bankers, established the "clearing-house." This is a house to which each banker who deals with it is in the habit of daily sending a clerk, who carries with him the various bills and cheques in the possession of his house that are drawn upon other bankers; the practice formerly being to exchange them for the bills and cheques in the possession of those others that were drawn upon his constituents, and to pay the balance on the one side or the other in cash or Bank of England notes. By this means the bankers connected with the clearing-house were enabled to settle transactions to the extent of several millions a day, by the employment of not more, at an average, than from £200,000 to £500,000 in cash or Bank of England notes.

Latterly, however, the arrangements connected with the clearing-house have been so much simplified and improved, that neither notes nor coins are any longer

[1] "*Vulgus ad magnitudinem beneficiorum aderat; stultissimus quisque pecuniis mercabatur.*"—Tacit. Hist., lib. iii. cap. 55.

required in settling the largest transactions. The clearing-house itself and the various banking firms connected with it, have accounts at the Bank of England; and the balances that were formerly settled by a money payment are at present settled by transfers from one account to another. The saving of money in the adjustment of large transactions occasioned by this and other contrivances, accounts for the fact, that the proportion of notes of £20 and upwards issued by the bank has considerably declined of late years, while that of £5 and £10 notes, which are used in ordinary dealings, has been materially increased.

Security afforded by banks of deposit.

The security afforded by a bank of deposit is a matter as to which there must always be more or less of doubt. When, indeed, a banking company confines itself to its proper business, and does not embark in speculations of unusual hazard, or from which its funds cannot be easily withdrawn, it can seldom fail, except in periods of panic or general distrust, of being in a situation to meet its engagements; whilst the large private fortunes that frequently belong to the partners afford those who deal with it an additional guarantee. Much, however, depends on the character of the parties, on their living within or beyond their incomes, and on a variety of circumstances with respect to which the public can never be correctly informed; so that though there can be no doubt that the security afforded by many banks of deposit is of the most unexceptionable description, this may not be the case with others.

Not necessary for the State to provide for the security of depositors.

All joint-stock banks, or banks having more than six partners, whether for deposit and issue, or for deposit merely, are ordered, by the Act 3 and 4 Will. IV. cap. 83, to send quarterly returns of the number and names of their partners to the stamp-office. But there was no good reason why similar returns should not, and several why they should, be required from *all* banks; and this having been done by the Act 7 and 8 Vict. c. 32, which also provides for their publication, little if any farther interference would seem to be required with banks not issuing notes. There is in this respect a wide difference between them and banks of issue. It is the duty of government to take care that the value of the currency shall be as invariable as possible; but it has never been pretended that it is any part of its duty to inquire into the security given by the borrowers to the lenders of money, any more than into the security given by the borrowers to the lenders of any thing else. Government obliges a goldsmith to have his goods stamped, this being a security to the public that they shall not be imposed on in buying articles of the quality of which they are generally ignorant; but it does not require that the persons to whom the goldsmith sells or lends his goods should give him a guarantee for their payment. This is a matter as to which individuals are fully competent to judge for themselves; and there is no good reason why a lender or depositor of bullion or notes should be more protected than a lender or depositor of timber, coal, or sugar. Gold being the standard or measure of value, government is bound to take effectual precautions that the currency shall truly correspond in the whole and in all its parts with that standard; that every pound note shall be worth a sovereign; and that the amount and value of the aggregate notes in circulation shall vary exactly as a gold currency would do were it substituted in their stead. But if A trust a sum of money in the hands of B, it is their affair, and concerns none else. Provided the money afloat correspond with the standard, it is of no importance, in a public point of view, into whose hands it may come. The bankruptcy of a deposit bank, like that of a private gentleman who has borrowed largely, may be productive of much loss or inconvenience to its creditors. But if the paper in circulation be equivalent to gold, such bankruptcies cannot affect either the quantity or value of money, and are, therefore, directly injurious only to the parties concerned.

But though such be the direct effects of the bankruptcies of deposit banks, their indirect effect, by propagating panics and runs on other banks, may be most disastrous. And to prevent their mischievous influence in this respect, it would be good policy, as already seen, to require a month's or six weeks' notice to make deposits bearing interest legally demandable.

Deposit banks which do not employ the money of the depositors.

The other description of banks of deposit, or those which do not employ the funds in their hands, or engage in any sort of business, are established without any view to profit, that they may secure the money, and facilitate the transactions of those who deal with them. The latter obtain *bank credits* or *bank money*, equivalent to the sums they deposit in the bank; and as the principal traders in towns where such a bank is established belong to it, each has a bank credit, and their payments are made without the intervention of money, by writing off so much from the credit or account of one to the credit or account of another. It is only in the event of a person having to pay money to a stranger that he has any motive to withdraw any portion of his deposit from the bank. An institution of this sort is, to those who deal with it, what the clearing-house is to the London bankers. Its expenses are usually defrayed either by a small fee charged on every transfer of bank credit from one individual to another, or by a charge on the coin or bullion deposited, or both.

A bank of this sort can never, unless its agents act dishonestly, be involved in debt, or in any kind of difficulty. The constitution of the Bank of Amsterdam was in so far vicious that it was not managed by parties interested in its welfare; that is, by agents chosen by the depositors. On the contrary, it was managed in the most secret manner by those who happened to be magistrates of the city, whether they were or were not depositors. And they, in violation of their oaths, privately lent to others a large portion of the funds deposited in the bank. But a proceeding of this sort is hardly possible in the case of a properly constituted deposit bank, like that established in Hamburgh. For in the latter the managers are appointed for short periods by the depositors, who, of course, endeavour to select the most trustworthy persons. And though it be necessary that the strictest secrecy should be kept in regard to the accounts of individuals in the bank, its affairs are otherwise transacted with sufficient publicity, while the deposits in its coffers may be withdrawn at any moment.

Notice of banking.

The trade or business of a banker has probably existed in all civilised countries in all ages. The bankers of Greece (τραπεζῖται) and Rome (*argentarii*, *mensarii*, *nummularii*) exercised nearly the same functions as those of the present day, except that they do not appear to have issued notes. They received money on deposit, to be repaid on demands made by cheques or orders, or at some stipulated period, sometimes paying interest for it, and sometimes not. Their profits arose from their lending the balance at their disposal, at higher rates of interest than they allowed the depositors. They were also extensively employed in valuing and exchanging foreign monies for those of Athens, Corinth, Rome, &c., and in negociating bills of exchange. In general they were highly esteemed, and great confidence was placed in their integrity. The rate of interest charged by the bankers

Money. was sometimes very high, but that was not a consequence, as has been alleged, of their rapacity, but of the defective state of the law, which, as it gave every facility to debtors disposed to evade payment of their debts, obliged the bankers to guarantee themselves by charging a proportionally high rate of interest.[1] In modern times the business of banking and exchange was, for a while, almost entirely engrossed by the Jews and the Lombards of Italy.

Sect. III.—*Bank of England, Account of.*

Establishment and History of the Bank of England. The Bank of England, which has long been the principal bank of deposit and circulation, in this country and in Europe, was founded in 1694. Its principal projector, Mr William Paterson, an enterprising and intelligent Scotch gentleman, was afterwards engaged in the ill-fated colony at Darien. Government being at the time much distressed for want of money, partly from the defects and abuses in the system of taxation, and partly from the difficulty of borrowing, because of the supposed instability of the revolutionary establishment, the bank grew out of a loan of £1,200,000 for the public service. The subscribers, besides receiving eight per cent. on the sum advanced as interest, and £4000 a year as the expense of management, in all £100,000 a year, were incorporated into a society denominated the Governor and Company of the Bank of England. The charter is dated the 27th of July 1694. It declares, amongst other things, that they shall "be capable, in law, to purchase, enjoy, and retain to them and their successors, any monies, lands, rents, tenements, and possessions whatsoever; and to purchase and acquire all sorts of goods and chattels whatsoever, wherein they are not restrained by Act of Parliament; and also to grant, demise, and dispose of the same.

"That the management and government of the corporation be committed to the governor and twenty-four directors, who shall be elected between the 25th of March and the 25th day of April each year, from among the members of the company duly qualified.

"That no dividend shall at any time be made by the said governor and company, save only out of the interest, profit, or produce arising by or out of the said capital stock or fund, or by such dealing as is allowed by Act of Parliament.

"They must be natural-born subjects of England, or naturalised subjects; they shall have in their own name, and for their own use, severally, viz. the governor at least £4000, the deputy-governor £3000, and each director £2000, of the capital stock of the said corporation.

"That thirteen or more of the said governors and directors (of which the governor or deputy-governor must be always one) shall constitute a court of directors, for the management of the affairs of the company, and for the appointment of all agents and servants which may be necessary, paying them such salaries as they may consider reasonable.

"Every elector must have, in his own name and for his own use, £500 or more capital stock, and can only give one vote. He must, if required by any member present, take the oath of stock, or the declaration of stock in case he may be one of the people called Quakers.

"Four general courts to be held in every year, in the months of September, December, April, and July. A general court may be summoned at any time, upon the requisition of nine proprietors duly qualified as electors.

"The majority of electors in general courts have the power to make and constitute by-laws and ordinances for the government of the corporation, provided that such by-laws and ordinances be not repugnant to the laws of the kingdom, and be confirmed and approved, according to the statutes in such case made and provided." Money.

The corporation is prohibited from engaging in any sort of commercial undertaking other than dealing in bills of exchange, and in gold and silver. It is authorised to advance money upon the security of goods or merchandise pledged to it; and to sell by public auction such goods as are not redeemed within a specified time.

It was also enacted, in the same year in which the bank was established, by statute 6 William and Mary, c. 20, that the bank "shall not deal in any goods, wares, or merchandise (except bullion), or purchase any lands or revenues belonging to the crown, or advance or lend to their majesties, their heirs or successors, any sum or sums of money, by way of loan or anticipation, or any part or parts, branch or branches, fund or funds of the revenue, now granted or belonging, or hereafter to be granted, to their majesties, their heirs and successors, other than such fund or funds, part or parts, branch or branches of the said revenue only, on which a credit of loan is or shall be granted by Parliament." And in 1697 it was enacted, that the "common capital or principal stock, and also the real fund, of the governor and company, or any profit or produce to be made thereof, or arising thereby, shall be exempted from any rates, taxes, assessments, or impositions whatsoever, during the continuance of the bank; that all the profit, benefit, and advantage from time to time arising out of the management of the said corporation, shall be applied to the uses of all the members of the said association of the governor and company of the Bank of England, rateably and in proportion to each member's part, share, and interest in the common capital and principal stock of the said governor and company hereby established."

In 1696, during the great recoinage, the bank was involved in great difficulties, and was even compelled to suspend payment of her notes, which were at a heavy discount. Owing, however, to the judicious conduct of the directors, and the assistance of the government, the bank got over the crisis. But it was at the same time judged expedient, in order to place her in a situation the better to withstand any adverse circumstances that might afterwards occur, to increase her capital from £1,200,000 to £2,201,171. In 1708, the directors undertook to pay off and cancel one million and a half of exchequer bills they had circulating two years before, at four and a half per cent., with the interest upon them, amounting in all to £1,775,028, which increased the permanent debt due by the public to the bank, including £400,000 then advanced in consideration of the renewal of the charter, to £3,375,028, for which they were allowed six per cent. The bank capital was then also doubled, or increased to £4,402,343. But the year 1708 is chiefly memorable in the history of the bank, for the Act previously alluded to, which declared, that during the continuance of the corporation of the Bank of England, "it should not be lawful for any body politic, erected or to be erected, other than the said governor and company of the Bank of England, or of any other persons whatsoever, united or to be united in covenants or partnership, exceeding the number of six persons, in that part of Great Britain called England, to borrow, owe, or take up any sum or sums of money on their bills or notes payable on demand, or in

[1] Boeckh's *Political Economy of Athens*, i. 168, &c.; *Voyage d'Anacharse*, cap. 55, *passim*; Smith's *Dictionary of Greek and Roman Antiquities*, *voce* Argentarii, &c.

Money. any less time than six months from the borrowing thereof." This proviso, which had a powerful operation on banking in England, is said to have been elicited by the Mine-Adventure Company having commenced banking business, and begun to issue notes.

The charter of the Bank of England, when first granted, was to continue for eleven years certain, or till a year's notice after the 1st of August 1705. The charter was further prolonged in 1697. In 1708, the bank having advanced £400,000 for the public service, without interest, the exclusive privileges of the corporation were prolonged till 1733. And in consequence of various advances made at different times, the exclusive privileges of the bank have been continued by successive renewals, till the first of August 1855, with the proviso that they may be cancelled on a year's notice to that effect being given after the said 1st of August 1855.

We subjoin an account of the successive renewals of the charter, of the conditions under which these renewals were made, and of the variations in the amount and interest of the permanent debt due by government to the bank, exclusive of the dead weight.—(*See following page.*)

Capital of the Bank. The capital of the bank on which dividends are paid has never exactly coincided with, though it has seldom differed very materially from, the permanent advance by the bank to the public. We have already seen that it amounted in 1708 to £4,402,243. Between that year and 1727 it had increased to near £9,000,000. In 1746 it amounted to £10,780,000. From this period it underwent no change till 1782, when it was increased eight per cent., or to £11,642,400. It continued stationary at this sum down to 1816, when it was raised to £14,553,000, by an addition of twenty-five per cent. from the profits of the bank, under the provisions of the Act 56 Geo. III. c. 96. The Act for the renewal of the charter 3 and 4 Will. IV. c. 98, directed that the sum of £3,671,700, being the fourth part of the debt due by the public to the bank, should be paid to the latter, allowing her, if she chose, to deduct it from her capital. But that has not been done; and after sundry changes, the capital of the bank amounts, as formerly, to £14,553,000.

Crisis of 1745. The Bank of England has been frequently affected by panics amongst the holders of her notes. In 1745 the alarm occasioned by the advance of the Highlanders, under the Pretender, as far as Derby, led to a run upon the bank; and in order to gain time to effect measures for averting the run, the directors adopted the device of paying in shillings and sixpences! But they derived a more effectual relief from the retreat of the Highlanders, and from a resolution agreed to at a meeting of the principal merchants and traders of the city, and very numerously signed, declaring the willingness of the subscribers to receive bank-notes in payment of any sum that might be due to them, and pledging themselves to use their utmost endeavours to make all their payments in the same medium.

Crisis of 1780. During the tremendous riots in June 1780, the bank incurred considerable danger. Had the mob attacked the establishment at the commencement of the riots, the consequences might have proved fatal. But they delayed their attack till time had been afforded for providing a force sufficient to insure its safety. Since that period a considerable military force is nightly placed in the interior of the bank, as a protection in any emergency that may occur.

Crisis of 1797. The year 1797 is the most important epoch in the recent history of the bank. Owing partly to events connected with the war in which we were then engaged; to loans to the Emperor of Germany; to bills drawn on the treasury at home by the British agents abroad; and partly, and chiefly, perhaps, to the advances most unwillingly made by the bank to government, which prevented the directors from having a sufficient control over their issues, the exchanges became unfavourable in 1795, and in that and the following year large sums of specie were drawn from the bank. In the latter end of 1796 and beginning of 1797, considerable apprehensions were entertained of invasion, and rumours were propagated of descents having been actually made on the coast. In consequence of the fears that were thus excited, runs were made on the provincial banks in different parts of the country; and some of them having failed, the panic became general, and extended itself to London. Demands for cash poured in upon the bank from all quarters; and, on Saturday the 25th of February 1797, she had only £1,272,000 of cash and bullion in her coffers, with every prospect of a violent run taking place on the following Monday. In this emergency, an order in council was issued on Sunday the 26th, prohibiting the directors from paying their notes in cash until the sense of Parliament should be taken on the subject. And after Parliament met, and the measure had been much discussed, it was agreed to continue the restriction till six months after the signature of a definitive treaty of peace.

As soon as the order in council prohibiting payments in cash appeared, a meeting of the principal bankers, merchants, traders, &c. of the metropolis, was held at the Mansion-house, when a resolution was agreed to, and very numerously signed, pledging, as had been done in 1745, those present to accept, and to use every means in their power to make bank-notes be accepted, as cash in all transactions. This resolution tended to allay the apprehensions that the restriction had excited.

Parliament being sitting at the time, a committee was immediately appointed to examine into the affairs of the bank; and their report put to rest whatever doubts might have been entertained with respect to the solvency of the establishment, by showing, that at the moment when the order in council appeared, the bank was possessed of property to the amount of £15,513,690, after all claims upon her had been deducted.

Much difference of opinion has existed with respect to the policy of the restriction in 1797; but, considering the peculiar circumstances under which it took place, its expediency seems abundantly obvious. The run did not originate in any over-issue of bank paper, but grew entirely out of political causes. So long as the alarms of invasion continued, it was clear that no bank paper immediately convertible into gold would remain in circulation. And as the bank, though possessed of ample funds, was without the means of instantly retiring her notes, she might, but for the interference of government, have been obliged to stop payments; an event which, had it occurred, might have produced consequences fatal to the public interests.

The error of the government did not consist in their coming to the assistance of the bank, but in continuing the restriction after the alarm of invasion had ceased, and there was nothing to hinder the bank from safely reverting to specie payments.

Notices of the Bank from 1800 to 1821. It had been generally supposed, previously to the passing of the Restriction Act, that bank-notes would not circulate unless they were immediately convertible into cash. But the event showed, conformably to the principles already stated, that this was not really the case. Though the notes of the Bank of England were not, at the passing of the Restriction Act, declared by law to be legal tender, they were rendered such in practice, by being received

Date of Renewal.	Conditions under which Renewals were made, and Permanent Debt contracted.	Permanent Debt. £	s.	d.
1694	Charter granted under the act 5 and 6 Will. III. c. 20, redeemable upon the expiration of twelve months' notice after the 1st August 1705, upon payment by the public to the bank, of the demand therein specified. Under this act the bank advanced to the public £1,200,000 in consideration of their receiving an annuity of £100,000 a year, viz. eight per cent interest, and £4000 for management	1,200,000	0	0
1697	Charter continued by 8 and 9 Will. III. c. 20, till twelve months' notice after 1st of August 1710, on payment, &c. Under this act the bank took up and added to their stock £1,001,171 exchequer bills and tallies.			
1708	Charter continued by 7 Anne, c. 7, till twelve months' notice after 1st of August 1732, on payment, &c. Under this act the bank advanced £400,000 to government without interest; and delivered up to be cancelled £1,775,027 17s. 10d. exchequer bills, in consideration of their receiving an annuity of £106,501: 13s., being at the rate of 6 per cent	2,175,027	17	10
1713	Charter continued by 12 Anne, stat. 1, cap. 11, till twelve months' notice after the 1st of August 1742, on payment, &c. In 1716, by the 3d Geo. I. c. 8, the bank advanced to government, at five per cent	2,000,000	0	0
	And by the same act the interest on the exchequer bills cancelled in 1780 was reduced from six to five per cent. In 1721, by 8 Geo. I. c. 21, the South Sea Company were authorized to sell £200,000 government annuities, and corporations purchasing the same at 26 years' purchase were authorised to add the amount to their capital stock. The bank purchased the whole of these annuities at 20 years' purchase	4,000,000	0	0
	Five per cent. interest was payable on this sum to midsummer 1727, and thereafter four per cent.	9,375,027	17	10
	At different times between 1727 and 1738, both inclusive, the bank received from the public, on account of permanent debt, £3,275,027: 17: 10, and advanced to it, on account of ditto, £3,000,000: Difference	275,027	17	10
	Debt due by the public in 1738	9,100,000	0	0
1742	Charter continued by 15 Geo. II. c. 13, till twelve months' notice after the 1st of August 1764, on payment, &c. Under this act the bank advanced £1,600,000 without interest, which being added to the original advance of £1,200,000, and the £400,000 advanced in 1710, bearing interest at six per cent., reduced the interest on the whole to three per cent	1,600,000	0	0
	In 1745, under authority of 19 Geo. II. c. 6, the Bank delivered up to be cancelled £986,000 of			
	Carry forward	10,700,000	0	0

Date of Renewal.	Conditions under which Renewals were made, and Permanent Debt contracted.	Permanent Debt. £	s.	d.
	Brought forward	10,700,000	0	0
	exchequer bills, in consideration of an annuity of £39,472, being at the rate of three per cent	986,000	0	0
	In 1749, the 23d Geo. II. c. 6, reduced the interest on the four per cent. annuities, held by the bank, to three and a half per cent. for seven years from the 25th of December 1750, and thereafter to three per cent.			
1764	Charter continued by 4 Geo. III. c. 25, till twelve months' notice after the 1st of August 1786, on payment, &c. Under this act the Bank paid into the exchequer £110,000, free of all charge.			
1781	Charter continued by 21 Geo. III. c. 60, till twelve months' notice after the 1st of August 1812, on payment, &c. Under this act the Bank advanced £30,000,000 for the public service for three years, at three per cent.			
1800	Charter continued by 40 Geo. III., c. 28, till twelve months' notice after the 1st of August 1833, on payment, &c. Under this act the Bank advanced to government £3,000,000 for six years without interest; but in pursuance of the recommendation of the committee of 1807, the advance was continued, without interest, till six months after the signature of a definitive treaty of peace. In 1816, the Bank, under authority of the act 56 Geo. III. c. 96, advanced at three per cent., to be repaid on or before the 1st of August 1833	3,000,000	0	0
1833	Charter continued by 3 and 4 Will. IV. c. 98, till twelve months' notice after the 1st of August 1855, with a proviso that it may be dissolved on twelve months' notice after the 1st of August 1855, on payment, &c. This act directs that in future the Bank shall deduct £120,000 a year from their charge on account of the management of the public debt; and that a fourth part of the debt due by the public to the Bank, or £3,671,700, be paid off	14,686,000 3,671,000	0	0 0
	Permanent advance by the bank to the public, bearing interest at three per cent., independent of the advances on account of dead weight, or other public securities held by her	11,015,100	0	0
1844	Charter continued by 7 and 8 Vict. c. 32, till twelve months after the 1st of August 1855, on payment, &c. This act exempts the notes of the bank from all charge on account of stamp-duty, and directs that in future the bank shall deduct a farther sum of £180,000 a-year from the charge on account of the management of the public debt. It also allows notes of the value of £14,000,000 to be issued on securities; separates the banking from the issuing department of the establishment, and effects other important changes.			

Money. as cash in all payments on account of government, and by the vast majority of individuals. For the first three years of the restriction, their issues were so moderate, that they not only kept on a par with gold, but actually bore a small premium. But in 1801, 1802, and 1803, they were so much increased that they fell to a discount of from 8 to 10 per cent. In 1804 they again recovered their value; and from that year to 1808, both inclusive, they were at a discount of 2½ per cent. In 1809 and 1810, however, the directors appear to have embarked on a new course, and to have entirely lost sight of the principles by which their issues had previously been governed; for the average amount of bank-notes in circulation, which had not exceeded 17½ millions, nor fallen short of 16½ millions, in any one year, from 1802 to 1808, both inclusive, was in 1809 raised to £18,927,833, and in 1810 to £22,541,523. The issues of country bank paper were increased in a still greater proportion; and, as there was no corresponding increase of the business of the country, the discount on bank-notes rose from 2½, in 1808, to from 13 to 16 per cent. in 1809 and 1810.

This depreciation in the value of bank paper being accompanied by a corresponding fall in the exchange, attracted the attention of the public and the legislature. In consequence, the House of Commons appointed, in 1810, a committee to inquire into the subject; and having examined several witnesses, the committee in their report, which is both an able and a celebrated paper, justly ascribed the fall in the value of bank paper, as compared with gold, to its over-issue; and recommended, in the view of correcting the existing evil and of preventing its recurrence, that within two years the bank should be obliged to resume specie payments. But this recommendation not being adopted, the over issue of paper went on increasing. In 1812 it was at an average discount, as compared with bullion, of 20¾ per cent.; in 1813, of 23 per cent.; and in 1814, when the maximum of depreciation was attained, it was 25 per cent.

At the period when the restriction on cash payments took place in 1797, it is supposed that there were about 280 country banks in existence; but so rapidly were these establishments multiplied, that they amounted to above 900 in 1813. The price of corn, influenced partly by the depreciation of the currency, and the facility with which discounts were obtained, but more by deficient harvests and the unprecedented difficulties which the war threw in the way of importation, rose to an extraordinary height during the five years ending with 1813. But the harvest of that year being unusually productive, and the intercourse with the continent being then also renewed, prices, influenced by both circumstances, sustained a very heavy fall in the latter part of 1813, and the beginning of 1814. And this fall having ruined a considerable number of farmers, and produced a general want of confidence, such a destruction of provincial paper took place as has rarely been paralleled. In 1814, 1815, and 1816, no fewer than 240 country banks stopped payment; and *eighty-nine* commissions of bankruptcy were issued against these establishments, being at the rate of *one* commission against every *ten and a half* of the total number of banks existing in 1813.

The great reduction that was thus suddenly and violently brought about in the quantity of country bank paper, by extending the field for the circulation of Bank of England paper, raised its value in 1817 nearly to a par with gold. The return to cash payments being thus facilitated, it was fixed, in 1819, by the Act 59 Geo. III., c. 78, commonly called Sir Robert Peel's Act, that they Money. should take place in 1823. But to prevent any future over-issue, and at the same time to render the resumption as little burdensome as possible, it was enacted, in pursuance of a plan suggested by Mr. Ricardo, that the bank should be obliged, during the interval from the passing of the Act till the return to specie payments, to pay her notes, if required, in bars of standard bullion of not less than sixty ounces weight. This plan was not, however, acted upon during the period allowed by law; for, a large amount of gold having been accumulated at the bank, the directors preferred recommencing specie payments on the 1st of May 1821.

The fluctuations, referred to above, in the value of paper were exceedingly injurious. From 1809 to 1815, the creditors of every antecedent contract, land-holders whose estates had been let on lease, stockholders and annuitants of every description—all, in short, who could not raise the nominal amount of their claims or incomes proportionally to the fall in the value of money, were to that extent losers. The injustice that would have been done to the creditors of the state and of individuals, who had made their loans in gold, or paper equivalent to gold, by raising the denomination of the coin twenty-five per cent., however gross and palpable, would not have been greater than was actually done them in 1814, by compelling them to receive payment of their just debts in paper depreciated to that extent.

It is true, that after a currency has been for a considerable period depreciated, as much injustice is done by raising, as was previously done by depressing, its value. But there is good reason to doubt whether the depreciation from 1809 to 1815 (for the depreciation of 2½ per cent. during the six preceding years is too inconsiderable to be taken into account) extended over a sufficiently lengthened period to warrant the legislature in departing from the old standard. It is needless, however, to offer any opinion on this rather difficult point, for we have seen that the value of paper was raised in 1816 and 1817 almost to par by accidental circumstances without any interference on the part of government or of the bank. Sir Robert Peel's Act, to which this rise has been ascribed, not being past till 1819, could have nothing to do with what occurred two or three years previously. Its object was twofold, to redeem the pledge given by Parliament to restore the old standard on the return of peace, and to shut the door against any fresh depreciation of paper.

It has sometimes, indeed, been alleged, that the rise in the value of the currency, by reverting to specie payments in 1821, was in reality much greater than was indicated by the previous difference between the values of paper and gold: for, it is maintained that the value of gold was itself raised by that measure. But we doubt whether this opinion have any good foundation. The supply of gold in the commercial world is too vast to allow of its value being sensibly affected by the drain occasioned by the resumption of cash payments in this country. It was probably, in fact, more than compensated by the cessation of hostilities, and the greater use of bills and other substitutes for coin, after the restoration of tranquillity. We are not aware that there is any article that fell in price after the peace of 1815, of which the fall has not been, or may not be, satisfactorily accounted for by changes in the channels of its supply, or in the cost of production, or both. And the rise that has of late years taken place in the price of some articles, is mostly, we believe, to be accounted for in the same way. The decline in the value of gold, in consequence of the increased

supplies furnished by California and Australia, has hitherto been very trifling indeed. (See Article PRECIOUS METALS.)

SECT. IV.—*Private and Joint-Stock Banks.*

Notices of the issues of private and joint-stock banks.

After the statements already made in regard to the constitution and purposes of these banks, it is unnecessary to enter into further details with respect to them, unless as respects their history and proceedings as issuers of money.

Except during the suspension of cash payments, the issues of the Bank of England have generally been, as they always ought to be, determined by the state of the exchange. But though the greatest, the Bank of England has not been the only issuer of paper in this country. Large amounts have been issued by the provincial banks, and their issues have been but little influenced by the influx or efflux of bullion, but have almost wholly depended on the state of credit and prices in the districts in which they happened to be situated. If their managers supposed that these were good or improving, they rarely hesitated, previously to the new system introduced in 1844, about making additional issues. Hence, when the state of the exchange, and the demand on the Bank of England for bullion, showed that the currency was redundant and ought to be contracted, the efforts of the bank to effect its diminution have been often impeded, and met by a contrary action on the part of the country banks. This was not owing to the ignorance of the latter. Under the supposed circumstances, the country bankers saw, speaking generally, that they ought also to contract; but being a very numerous body, comprising several hundred establishments scattered over all parts of the country, each was impressed with the well-founded conviction, that all that he could do in the way of contraction, would be next to imperceptible; and few thought of attempting anything of the sort, so long as they felt satisfied of the stability of those with whom they dealt. On the contrary, most bankers knew, that had they withdrawn a portion of their notes, some of their competitors would have been eager to embrace the opportunity of filling up the vacuum; and that they would only have lost a portion of their business, without in any degree lessening the amount of paper afloat. Hence, in nineteen out of twenty instances, the country banks went on increasing their issues long after the exchange had been notoriously against the country, and the Bank of England had been striving to pull up.

And not only did they almost universally increase their issues when they ought to have been diminished, but the moment they were compelled to set about their reduction, they ran headlong into the opposite extreme, and unreasonable suspicion took the place of blind unthinking confidence. It is seldom, indeed, that a recoil takes place without its destroying more or fewer of the provincial banks; and provided the others succeed in securing themselves, little attention is usually paid to the interests of those they may have taught to look to them for help. In exemplification of these statements, we shall shortly notice some of the circumstances connected with the destruction of country bank paper in 1792-93, 1813-15, 1825-26, and in 1836-39.

1. Previously to 1759, the Bank of England did not issue any notes for less than £20; but having then commenced the issue of £10 notes, her paper was gradually introduced into a wider circle, and the public became more habituated to its employment in their ordinary transactions. The country banks had not, however, been so very scrupulous in regard to the magnitude of their notes, which they endeavoured to get into circulation by making them for very small sums. But this being a practice productive of much abuse, was checked in 1775, by Parliament enacting that notes should not be issued for less than £1. In 1777, this minimum limit was further raised to £5, at which point it continued till 1797, when an issue of £1 notes was again authorised.

The distress and embarrassment that grew out of the American war proved exceedingly unfavourable to the formation of country banks, or of any establishments requiring unusual credit or confidence. No sooner, however, had peace been concluded, than everything assumed a new face. Agriculture, commerce, and still more, manufactures, into which Watt and Arkwright's inventions had been lately introduced, immediately began to advance with a rapidity unknown at any former period. In consequence, that confidence which had either been destroyed, or very much weakened by the disastrous events of the war, was fully re-established. The extended transactions of the country required fresh facilities for carrying them on, and these were supplied in the utmost profusion. The number of banks, which in 1784 was certainly under 150, increased so rapidly, that in 1792 they amounted to about 350! In consequence, a banking office was opened in every market-town and in most considerable villages. And such being the case, it is needless, perhaps, to add, that the prudence, capital, and connections of those who set up these establishments were but little attended to. The great object of a large class of traders was to obtain discounts; and the bankers of an inferior description were equally anxious to accommodate them. All sorts of paper were thus forced into circulation, and enjoyed nearly the same degree of esteem. The bankers, and those with whom they dealt, had the fullest confidence in each other. No one seemed to suspect that there was anything hollow or unsound in the system. Credit of every kind was strained to the utmost; and the available funds at the disposal of the bankers were reduced far below the level which the magnitude of their transactions required to render them secure.

Crisis of 1792-93.

The catastrophe which followed, was such as might easily have been foreseen. The currency having become redundant, the exchanges took an unfavourable turn in the early part of 1792. A difficulty of obtaining pecuniary accommodation in London was not long after experienced; and notwithstanding the efforts of the Bank of England to mitigate the pressure, a violent revulsion took place in the latter part of 1792 and the beginning of 1793. The failure of one or two great houses excited a panic which proved fatal to many more. Out of the three hundred and fifty country banks in England and Wales, when this revulsion began, about a hundred were compelled to stop payments, and upwards of fifty were totally destroyed, producing by their fall an extent of misery and bankruptcy till then unknown in the country.

"In the general distress and dismay, every one looked upon his neighbour with caution, if not with suspicion. It was impossible to raise money upon the security of machinery, or shares of canals; for the value of such property seemed to be annihilated in the gloomy apprehension of the sinking state of the country, its commerce and manufactures; and those who had any money, not knowing where they could place it with safety, kept it unemployed and locked up in their coffers. Amid the general calamity, the country banks, which had multiplied greatly beyond the demand of the country for circulating paper currency, and whose *eagerness to push their notes into circulation* had laid the foundation of their own misfortunes, were among the greatest sufferers, and, con-

Money. sequently, among the greatest spreaders of ruin and distress among those connected with them; and they were also the chief cause of the drain of cash from the Bank of England, exceeding any demand of the kind for about ten years back. Of these banks above a hundred failed, whereof there were twelve in Yorkshire, seven in Northumberland, seven in Lincolnshire, six in Sussex, five in Lancashire, four in Northamptonshire, four in Somersetshire, &c."[1]

Attempts have sometimes been made to show that this crisis was not occasioned by an excess of paper-money having been forced into circulation, but by the agitation caused by the war then on the eve of breaking out. But there do not seem to be any good grounds for this opinion. The unerring symptoms of an overflow of paper—a fall of the exchange, and an efflux of bullion—took place early in 1792, or about twelve months before the breaking out of hostilities. Mr Chalmers states that none of the great houses that failed during this crisis had sustained any damage from the war. The efforts of the country bankers to force their paper into circulation occasioned the redundancy of the currency, and it was on them, and on the country dealers and farmers dependent on them, that the storm principally fell.[2] It has been already seen, and it is of importance to remark, that the Bank of England had no notes for less than £10, and the country banks for less than £5 in circulation when the crisis of 1792-93 took place.

Crisis of 1814, 1815, and 1816.

2. During the period from 1800 to 1813, the number of country banks increased from about 400 to 922; and in consequence partly of this rapid increase, and partly of the suspension of cash payments at the Bank of England in 1797, and the issue of one-pound notes by that establishment and the country banks, the amount of paper afloat was vastly increased, particularly after 1808, when it sunk to a heavy discount as compared with bullion. Mr Wakefield, whose extensive employment in the management of estates in all parts of the country gave him the most favourable opportunities for acquiring correct information, stated to the agricultural committee of 1821, that "down to the year 1813, there were banks in almost all parts of England, forcing their paper into circulation at an enormous expense to themselves, and in most instances to their own ruin. There were bankers who gave commission, and who sent persons to the markets to take up the notes of other banks; these people were called money-changers, and commission was paid them." (Report, p. 213). And among the various answers to the queries sent by the Board of Agriculture in 1816, to the most intelligent persons in different parts of the country, there is hardly one in which the excessive issue of country-bank paper is not particularly specified as one of the main causes of the unprecedented rise of rents and prices previously to 1814.

We have already seen what was the result of this conduct, and that the extensive destruction of country bank paper at the end of the war, by raising the value of the currency nearly to par, paved the way for the resumption of cash payments at the old standard in 1821.

Crisis of 1825-26.

But notwithstanding the ample experience that had been supplied by the occurrences of 1792-93 and 1814-16, of the mischievous consequences of the issue of paper by the country banks, and of their want of solidity, nothing whatever was done, when provision was made for returning to specie payments, to restrain their issues, or to place them on a better footing. The consequences of such improvidence were not long in manifesting themselves. The prices of corn and other agricultural products, which had been greatly depressed in consequence of abundant harvests, in 1820, 1821, and 1822, rallied in 1823; and the country bankers, true to their invariable practice on similar occasions, immediately began to enlarge their issues. It is unnecessary to inquire into the circumstances which conspired, along with the rise of prices, to promote the extraordinary rage for speculation exhibited in 1824 and 1825. It is sufficient to observe, that in consequence of their operation, confidence was very soon carried to the greatest height. It did not seem to be supposed that any scheme could be hazardous, much less wild or extravagant. The infatuation was such, that even the most considerate persons did not scruple to embark in visionary and absurd projects; while the extreme facility with which discounts were procured upon bills at very long dates, afforded the means of carrying on every sort of undertaking. The most worthless paper was readily negociated. Many of the country bankers seemed, indeed, to have no object other than to get themselves indebted to the public. And such was the vigour and success of their efforts to force their paper into circulation, that the amount of it afloat in 1825 is estimated to have been nearly fifty per cent. greater than in 1823.

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The consequences of this extravagant and unprincipled conduct are well known. The currency having become redundant, the exchanges began to decline in the summer of 1824. The directors of the Bank of England having unwarily entered, in the early part of that year, into an engagement with the government to pay off such holders of four per cent. stock as might dissent from its conversion into a three and a half per cent. stock, were obliged to advance a considerable sum on this account after the depression of the exchange. But despite this circumstance, they might and ought to have taken measures in the latter part of 1824 and the earlier part of 1825, by lessening their issues, to stop the efflux of bullion. But not being sufficiently alive to the urgency of the crisis, the London currency was not materially diminished till September 1825. The recoil, which would have been less severe had the efforts of the bank to prevent the exhaustion of her coffers taken place at an earlier period, was most appalling. The country banks began to give way the moment they experienced a considerably increased difficulty of obtaining accommodation in London, and confidence and credit were immediately at an end. Suspicion having awakened from her trance, distrust had no limits. All classes of depositors made haste to call up the sums they had entrusted to the care of the banks. There was, also, a run upon them for payment of their notes, not in the view of sending the gold as a mercantile adventure to the Continent, but to escape the loss which it became obvious the holders of country paper would have to sustain. *Sauve qui peut* was the universal cry; and the destruction was so sudden and extensive, that in less than six weeks, above seventy banking establishments were swept off, and a vacuum was created in the currency which absorbed from eight to ten millions of additional issues by the Bank of England; at the same time that myriads of those private bills that had previously swelled the amount of the currency, and added to the machinery of speculation, were wholly destroyed.

Crisis of 1825 not occasioned by bank lending too much capital.

3. It may be worth while, perhaps, to observe that it has been alleged, in opposition to what is now stated, that the difficulties of the bank in 1825 were not caused by any excess either of her issues or of those of the country banks, but by the too great amount of the capital she had lent; and in proof of this allegation, we are referred to the increase of nearly eight millions in the amount of

[1] Macpherson's *Annals of Commerce*, vol. iv. p. 266.

[2] *Comparative Estimate*, p. 226, ed. 1812.

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securities which the bank held in August 1825 over their amount in August 1822, and to the simultaneous decrease of nearly six and a half millions in the amount of bullion in her coffers.[1] But a little consideration will suffice to show the futility of this statement. It is impossible, indeed, that any mere advance of capital, however great, whether by the bank or any other great association, should affect the state of the currency or the exchanges. It was not the magnitude of the advances, but the mode in which they were made, that brought on the crisis. The bank took no steps, or none of sufficient energy, to reduce the amount of her notes in circulation till long after the exchange had become unfavourable, and bullion was demanded of her for exportation. The accumulation of securities was the necessary result of this radical error. Had the bank made her advances in the shape of produce—in corn, cotton, cloth, or iron—they might have been ten times as great without having the smallest influence over the exchange. But the currency having become redundant in 1824, the notes of the bank were returned upon her for gold, so that her securities were augmented at the same time that her means of dealing with the unfavourable exchange were impaired. It is to be remembered, that the efflux of bullion showed conclusively that, however issued, and whether greater or less than at former periods, the paper afloat was in excess, and that its contraction had become indispensable. And such being the case, it was the bounden duty of the bank, as soon as she felt the drain for gold setting steadily against her, to adopt every means in her power, by raising the rate of interest, selling securities, and otherwise, to reduce her issues, and restore the exchange to par. And had she done this at a sufficiently early period, it is all but certain she would not have lost more than two or three millions of bullion; whereas, by following a different line of conduct, and deferring the adoption of vigorous repressive measures till too late a period, she was drained of about seven millions of bullion, and her safety seriously compromised before she could stop the drain.

It is, therefore, the merest delusion to ascribe the crisis of 1825, or any similar crisis, to the bank advancing too much capital. She did no such thing. What she did was to issue and keep out an excess of notes in the teeth of an unfavourable exchange. It was this that drained her of her bullion; and it would have had precisely the same result had the bank capital been ten times greater than it actually was.[2]

Measures for establishing joint-stock banks in 1826. Inadequacy of these measures.

4. Notwithstanding nations are proverbially slow and reluctant learners, the events of 1825-26, taken in connection with those of the same sort that had previously occurred, produced a conviction of the necessity of taking some steps to improve the system of country banking in England. But we regret to have to add, that the measures adopted in this view were very far indeed from being effectual to their object. The law of 1708, limiting the number of partners in banking establishments to six, was repealed; and it was enacted, that banks with any number of partners, might be established for the issue of notes anywhere beyond sixty-five miles from London; and that banks not issuing notes might be established in London itself with any number of partners. The circulation of notes for less than five pounds in England and Wales was at the same time forbidden.

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Much benefit was expected, but without much reason, to result from these measures. The suppression of £1 notes was in so far advantageous, that it shut up one of the principal channels by which the inferior class of country bankers got their paper into circulation, and tended, consequently, to secure the labouring classes against loss in the event of their bankruptcy. But the other measure, or that for the establishment of joint-stock banks, proved to be a complete failure. And we have seen in the previous inquiry into the constitution of such banks, that nothing but mischief could be expected to arise from giving them power to issue notes.

Progress of the joint-stock system.

Those who supposed that joint-stock banks would be immediately set on foot in all parts of England, were a good deal disappointed with the slowness with which they spread for some years after the Act permitting their establishment was passed. The heavy losses occasioned by the downfall of most of the joint-stock projects set on foot in 1824 and 1825, made all projects of the same kind be looked upon for a considerable period with suspicion, and deterred most persons from embarking in them. But this caution gradually wore off; and the increasing prosperity of the country, and the difficulty of vesting money so as to obtain from it a reasonable return, generated of new a disposition to adventure in hazardous projects. A mania for embarking in speculative schemes acquired considerable strength in 1834, and during 1835 and part of 1836, it raged with a violence but little inferior to that of 1825. It was at first principally directed to railroad projects; but it soon began to embrace all sorts of schemes, and, among others, joint-stock banks, of which an unprecedented number were projected in the course of 1835. The progress of the system was as follows:—

	Banks.		Banks.
In 1826 there were registered	6	In 1832 there were registered	10
In 1827	1	In 1833	13
In 1828	5	In 1834	8
In 1829	4	In 1835	45
In 1830	3	In 1836	11
In 1831	8		
		Total	114

In point of fact, however, the number of banks created in 1835 and 1836 was vastly greater than appears from this statement. We believe that, at an average, each of the fifty-six banks established in those years, like those previously established, had from four to five branches; and as these branches transacted all sorts of banking business, and enjoyed the same credit as the parent establishment, from which they were frequently at a great distance, they were, to all intents and purposes, so many new banks; so that, instead of fifty-six, it may safely be affirmed that from about 220 to 280 new joint-stock banks were opened in England and Wales in 1835 and 1836, but mostly in the former!

In January, February, and March 1836, when the rage

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[1] Securities of all sorts, 31st August 1822, £17,290,510
31st August 1825, 25,106,030
Excess of Securities, 31st August 1825, over those held on 31st August 1822, £7,815,520
Bullion in Bank, 31st August 1822, £10,097,960
Do. 31st August 1825, 3,634,320
Diminution of bullion, £6,463,640

On the 28th February 1826, the bullion in the bank amounted to only £2,459,510.

[2] Perhaps we may be allowed to observe, that we endeavoured to point out, in an article in the *Scotsman*, published in 1825, what would be the inevitable result of the bank allowing the drain of bullion to run its course, viz., that she would be drained of her last sovereign, and obliged to stop payments; and that she could not avert this result otherwise than by narrowing her issues, and raising the value of the currency. She did this at last, but she ought to have done it nearly twelve months sooner.

Over-issue by the joint-stock banks in 1836-37.

for establishing joint-stock banks was at its height, the exchange was either at par, or slightly in our favour, showing that the currency was already up to its level, and that if any considerable additions were made to it, the exchange would be depressed, and a drain for bullion be experienced. But these circumstances, if ever they occurred to the managers of the joint-stock banks, do not seem to have had, and could not in truth be expected to have, any material influence over their proceedings. Their issues, which amounted on the 26th of December 1835 to £2,799,551, amounted on the 25th of June next to £3,588,064, exclusive of the vast mass of additional bills, cheques, and other substitutes for money they had put into circulation. The consequences were such as every man of sense might have foreseen. In April 1836 the exchange became unfavourable, and bullion began to be demanded from the Bank of England. The latter, that she might the better meet the drain, raised the rate of interest in June from four to four and a-half per cent., and this not being enough sufficiently to lessen the pressure on her for discounts, she raised it in August from four and a-half to five per cent. But during the whole of this period the country banks went on increasing their issues. We have seen that, on the 25th of June 1836, their issues were £788,513 greater than they had been on the preceding 26th of December; and notwithstanding the continued drain for bullion, and the increased rate of interest charged by the Bank of England, and the reduction of her issues, the issues of the joint-stock banks increased from £3,588,064 in June, to no less than £4,258,197 on the 31st of December, being an increase of nearly twenty per cent. after the exchange was notoriously against the country; and the most serious consequences were apprehended from the continued drain for bullion.

It may perhaps be supposed that the increased issue of the joint-stock banks would be balanced by a corresponding diminution of the issues of the private banks, and that on the whole the amonnt of their joint issues might not be increased. This, however, was not the case. Some private banks were abandoned in 1836, and others incorporated with joint-stock banks; and it is farther true, that those which went on managed their affairs with more discretion than their associated competitors. But, from the 26th of September 1835 to the 31st of December 1836, the issues of the private banks were diminished only £159,087, whilst those of the joint stocks were increased during the same period £1,750,160, or more than *ten times* the falling off in the others!

There should be only *one* issuer of paper-money.

These statements show the inexpediency of having more than one issuer of paper. Its issue ought in all cases to be governed by the state of the exchange, or rather, as already stated, by the influx and efflux of bullion. But previously to 1844, the provincial banks might go on over-issuing for a lengthened period without being affected by a demand for bullion, or even for Bank of England paper.

In the end, no doubt, an efflux of the former was sure, by rendering money and all sorts of pecuniary accommodation scarce in the metropolis, to affect the country banks as well as the Bank of England; and then the injury to industry, occasioned by the withdrawal of their accustomed accommodations from a great number of individuals, was severe in proportion to the too great liberality with which they had previously been supplied. This was especially the case in 1836, when the Bank of England, by bolstering up the Northern and Central Bank, averted, though but for a while, the bankruptcy of that establishment, which had no fewer than *forty* branches, and, by doing so, is said to have prevented the occurrence of a panic that might have proved fatal to many other joint-stock and private banks. Still, however, the shock given to industrial undertakings, by the revulsion in the latter part of that year, and in 1837, although unaccompanied by any panic, was very severe. All sorts of commercial speculations were for a while completely paralysed, and there were but few districts in which great numbers of individuals were not thrown out of employment. In Paisley, Birmingham, and most other towns, the distress occasioned by the revulsion was very general and long-continued. And owing to the Bank of England having delayed, in 1838 and the earlier part of 1839, to take efficient measures for the reduction of her issues, despite the unmistakeable evidence of their being redundant, the bullion in her coffers was reduced in September 1839 to £2,406,000; and, but for the efficient assistance obtained from the Bank of France, her stoppage could hardly have been averted.

Sect. V.—*Act of* 1844. *Objections to and Defence of that Act. Suspensions of in* 1847 *and* 1857.

Act of 1844.

This perilous experience having again forcibly attracted the public attention to the state of the banking system, Sir Robert Peel was induced to attempt its improvement. The clause in the Act 3 and 4 Will. IV. c. 98, which renewed the Bank Charter in 1833, gave Parliament power to revise or cancel it in 1845, and thus afforded a legitimate opportunity for the introduction of the new system. It was indispensable, in attempting to obviate the defects inherent in our currency, to proceed cautiously, to respect, in as far as possible, existing interests, and to avoid taking any step that might excite the fears or suspicions of the public; the grand difficulty being to reconcile such a course with the adoption of any plan that would obviate in any considerable degree the defects complained of. Happily this difficult problem was satisfactorily solved. The measures which Sir Robert Peel introduced and carried through Parliament in 1844 and 1845, for the improvement of our banking system, were so skilfully contrived as to provoke little opposition, at the same time that they effected most important and highly beneficial changes.

The measures in question consisted of the Act 7 and 8 Vict. c. 32, which refers to the Bank of England, and the English country banks; and the Acts 8 and 9 Vict. c. 38, 37, referring to the banks of Scotland and Ireland. These statutes were intended to obviate the chances of over-issue, and of sudden fluctuations in the quantity and value of money, by limiting the power to issue notes payable on demand, and by making the amount of such notes in circulation vary with the amount of bullion in the possession of the issuers. In dealing with the Bank of England, Sir Robert Peel adopted the proposal previously made by Lord Overstone,[1] for effecting a complete separation between the issuing and banking departments of that establishment, and giving the directors full liberty to manage the latter at discretion, while they should have no power whatever over the other.[2]

[1] In tracts published in 1837 and 1840, and in his evidence before a committee of the House of Commons in the latter year.

[2] It is right to state, that except in so far as he no doubt profited by the suggestion referred to, the measures adopted b Sir Robert Peel in 1844 and 1845 were entirely his own. And they will continue to be enduring monuments of the depth and clearness of his views, and of his administrative ability. This is a point in regard to which the evidence of Lord Overstone is quite decisive; and it is difficult to say, whether that evidence redounds more to his lordship's credit, or to that of the illustrious statesman whose claims to the gratitude of the country as the founder of a sound system of currency, he has so generously and successfully vindicated. "I," said Lord Overstone

Principle on which Act of 1844 was founded.

The notes of the Bank of England in circulation for some years previously to 1844 rarely amounted to twenty or sunk so low as sixteen millions. And such being the case, Sir Robert Peel was justified in assuming that the circulation of the bank could not, in any ordinary condition of society, or under any mere commercial vicissitudes, be reduced below fourteen millions. And the Act of 1844 allows the bank to issue this amount upon securities, of which the £11,015,100 she has lent to the public is the most important item. Inasmuch, however, as the issues of the provincial banks were at the same time limited in their amount, and confined to certain existing banks, it was further provided, in the event of any of these banks ceasing to issue notes, that the Bank of England might be empowered, by order in council, to issue, upon securities, two-thirds, and no more, of the notes which such banks had been authorised to issue. Under this condition, the total secured issue of the bank has (1857) been increased from £14,000,000 to £14,475,000. *But for every other note which the issue department may at any time issue over and above the maximum amount (£14,475,000) issued on securities, an equal amount of coin or bullion must be paid into its coffers.* And hence, under this system, the notes of the Bank of England are rendered really and truly equivalent to gold, while their immediate conversion into that metal no longer depends, as it previously did, on the good faith, the skill, or the prudence of the directors. And these important results have been attained without imposing any burden of which any one has any right to complain. Our currency rests on the fundamental principle, that all debts above forty shillings shall be paid in gold. But individuals and associations, including the banking or commercial department of the bank, have the option, if they prefer it, to exchange gold for bank notes, and to make use of the latter in their dealings with the public. Hence, if A or B goes to the issuers of paper, and gets 100 or 500 notes from them in exchange for an equivalent amount of gold, it is his own convenience he has exclusively in view. He was at full liberty to use gold, but he preferred exchanging it for notes because he could employ the latter more advantageously. This is the way in which paper is issued under the Act of 1844; and such being the case, it is contradictory to say that it is productive either of hardship or inconvenience.

It has sometimes been proposed to increase the issue upon securities from fourteen to fifteen or sixteen millions. But though a measure of this sort would in nowise affect the amount of the currency, it would in some degree, perhaps, diminish the security for its conversion in periods of difficulty; and the advantage that would result from setting free one or two millions of bullion is too trifling to be gained by exposure to such a contingency.

roposal issue in-nvertible tes.

We may, perhaps, be allowed, in connection with this part of our subject, shortly to observe, that it was suggested to the late Committee on Banks (1857), that the currency might be improved by issuing some fourteen or twenty millions of inconvertible notes. (*Min. of Evidence*, pp. 441-449). The deserts of this proposal may be easily appreciated; and it would not have been worth notice had it not been one of the few practical measures recommended by the opponents of the Act of 1844. It is plain that inconvertible notes, supposing them to be issued in moderate quantities, or to the extent of fourteen millions or thereby, would not serve all the purposes, nor be of the same value as those that are convertible; and if they circulated, it would only be at a fluctuating rate of discount, as compared with other notes and coins. And while the greatest confusion and disorder would thus unavoidably result from their issue, nothing whatever would be gained by it beyond what is gained by the present system. All notes are now payable in gold on demand; but as it is abundantly certain that fourteen millions of notes will be at all times retained in the pockets of the public, that amount is allowed to be issued on securities. It is obvious, therefore, that while we avoid its endless inconveniences, we should realise nothing by the issue of fourteen millions of inconvertible notes, beyond what is realised under the Act of 1844. These, however, though sufficiently conclusive, are inferior considerations. If once we begin to issue such notes, it is impossible to say where we shall be allowed to stop. The principles, if so we may call the crude and contradictory assertions of the proposers of this notable scheme, would justify an issue not merely of fourteen or twenty, but of forty or fifty millions, or any greater sum. But it is not conceivable that it should meet with any countenance from any portion of the public, much less that it should be adopted. If it were, it requires little prescience to foresee that its results would be alike speedy and disastrous. What has repeatedly happened under the like circumstances would no doubt happen again. Gold would be driven from the country; all contracts would be upset, and we should be fortunate indeed if we escaped a national bankruptcy and revolution. If we take to dealing in assignats, we need not hope to escape its inevitable results.

Act of 1844 does nor shackle the bank in using her credit.

But, dismissing such crotchets, it is alleged that the new system is injurious by shackling the bank in the use of her credit. But it must be clear on the least reflection that it does nothing of the sort. It merely prevents the bank from issuing substitutes for money which do not represent money. It does not absorb or lock up a single sixpence worth of her capital; nor does it interfere in any manner of way with her employment either of it, or of her credit. The gold in the issue-department of the bank was not purchased by her, and does not belong to her. She is its keeper, but not its owner. It belongs to the public, or to the holders of bank notes, who deposited it in the bank in exchange for notes, with and under the express stipulation, that on paying the latter into the bank, they should receive back their gold. Any interference with these deposits would be an interference with property held in pledge for others, that is, it would be an act precisely of the same kind with that which deservedly subjected Strahan, Paul, and Co. to transportation for fourteen years. The authority of Mr. Sheffield Neave, the present governor of the bank, may be quoted in corroboration of this statement:—"The issue department is put out of our hands altogether. We are

"had no connection, political or social, with Sir Robert Peel. I never exchanged one word upon the subject of this Act with Sir Robert Peel in my life, neither directly nor indirectly. I knew nothing whatever of the provisions of this Act until they were laid before the public, and I am happy to state that, because I believe that what little weight may attach to my unbiassed conviction of the high merits of this Act, and the service which it has rendered to the public, may be diminished by the impression that I have something of personal vanity in this matter. I have no feeling whatever of the kind. The Act is entirely, so far as I know, the act of Sir Robert Peel, and the immortal gratitude of the country is due to him for the service rendered to it by the passing of that Act. He has never been properly appreciated, but year by year the character of that statesman upon this subject will be appreciated. By the Act of 1819, Sir Robert Peel placed the monetary system of the country upon an honest foundation, and he was exposed to great obloquy for having so done. By the Act of 1844, he has obtained ample and sufficient security that that honest foundation of our monetary system shall be effectually and permanently maintained. And no description can be written on his statue so honourable as that he restored our money to its just value in 1819, and secured for us the means of maintaining that just value in 1844. Honour be to his name."—(*Min. of Evidence*, p. 178, *Committee of* 1857.)

Money. mere trustees under the Act of Parliament, to see that those securities are placed there and kept up to that amount; and in no case can any creditor of the bank touch that which is reserved for a note-holder. We are in that respect merely ministrative; we are trustees to hold that amount in the issue-department, and our banking department has a totally separate function, which has no relation whatever to the issue-department."—(*Min. of Evidence*, 1857, p. 99.)

But though she may not lay violent hands on the property of the public, the bank, it is obvious, has at this moment the same absolute command over her entire capital and credit, that she would have were the Act of 1844 non-existent. In her banking capacity she is free from all restraint, and is in precisely the same situation as other banking or mercantile establishments. She may lend or not lend as she pleases, and may lay down such conditions as she pleases in regard to the interest and the terms of her loans and discounts. In short, she may do whatever she likes with her own. But farther she is not permitted to go. She may not substitute shadows for realities. She cannot, whether to assist others, or to relieve herself from embarrassment, issue a single note except upon a deposit of bullion. But this rule does operate on herself only. It applies to all individuals and associations. And to relax it in any degree would be—disguise it as you will—to authorise an issue of fictitious or spurious paper, and consequently to vitiate the currency and to abuse credit in the way that is sure to be in the end the most disastrous.

This statement shows the groundless nature of the charge which is often made against the Act of 1844, that under its operation the bank runs the risk of being brought to a stop, though she may have some five, six, or even eight millions bullion in her coffers. For it is plain that two things are confounded in this charge, which are quite distinct, and have no necessary connection with each other, viz., the proceedings of the bank in her capacity of issuer of notes, and her proceedings in her capacity of a banking company. In her former capacity it is all but impossible that she should be brought to a stop; and if such a thing should happen, there would not then be an ounce of bullion in her coffers. It is not, however, impossible, nor even very improbable, that the bank should be brought, in her mercantile capacity, into difficulties, while there may be a large amount of bullion in the issue-department. But, though such should be the case, is that any reason why she should be permitted to draw on funds that do belong to her, and over which she has no control? Strahan, Paul, and Co. were in difficulties when they sold the bonds and other securities intrusted to their care. And supposing the bank were in difficulties, is she to be allowed to right herself by setting aside the principle of *meum* and *tuum*, and seizing on what belongs to others? Her directors would be the first to repudiate such a doctrine. It may be popular among the founders and managers of the Royal British Bank, and their associates and admirers here and elsewhere, but it will be contemptuously rejected by all men who have any sense of honour, or regard for character.

Act of 1844 has not increased fluctuations of interest.

We have already seen that the facility with which fictitious paper might be issued previously to 1844 was, on many occasions, greatly abused, and that by giving a powerful stimulus to speculation and over-trading, it promoted in no ordinary degree, even when it did not originate, those periods of artificial prosperity that never fail to terminate in bankruptcy and ruin. But though such stimulus can no longer be applied, it is alleged that the Act of 1844 has increased industrial vicissitudes by increasing the number and intensity of fluctuations in the rate of interest. But this charge is no better founded than the others. Previously to the modification of the usury laws in 1839, the bank could not charge more for loans than 5 per cent.; and for some considerable period after the restriction had been removed, the directors, influenced in part at least by their accustomed habit, permitted on several occasions the bank to be involved in difficulties which might have been averted by their sooner raising the rate of discount. But everybody who knows anything of the matter, must know that the measures of the bank do not determine the general rate of interest. She of course fixes the rate at which she will lend; but her rate is one thing, and the market rate another. Generally, she regulates her proceedings by the fluctuations in the latter. If, on the one hand, the rate of interest fixed by the bank were above the market rate, none but fools, or persons in desperate circumstances, would resort to her for discounts; while, on the other, if it were below that rate, the demands upon her would be so very great that her means would be speedily exhausted. Whether, therefore, there have been more or fewer fluctuations in the rate of interest since 1844, than in any previous period of equal duration, it is difficult to say, and the fact, were it ascertained, would be wholly immaterial to this question. Fluctuations in the market rate of interest seldom depend, in any degree, and never to any considerable extent, on the proceedings of those whose paper, like that of the bank, is equivalent to, and may be immediately converted into, gold. They are brought about by widely different means; by fluctuations in the rate of profit depending on the negociation of loans; the greater or less demand for capital caused by the opening of new and the shutting up of old commercial channels; the increased efficiency of industry; the undertaking of new projects; and so forth. Fluctuations originating in such widely different causes, must necessarily be of frequent though uncertain occurrence. There can, however, be no manner of doubt, as has been already seen, that their frequency and violence are uniformly and greatly increased by the revulsions consequent on over-issues of paper. At this very time (November 1857) in the United States, which are sufferers from a recoil of this sort, the rate of discount on first class bills varies from 20 to 30 and 40 per cent., while inferior paper cannot be negociated on any terms. The Act of 1844 has made such ruinous fluctuations, or anything approaching to them, impossible in this country, and on that ground alone, were there none else, it is entitled to the support of all save the merest gamblers.

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While, however, the commercial vicissitudes which take place in this country are trifling compared with those that take place in the United States, they are also much less severe than those which occurred prior to the Act of 1844. But no one ever said or supposed that that Act, or that any other possible Act, would free us entirely from such vicissitudes. Its object was to insure at all times the equality of gold and paper, and to redress an adverse exchange. But though these great ends be completely effected, we are still necessarily left to contend with such evils as may result from the revulsions and contingencies inseparable from our enormously extended credit and commercial systems. Speculation, and the miscalculation inseparable therefrom, will continue; credit will be given to those from whom it should be withheld; bad harvests will no doubt recur; American and other extensive importers of our produce, will sometimes fail to make good their engagements; great corporations will sometimes be mismanaged; and mistaken views will sometimes

Money. prevail amongst the public. And the distress occasioned by the occurrence of these and other contingencies, may be severe, long continued, and widely diffused. But while, on the one hand, the bubble of unnatural prosperity is no longer inflated, as was formerly the case to a vast extent, by issues of spurious paper, so, on the other, the suffering and distress caused by the subsequent revulsion, are no longer inflamed and aggravated by their withdrawal or destruction.

The truth is, that no commercial crisis has been, or can be, averted by making issues of fictitious paper. On the contrary, by improperly bolstering up parties not entitled to credit, and by preventing that timely contraction of the currency which is necessary to correct an adverse exchange, they invariably tend to increase the mischief they are meant to alleviate. To tamper with the currency, except under the exigency of internal discredit or of a panic, is a totally inexcusable proceeding. Having adopted gold for the standard of our money, it is our bounden duty to keep such paper as is substituted for gold, on a par with it. Indeed it would be quite as correct to say that a commercial crisis may be mitigated by a change in our measures of length, capacity, or weight, as by a change in our measure of value.

Currency not limited by Act of 1844.

It is further objected to the Act of 1844, that it "limits the currency;" that it makes no provision for the increasing demands of the public; and confines us, in 1857, when the exports will probably exceed 120 millions, to the same amount of money as in 1844, when the exports did not exceed 58½ millions. But though this statement has been made by parties who ought to have known better, the reader can hardly require to be told that it is completely destitute of foundation. The £14,000,000 issued on securities, is the only thing that is limited in the Act; every thing else varies with the varying condition and circumstances of the country, including the means by which the use of money may be economised. In the week ended the 29th of August 1857, the issue department of the bank had issued notes to the amount of £25,323,965, being no fewer than £11,323,965 over and above the amount authorised to be issued on securities. And if the country had really required a larger supply of money, that is, if more coins, or paper equivalent to coins, could have been absorbed into the circulation without rendering the currency redundant, and depressing the exchange, the additional quantity would have been forthwith supplied. For, under such circumstances, merchants, bankers, and money-dealers, would have realised a certain and immediate profit by carrying bullion to the mint or the bank, that they might obtain coins, or notes, or both, with which to increase the currency. It is one of the chief merits of the Act of 1844, that, under its agency, the supply of money is not to any extent or in any degree regulated or influenced by the proceedings of the bank, or the government. They have nothing to do in the matter, unless it be to coin the bullion which individuals or firms carry to the mint for that purpose, and to exchange, when called upon, notes for coins, and coins for notes. The supply of money, like that of all non-monopolised articles, is wholly dependent upon, and is determined by the free action of the public. It would, indeed, be quite as true to say, that the Act of 1844 limits the amount of corn, of cloth, or of iron produced in the country, as that it limits the amount of money. It maintains the value of the notes issued by the bank on a level with the coins for which they are substitutes; but beyond that its effect is *nil*. It has nothing whatever to do with the greater or less amount of the currency. That depends entirely on the estimate formed by the public of its excess or deficiency, an estimate which, when wrong, is sure to be corrected by the exchange. Money.

We may add, that no inference can ever be safely drawn from the number of notes or coins, or both, afloat in a country, as to whether its currency be, or be not, in excess. That is to be learned by the state of the exchange, or by the influx and efflux of bullion. If the imports of bullion exceed the exports, it shows that the currency is in some degree deficient; while, if the exports exceed the imports, it shows that the currency is in excess, and that no additions can be made to it without farther depressing the exchange and increasing the drain of bullion. When the imports and exports of bullion are about equal, then of course the currency is at about its proper level. These are the only criteria by which anything can ever be correctly inferred, in regard to the deficiency or excess of currency. Its absolute amount affords hardly even a basis for conjecture. When there is little speculation or excitement, an issue of 25 or 27 millions bank notes may be in excess; while, at another time, and with a different state of trade and speculation, an issue of 35 or 37 millions of notes may not be enough. Except in periods of internal commotion, or when we are disturbed by alarms of invasion, the state of the exchange is the only, as it is the infallible, test of the sufficiency and insufficiency of the currency.

We may farther state, that those who are in the habit of complaining of the limitation of the currency by the Act of 1844, almost uniformly underrate its amount. We have already seen that, in the week ending the 29th August 1857, the notes issued by the issue department of the bank amounted to £25,323,965, of which £5,999,790 were in the banking department of the bank, leaving a balance of £19,324,175 in the hands of the general public; and this latter sum is, we are told, the real amount of the issues. But this is falling into the rather serious blunder of mistaking a part for the whole. The notes in the banking department of the bank make not only a part, but a most important and active part, of the currency of the country. They constitute the means, along with the bullion in the same department, with which the bank carries on her banking business, and are as evidently a portion of the currency as the notes in the tills of private bankers and the pockets of individuals. The notes in the banking department of the bank must therefore never be omitted in estimating the amount of notes in circulation. The latter, and the notes out of the issue department, are identical; and, in a general point of view, it matters not a straw whether they are in the hands of the banking department of the bank or of individuals.

Notes in the banking department of the bank an important part of the currency.

We have seen that bills of exchange, about which so much is said, though they serve some of the purposes of money, are not money. But whether the amount of them in circulation be great or small, and whether they be drawn at long or short dates, though highly important in other respects, has no reference to, or bearing upon, this question. When from any cause, whether from an excess in the amount of bills, or notes afloat, the currency becomes redundant, the exchange is depressed, and notes are sent to the issue department of the bank to be exchanged for gold, which is forthwith exported. And it is by the immediate action of the adverse exchange upon notes, and the consequent influence of the contraction of the latter upon bills, that the amount of the currency is lessened, its value raised, and the exchange brought to par. At such periods there is usually more or less of mercantile pressure, and a greater demand for discounts and pecuniary accommodation. This leads to a rise in the rate of interest; but no change in this rate has any

Mercantile pressure not aggravated by Act of 1844.

Money. influence over the currency, except in so far as its rise may diminish, and its fall may increase, the demands upon the bank for loans. A system of this sort effectually prevents any great excess of bills from ever getting into the market; and thus checks, *in limine*, what would otherwise be the most copious source of wild speculation, overtrading and bankruptcy.

The operation of the present system during the late war with Russia, was in all respects eminently satisfactory. It stood in the way of no legitimate transaction, of no fair exercise of the credit, either of the state, or of individuals. But as it was a powerful obstacle to the creation of artificial credit, it was eminently unpopular with those who supposed they would profit by such abuse. It is doubtful, indeed, had the war continued for two or three years longer, whether government might not have been compelled to resort to an inconvertible paper, and consequently to place the property of the public, and of every individual, at the mercy of its issuers!

It is, therefore, wholly untrue to say that the Act of 1844 aggravates the severity of any mercantile pressure that may occur. Its practical effect is to do what other Acts professed but failed to do, that is, to make paper and gold precisely of the same value, and to insure the immediate conversion of the former into the latter. This is what the Act of 1844 really does. And to say that this aggravates either pressure or distress, is equivalent to saying that it would be aggravated by employing a purely metallic currency, or by maintaining a practically invariable measure of value, which is absurd. A gold currency interposes no obstacle to the free transfer of capital from one party to another, and has in truth no influence of any sort over its distribution, its employment, or the rate of profit. How, then, can it either occasion distress, or add to its pressure? It is not difficult to discover, in the stimulus given to emigration and industry by the discovery of the Californian and Australian gold fields, in the destruction of capital occasioned by the late war, in the hoarding now going on in India, China, and other countries, in the improvement of industry and the extension of commerce, and in the various schemes afloat, the causes of the present high rate of interest. But whatever they may be, the equality of gold and paper in England cannot be one of them. Neither can it be said to be occasioned by a scarcity of gold, for we have exported it to all parts of the continent; and interest is more than three times as high in California, and more than twice as high in Australia, in both of which gold is comparatively cheap, as in the United Kingdom.[1]

It is quite true, that if the check on the issue of paper were less cogent than at present (1857), parties might, perhaps, be tempted to lend it at less than 6 or 5, or even 4 per cent. But, down to a very late period, the currency, as shown by the exportation of gold, was really redundant; and hence it is obvious, that the issues now referred to, supposing they had been made, would, by making it still more redundant, have depressed the exchange to a still greater extent, and proportionally increased the drain for gold. Every device of this sort, that is, every attempt to obviate a foreign drain by encroaching on the integrity of the currency, is sure to lead to mischief. It may, like drams administered to a person with a broken-down constitution, have a momentary effect, but the collapse is inevitable, and is sure to be ruinous in proportion to the previous abuse of the stimulant. Money.

Proposal for vesting the issue of notes in the hands of government commissioners.

It may be said, perhaps—for there is no end of apologies for whatever is vicious—that if the issue of notes were in the hands of government, the entire profit accruing thereon would belong to the public. But supposing such to be the case, the difference between that profit, and that which is or may be realized under the present system, would either be nothing at all, or so inconsiderable as to be wholly unworthy of attention. It will be afterwards seen that at this moment the public receives by far the greater part of the profit made by the bank on the fixed issue of £14,000,000, and if it be deemed expedient, that part may be still further increased, or turned into the lion's share. Assuming, therefore, for a moment, that the power to issue notes is vested in government commissioners, it is not pretended that these notes are to be legal tender. Nothing so monstrous as that could be thought of, or at all events, durst be proposed. The notes issued by the commissioners, like those issued by the bank, must be paid on demand. But to do this, a stock of bullion must be provided; and unless the plan now followed were adopted, and all issues above the amount of £14,000,000, or thereby, were made upon deposits of bullion, the public would not have that perfect security which is given them by the present system, and which is worth more than ten times all the profits arising out of the fixed issue. Even under the old system, or that which existed previously to 1844, the rule of the bank was to keep a stock of bullion on hand equal to a third part of her issues. But this rule was not, and in truth could not, be acted upon. It is plain, however, had it been *bona fide* carried out, that the profits on the issue of notes would not have been materially, if at all different, from what they are at this moment. Nothing, therefore, can be more completely futile than the talk about the large profits that would accrue to the public by vesting the power to issue notes in commissioners appointed by government. With the same security as at present for the conversion of the notes into coin, nothing would be gained by such appointment; and if, as would most likely be the case, it lessened the security referred to, and added to the chances of over-issue and mismanagement, the injury to the public hence resulting might be enormous. We, therefore, are disposed to believe, that of the various proposals in regard to the currency, that which proposes to vest the issue of notes in the hands of government commissioners, is one of the most objectionable. The chances are ten to one that they would act as directed by the government of the day; and this, at all events, would be popularly assumed to be the case. Supposing, however, that they did nothing of the sort, but were perfectly independent, still it is obvious, that whatever they did more or less than is done at present, would be mischievous. And such being the case, it is not easy to see what advantage would be gained by their appointment; while it would have the serious disadvantage of making government directly responsible, in the public estimation, for whatever inconvenience might at any time be supposed to result from the limitation of the currency.

Another class of opponents to the Act of 1844, though

[1] Among the many charges which have been made against the Act of 1844, one of the most extraordinary, if not the most absurd is, that it doubles the intensity of all demands for bullion on the bank, or converts a demand for one million into a demand for two! A million of notes are got, it is said, from the banking reserve of the bank, and these being sent to the issue department, are exchanged for gold, so that the bank has sustained a loss of *two* millions. It is singular that so obvious a fallacy should have been put forward. The gold in the issue department does not belong to the bank, but to the note-holders, so that she sustains neither loss nor injury by its being withdrawn. In this case, and in all cases of the sort, the notes in circulation are reduced a million, and their equivalent in gold is exported.

but a small minority, take a different ground from most of those already noticed, and contend not that the Act is too strict, but that it is not strict enough. According to their view of the matter, no notes should be issued on securities. And they propose, conformably to their theory, that the issue of notes should be transferred from the bank to the mint, and that none should be issued except upon the deposit of a corresponding amount of bullion. This project, however, were it adopted, would not be productive of any advantage of any kind whatever, while it would abstract more than fourteen millions of capital from useful purposes. There is not, as already seen, the smallest chance that, under ordinary circumstances, or in the absence of internal commotion or panic, the issue of bank-notes will ever be reduced so low as £14,000,000; and it is therefore quite enough for every purpose of security, that the notes above that limit should be issued on deposits of bullion. How invaluable soever, it would be absurd to make greater sacrifices in favour of security than what are sufficient to obtain it in its most perfect state; and these are fully realized by the Act as it now stands.

Proposal to have notes issued by the mint on deposits of gold.

It is argued, indeed, by those who have brought forward this scheme, that it would greatly improve the conduct of the bank, and that there would henceforth be fewer fluctuations in the rate of interest, and so forth. But every one must see that those who make such statements confound the proceedings of the bank as issuer of notes, with her proceedings as a great banking association. In truth and reality, however, the former have no connection with the latter; and are conducted precisely as they would be were the suggestion now under consideration to be adopted. In her proceedings as a great banking company, the bank is necessarily affected by all those circumstances which affect the trade and industry of the empire and the world, the state of the exchange, the demand for discounts and loans, and so forth. She must act accordingly, and adapt her measures to the varying wants and exigencies of society. But it is indifferent to the banking department of the bank, whether the notes which are used by it are obtained by carrying an equivalent amount of gold to the issue department, or to any other place. And such being the case, it is clear that the proposed plan, were it adopted, would obviate none of the inconveniences, if such there be, that attach to the present system, while it would introduce others which at present have no existence. For it would occasion a waste of the national resources by unnecessarily locking up fourteen millions of gold; and it would place the issue of paper, where it never ought to be placed, in the hands of government officers. But it is needless to enlarge further on a scheme which is sure to be repudiated by all parties.

Act of 1844 restrains country issues.

The objections to the Act of 1844 are so various and so opposite that they are not easily recollected. Sometimes we are told that it is inconsistent with itself and incomplete, and that it deals stringently with the Bank of England, while it hardly interferes with the country banks. But this is an unfair representation. In dealing with the country banks the Act may not have gone quite so far as it was desirable it should have gone, or as Sir Robert Peel wished it to go; but it notwithstanding effected, even in that respect, a very great improvement, and really left but little to be wished for.

To prevent future over-issues of country paper, it was enacted, that from and after the passing of the Act, no new bank for the issue of notes should be established in any part of the United Kingdom. And it was farther enacted, that the *maximum* issue of notes by the existing country banks should, in future, be limited to the average amount which they had respectively in circulation during the twelve weeks preceding the 27th April 1844;[1] and various penalties are imposed on those whose issues exceed that fixed amount. It was then, also, ordered that the names of the partners, in joint-stock and other banks, should be periodically published.

These are most important regulations. No doubt it would have been better had provincial issues been entirely suppressed, and Bank of England notes been made the only legal substitute for coins. But in matters of legislation what is practicable is of quite as much importance as what is absolutely just and proper. Sir Robert Peel knew what he could carry through Parliament. Had he attempted more he would not only have failed of his object, but would, most likely, have endangered the success of the other and far more important portion of his measure which related to the Bank of England.

Under the operation of the Act of 1844 the extinction of the country issues is being gradually effected, partly by some of the issuing banks finding it to be for their advantage to use notes of the Bank of England instead of their own, and partly by the winding up of some concerns and the bankruptcy of others. But, owing to the limitation of the issues, comparatively little inconvenience has resulted to the public from the latter circumstance.

On the whole, therefore, there does not appear to be much ground on which to object to the existing arrangements in regard to the country banks. Though not theoretically perfect, their practical deficiences are unimportant. To attempt to obviate them might imperil other and more important arrangements. And we incline to think that the notion that such would be the case has had not a little to do in making them be pressed on the attention of the public.

Suspensions of 1847 and 1857.

But it is said, "that even the best system cannot always be carried to an extreme. The Act of 1844 has had to be suspended in 1847, and again in 1857; and machinery for its relaxation in periods of difficulty should be introduced into it!"

We beg, however, to express our dissent from this doctrine. It would be easy to show that the embarrassment of the banking department of the bank in 1847 was mainly a consequence of the injudicious proceedings of the directors; and it is to be hoped that the experience they acquired on that occasion may not be forgotten. But in whatever way the crisis may have originated, there can be no question that the suspension of the Act in 1847 was a measure of doubtful policy. The exchanges had already become favourable, and it was the prevalent opinion in very well-informed quarters, that the panic which had begun to show itself would speedily have disappeared without the intervention of government. It should never be forgotten that, apart from internal panics, the time when the Act is said to be working harshly and oppressively, is the very time when it is most for the public advantage that it should be honestly carried out.

That such is the case is admitted by the highest authorities, and among others by Mr Hubbard, late governor of the bank. "As limitation of credit paper is," says he, "of the very essence of the Act of 1844, and as limitation operates sensibly only under circumstances of pressure, it is obvious that to evade its stringency because a pressure is felt, is simply to stultify the Act; while again, to admit a provision for extending the

[1] This condition applies only to banks in England and Wales. The issues of those in Scotland and Ireland are limited to the average amount of those in circulation during the twelve months ending the 1st of May 1845. See *post*.

Money. credit issue in the event of difficulties arising from any possible or prospective contingency, would be to encourage overtrading, and foster in the banking community an unwarrantable dependence upon the Bank of England, while they make immoderate engagements, and neglect to maintain an adequate reserve for their own protection."[1]

In regard to the late suspension of the Act, we are, perhaps, too near the occurrence to be able to judge dispassionately of its policy. Owing, in no inconsiderable degree, to the prudence with which the business of the bank has been conducted of late years, there has not been, until very recently, any material amount of mercantile distress. Credit, indeed, is apt at all times to be incautiously and improperly given, and there is uniformly a good deal of overtrading and unwarranted expenditure. But except when a revulsion, or something else occurs to deprive parties who are overtrading of their accustomed accommodations, a system that is rotten at the heart may wear an imposing appearance, and seem to be possessed of that solidity of which it is wholly destitute. When, however, the hollowness of such a state of things is laid bare, it would be a gross abuse to attempt by forced measures to bolster up a parcel of mismanaged, bankrupt or ricketty concerns. Such a proceeding is unjust to all those parties who have conducted their businesses soberly and cautiously; and it tempts others to engage in reckless courses, from believing that government will, in the event of their speculations breaking down and being on a sufficiently large scale, volunteer to keep them on their legs.

This last is a most important consideration. In business matters, as in every thing else, individuals should be taught to rely exclusively on themselves. Those who rely on others are necessarily less industrious, cautious, and provident, than if they had no such dependence. They believe that, when the evil days come, they will be helped out of their difficulties; and they therefore make no provision against them, or none that is adequate. It is not easy to estimate the pernicious influence of the statements that are so frequently put forth, of this, that, and the other house, being in difficulties, and of their having obtained large advances from the bank, or other great associations. In nine cases out of ten these difficulties might have been avoided; and had the parties not been pretty well assured that assistance would be granted, they would not have needed it. They would have confined their engagements, and still more their expenditure, within reasonable limits; and their solvency or bankruptcy would not have depended on the judgment or caprice of any set of men. All applications for relief should be rigorously scrutinised; and those best qualified to form a just opinion on such subjects, are of opinion, that there are but few cases in which it is for the public advantage that they should be complied with. "An avowed system," said the most distinguished merchant of his day, "of leaving things to take their own course, and of not listening to the interested solicitations of one class or another for relief, whenever the imprudence of speculation has occasioned losses, will, sooner than any artificial remedy, reproduce that equilibrium of demand and supply which the ardour of gain will frequently derange, but which the same cause will, when let alone, as infallibly restore."[2]

But, however important, even these principles are not Money. to be carried out at all hazards. The *salus publica* is the first consideration, and to it all others must give way. And if, at any time, it can be shown that that grand principle would be compromised by abiding by the Act of 1844, or by any other Act, then undoubtedly it ought to be suspended. But the necessity for interference must be clearly made out.

> Nec deus intersit, nisi dignus vindice nodus
> Inciderit.

The late revulsion, which grew out of the stoppage of the American banks, is said to be an instance of the kind now referred to. The real value of the exports from this country to the United States amounted in 1856 to £21,476,000, of which a large portion was unpaid when the banks stopped payments; and a further and very large sum was due to us on account of dividends on state, railway and canal stocks, and so forth, held by parties in England. The sudden cessation of so large an amount of payments could not fail to occasion a good deal of distress among the merchants and others dealing with America. And it was among this class, or those intimately connected with it, that the greatest overtrading and abuse of credit had taken place. Some firms in Glasgow, which had been notoriously overtrading for a number of years, were the first to give way. And their failure being on a very large scale, the banks[3] by which they had been principally supported became the objects of suspicion. And from suspicion to distrust there is but a step. Notwithstanding the numbers and wealth of the shareholders responsible for the banks in question, they were subjected to a run on the part of the inferior class of note-holders and depositors, and their resources being either anticipated or locked up, they were obliged to suspend payments. And had they only failed, none could have regretted the result. On the contrary, it would have been nothing more than they deserved, for they had for a lengthened period grossly abused the ample resources at their command, and resorted to the most questionable means to bolster up the speculators with whom they had become identified. But the mischief is, that the disastrous effects of such proceedings cannot be confined to the guilty parties. A fire originating in a pig-stye may destroy a palace. The suspension of the offending banks, by generating uneasy feelings and suspicions in the public mind, led to a run on some of the other banks. And to provide for their own safety these establishments immediately began to sell securities, and to adopt other means, by which to obtain supplies of gold. Large amounts of it were in consequence carried to Scotland. And, in addition to the demand for gold, that for discounts, notwithstanding the high rate of ten per cent. charged by the bank, continued undiminished, so that the reserve in her possession was reduced on the 11th of November to £1,462,153; and it was the general belief, that this inadequate reserve would be forthwith either much reduced or wholly swallowed up. To avert the possibility of such an event occurring, the directors were authorised, on the 12th of November, to issue notes without being bound by the conditions of the Act of 1844.[4]

This, though a brief, is, we believe, a sufficiently

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[1] Letter of Mr. Hubbard to the governor of the bank, October 1856.

[2] Tract by the late Alexander Baring, Esq. (afterwards Lord Ashburton), on the Orders in Council, 1808.

[3] The Western Bank, and the City of Glasgow Bank, but especially the former.

[4] We subjoin a letter by the governor and deputy-governor of the bank, illustrative of the circumstances referred to:—

"*Bank of England, December* 2, 1857.

"My Lord and Sir,—We have the honour to acknowledge the receipt of your letter of the 27th inst., requesting 'such an explanation with respect to the course which the directors of the Bank of England have pursued in regulating their issues of notes since the 12th inst. as they may be able to furnish for the information of Her Majesty's Government.'

Money. accurate account of the circumstances that led to the suspension of the Act in 1857. The weight to be attached to them will be differently estimated by different individuals. The suspension is believed by some to have been, at least, premature, and others think that probably it might have been avoided. It is alleged that the panic in Scotland had begun to subside previously to the measure being adopted; and it was all but certain that when it had subsided, a considerable portion of the gold that had been sent to Scotland would speedily find its way back to London, and some considerable risk and inconvenience should have been encountered rather than that measures should have been adopted, the effect of which will be to protect speculators and money dealers without capital, and wanting alike in character and conduct, from the consequences of their unjustifiable proceedings. But, at the same time, we admit that the immediate exposure and punishment of these parties, however desirable, was not to be purchased at the risk of a general revulsion. And as the information laid before ministers made them believe that such a calamity was imminent unless the statute of 1844 was suspended, they were bound to act upon that conviction, and to provide *ne quid detrimenti respublica capiat.*

But whatever may be thought of these conclusions, it is at all events certain that the Act of 1844 had nothing whatever to do with the late revulsion. It did not occasion the American stoppage, and under its operation the foreign drain for gold had been entirely stopped; and though it could not prevent the abuses in banking, and the system of rediscounting and overtrading in which so many banks and firms have been engaged, it contributed in no ordinary degree, by preventing the issue of spurious paper, to confine them within comparatively narrow limits, and to lessen the violence of the crisis.

The Act of 1844 is a rule to be enforced in all but extraordinary and unforseen emergencies, the urgency of which cannot be appreciated beforehand, but must be determined at the moment. But when these occur, it may, like the *Habeas Corpus* Act, be properly suspended. It is mainly calculated to regulate our currency by the exchanges, or through our commercial intercourse with other countries; but it is not applicable, nor is any system of which the convertibility of paper into coin makes a part applicable to a state of internal discredit or panic. Had it existed in 1797, it must have been suspended; and its suspensions in 1847 and 1857 are only to be justified by the state of our domestic affairs making an adherence to principle inexpedient and impracticable. But, whenever the circumstances referred to, that is, when the panic and distrust that occasion the suspension of the Act subside, then it should be revived in its pristine vigour. The *Habeas Corpus* Act is not the less efficient at this moment that it has been repeatedly suspended in periods of danger and difficulty. Money.

Inasmuch, however, as the Act of 1844 has been suspended in cases of emergency, and as there can be no doubt that it will be suspended, if occasion require, in time to come, it may be supposed, perhaps, to be indifferent whether such suspension should be effected as hitherto by the *pro re nata* interference of ministers, or whether a suspensive power should be embodied in the Act. We believe, however, that the present plan is much the best of the two. When government interferes to suspend the Act, the necessity under which they are now placed of applying to Parliament for an indemnity, and the discussions thence arising, are the best securities that can be obtained for the measure not being resorted to rashly, or without a reasonably good cause. But it would be quite another thing did the Act contain a clause authorising suspensions. This would show that

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"In complying with this wish it may be well to allude to the position of the Bank of England accounts anterior to the receipt of the letter of the 12th.

"On the 24th of October the bullion in the issue department was £8,777,000; the reserve £4,079,000; the notes in the hands of the public, £19,766,000; the discount and advances, £10,262,000; and the deposits, £16,126,000; the rate of discount at the bank being eight per cent. for bills having not more than 95 days to run.

"In the following week a great shock of credit and a consequent demand on the Bank of England for discounts arose from the failure of the Liverpool Borough Bank, whose rediscounted bills were largely held by the bill-brokers and others in London. The effects of this and other failures, however, up to this time, had not occasioned any alarming pressure on the resources of the bank, or great disquietude in commercial affairs in London.

"On the 5th of November the reserve was £2,944,000, the bullion in the issue department £7,919,000, and the deposits £17,265,000. The rate of discount was advanced to 9 per cent., and on the 10th of November to 10 per cent.

"The Continental drain for gold had ceased, the American demand had become unimportant, and there was at that time little apprehension that the bank issues would be inadequate to meet the necessities of commerce within the legalized sphere of their circulation.

"Upon this state of things, however, supervened the failure of the Western Bank of Scotland and the City of Glasgow Bank, and a renewed discredit in Ireland, causing an increased action upon the English circulation by the abstraction in four weeks of upwards of two millions of gold to supply the wants of Scotland and Ireland; of which amounts more than one million was sent to Scotland and £280,000 to Ireland between the 5th and 12th of November.

"This drain was in its nature sudden and irresistible, and acted necessarily in diminution of the reserve, which on the 11th had decreased to £1,462,000, and the bullion to £6,666,000.

"The public became alarmed, large deposits accumulated in the Bank of England, money dealers having vast sums lent to them upon call were themselves obliged to resort to the Bank of England for increased supplies, and for some days nearly the whole of the requirements of commerce were thrown on the bank. Thus, on the 12th, it discounted and advanced to the amount of £2,373,000, which still left a reserve at night of £581,000.

"Such was the state of the Bank of England accounts on the 12th, the day of the publication of the letter from the Treasury. The demand for discounts and advances continued to increase till the 21st, when they reached their *maximum* of £21,616,000.

"The public have also required a much larger quantity of notes than usual at this season, the amount in their hands having risen on the 21st to £21,554,000.

"The Bank have, since the 12th, under the authority of the letter from the Treasury, issued £2,000,000 of notes in excess of the limits of the circulation prescribed by the Act of 1844, and have passed securities to the issue department to that amount.

"That, however, is not the measure of the amount actually parted with by the Bank, which has not exceeded £928,000, the remainder of the £2,000,000 having been retained as a reserve of notes in the banking department, which, at the same time, also held £407,020 in coin.

"We subjoin a statement of accounts from the 11th of November to the 28th inclusive, from which it will be apparent that the Bank continued to meet all the demands for discounts and advances, on approved securities, to remedy the commercial discredit and distress mentioned in your letter of the 12th inst., 'as occasioned by the recent failure of certain joint-stock banks in England and Scotland, as well as of certain large mercantile firms chiefly connected with the American trade,' and aggravated by the subsequent embarrassment of large joint-stock banks.

"In discounts and advances the sum supplied to the public between the 12th of November and 1st of December amounted in the aggregate to £12,645,000.

"To the Right Hon. the First Lord of the Treasury and the
"Right Hon. the Chancellor of the Exchequer.

SHEFFIELD NEAVE, *Governor.*
BONAMY DOBREE, *Deputy-Governor.*"

they were expected, and, indeed, almost invited. Under such circumstances, they would soon come to be regarded as matters of course, and to be resorted to whenever a complaint or cry of monetary pressure was got up. And were such the case, it would be idle to suppose, that either the Act or the convertibility of notes should be maintained for any considerable period. The millennium of the paper-mongers would be at hand. When the checks which with difficulty restrain over-issue, depreciation, and fraud, are repealed or rendered inefficient, what are we to expect but that they should extend their baleful influence on all sides?

If we are right in these statements, it follows that the Act of 1844 should be indefinitely continued with little or no alteration. We are well convinced that all the most important interests of the country will be best secured by such a proceeding.[1]

Sect. VI. *Management of the Bank of England.*

Bank-notes made legal tender everywhere except at the bank.

When the charter was renewed in 1833, the notes of the Bank of England were made legal tender everywhere in England except at the bank. Of the wisdom of this regulation no doubt can be entertained. Bank-notes are necessarily always equivalent to bullion; and by making them substitutes for coin at country banks, the demand for the latter during periods of alarm or runs is materially diminished, and the stability of the bank and of the pecuniary system of the country proportionally increased.

Since 1826 the bank has established branches in some of the great commercial towns. The mode and terms of conducting business at which have been described as follows:—

Account of branch banks.

"The branch bank at Swansea (and the same is true of those established in other places) is to be a secure place of deposit for persons having occasion to make use of a bank for that purpose; such persons are said to have *drawing accounts:* to facilitate to the mercantile and trading classes the obtaining discounts of good and unexceptionable bills, founded upon real transactions, two approved names being required upon every bill or note discounted; these are called *discount accounts.* The applications of parties who desire to open discount accunts at the branch are forwarded to the parent establishment for approval, and an answer is generally received in about ten days. When approved, good bills may be discounted at the branch without reference to London. Bills payable at Swansea, London, or any other place where a branch is established, are discounted under this regulation. The dividends on any of the public funds, which are payable at the Bank of England, may be received at the branch, by persons who have opened 'drawing accounts,' after signing powers of attorney for that purpose, which the branch will procure from London. No charge is made in this case, except the expense of the power of attorney and the postages incurred in transmitting it. Purchases and sales of every description of government securities are effected by the branch at a charge corresponding to that made by the local bankers where the branch is situated. A commission, including brokerage in London, and all expenses of postage, is charged on paying at the Bank of England bills accepted by persons having drawing accounts at Swansea, such bills to be advised by the branch; also for granting letters of credit on London, or on the other branches. The branch grants bills on London, payable at seven days' date, without acceptance, for sums of £10 and upwards. Persons having drawing accounts at Swansea may order money to be paid at the bank in London to their credit at Swansea, and *vice versâ*, at a charge of 6d. in lieu of postage. The branch may be called upon to change any notes issued and *dated* at Swansea; but they do not change the notes of the bank in London, nor receive them in payment, unless as a matter of courtesy where the parties are known. Bank post bills, which are accepted and due, are received at the branch from parties having drawing accounts, and taken to account without any charge for postage; but unexcepted bank post bills, which must be sent to London, are subject to the charge of postage, and taken to account when due. No interest is allowed on deposits. No advance is made by the branch upon any description of landed or other property, nor is any account allowed to be overdrawn. The notes are the same as those issued by the parent establishment, except being dated Swansea, and made payable there and in London. No note issued exceeds the sum of £500, and none are for a less amount than £5."

But though it might have been advisable to establish offices in Manchester, Birmingham, and one or two more great towns, for the interchange of bank-notes and gold, we much doubt whether the establishment of the branch banks has been advantageous. Speaking generally, it may be laid down that local affairs are best conducted by local agencies; and this is believed to be especially the case in banking. It is a business which is most likely to flourish when those by whom banks are established in country districts belong to those districts, and are well acquainted with the character and pursuits of those with whom they deal.

Bank of England in connection with the government.

The Bank of England transacts the whole business of government. "She acts not only," says Adam Smith, "as an ordinary bank, but as a great engine of state. She receives and pays the greater part of the annuities which are due to the creditors of the public; she circulates exchequer bills; and she advances to the government the annual amount of the land and malt taxes, which are frequently not paid till some years thereafter."

Assistance rendered by bank to the mercantile interest.

The greater part of the paper of the bank has generally been issued in the way of advances or loans to government, upon security of certain branches of the revenue, and in the purchase of Exchequer bills and bullion; but her issue through the medium of discounts and advances to individuals has also been at all times considerable, while during war, and in periods of distress, it is occasionally very great. Generally, however, the directors do not appear to have thought it advisable to enter into any very keen competition with private bankers in the discounting of mercantile paper. And hence it is that the rate of interest charged by the bank for loans being usually equal to, and sometimes rather above the market rate, comparatively few applications are made to her, in ordinary periods, for discounts. But, at the same time, every one who has any reasonable security to offer, knows where they may always be had; while the rate of interest charged by the

[1] We earnestly recommend those who may have any doubts in regard to this conclusion, to read and study the evidence of Lord Overstone before the Bank Acts Committee of 1857. It cannot fail to carry conviction to every one in the least familiar with such subjects, and is a most masterly and indeed triumphant vindication of the Act of 1844, and of sound monetary principles. It embraces, discusses, and exhausts the fundamental principles of paper money and banking. It were much to be wished that it were published separately.

Of the opponents of the Act of 1844, the writers in the *Economist* are at once the most reasonable, ingenious, and able. Those, however, on whom their lucubrations may have made an impression, will probably be restored to the sound faith if they read over the pamphlet of Mr. Arbuthnot of the Treasury. He has shown the fallacy of many of the statements and conclusions of the writers referred to, as well as of others, and has set the practical working of the Act of 1844 in a clear light.

Money. bank necessarily forms a *maximum* rate which no other establishment can exceed. When, however, any circumstances occur to occasion a pressure in the money market, or a difficulty of obtaining accommodations in the usual channels, the market rate of interest generally rises to the rate fixed by the bank, how high soever that may be, and on such occasions the private bankers, and the public generally, resort to the bank for aid. She then becomes, as it were, a *bank of support;* and has, as such, on various occasions, rendered good service to public credit, and to the commercial interests of the country.

But, at the same time, it must be admitted that the interference of the bank in assisting the commercial interest is a matter that requires the greatest consideration, and that it can only be safely undertaken in rare instances and under very peculiar circumstances. We repeat again, that however a drain for gold may originate, the fact of its existence shows conclusively that gold is more valuable abroad than here, and consequently that the currency is redundant and ought to be diminished. Under such circumstances, it is the imperative duty of the directors, if they would prevent the total exhaustion of their banking reserve, not to fill up the vacuum caused by the exchange of notes for bullion, by the issue of fresh notes. It is at such periods, no doubt, that the applications for assistance are the most urgent; but it is impossible to yield to them, and at the same time to enforce that systematical and continuous reduction of the issues which is indispensable for the safety of the banking department of the bank. She can no longer assist herself as on former occasions, by making fresh issues of paper. And in truth that resource was of no real advantage to her, but the reverse. It tempted her to disregard those great principles and warnings which never can be neglected with impunity. The great commercial crises that took place in 1793, in 1815-16, in 1825, and in 1836-39, were all increased in violence and destructiveness by the bank declining to narrow her issues immediately on the exchange becoming unfavourable, and deferring her repressive action till too late a period.

ethods which e bank ty reduce r issues.

When the bank sets about reducing her issues, she may effect her object in various ways, viz., by rejecting a portion of the bills sent to her for discount, by raising the rate of interest at which she discounts or makes advances, by shortening the dates or *echèance* of the bills which she negociates, and by selling bullion and securities. Of these means, some may be more or less expedient at one time, and some at another. On the whole, however, the first mode, or the rejection of bills, seems to be, in all respects, the most objectionable. The bank will not, of course, discount any bill in regard to the payment of which there can be any reasonable doubt. And when the solidity of the bills offered for discount cannot be objected to, it becomes an invidious, if not an unjust proceeding, to discount some and reject others. Under such circumstances, the true plan is to raise the rate of interest, for while such rise operates equally and universally, it makes rich parties, or those who can avail themselves of other means of accommodation, withhold their demands, and thus effects its object in the fairest and easiest way, and without sacrificing individuals.

Inasmuch, however, as any sudden rise in the rate of discount, especially if it be considerable, is always productive of more or less inconvenience to the mercantile world, it may be proper, when the exchange becomes unfavourable, to endeavour to restore it to par by shortening the dates of bills, and if circumstances will permit, by selling bullion and securities. But, at all events, the redundancy of the currency must be got rid of, and the exchange redressed; and if the other means at the disposal of the bank be inadequate to effect this object, a rise in the rate of interest should be at once resorted to, and carried to the necessary extent. Money.

It may be observed, with respect to the sale of securities, that they may be wholly or partly paid by drafts against deposits held by the bank. But, if so, it is clear that, at all events, her debts, or the obligation under which she lies to pay notes or gold to depositors when demanded, will be in so far reduced.

The fact that the applications for discounts at the bank are usually most numerous, when the rate of discount is highest, has made some doubts be entertained in regard to the efficacy of a rise in that rate to raise the value of the currency, and restore an unfavourable exchange to par. But the additional demand for discounts, on the occasions referred to, is most commonly a consequence of the increased difficulty of obtaining them in other quarters; and when the rate of discount becomes unusually high, apprehensions of a revulsion begin to be entertained, and bankers and others carry bills to the bank, not that they may get gold to send abroad, but that they may provide for their own security, by getting a supply of notes or gold, or both, to keep in reserve. And it is further to be observed, that the rise in the rate of interest, whether it be, as it usually is, the result of capital becoming scarcer or more productive, or of a temporary increase in the demand for money, uniformly operates to hinder the exportation of the latter. That such is the case is evinced by what took place in 1825, and in 1836-37. And on the recent occasion, notwithstanding the large sums lent by the bank on bills and advances of one sort or other, the ten per cent. rate of interest charged by her was sufficient to stop the efflux of bullion to the Continent and the United States; and, but for the abuse of credit by some private establishments, the restoration of the exchange to par would have been effected without any internal revulsion.

Mischievous effects of discounting bills at long dates.

The Bank of England rarely discounts bills that have more than two, or at most three, months to run, and it were well were this rule generally observed by other establishments. The discounting of bills at long dates is a powerful stimulus to unsafe speculation. When individuals obtain loans which they are not to be called upon to pay for six, twelve, or, perhaps, eighteen months, they are tempted to adventure in speculations which are not expected to be wound up till some proportionally distant period, and as these not unfrequently fail, the consequence is that, when the bills become due, there is commonly little or no provision made for their payment. In such cases the discounters, to avert an imminent loss, sometimes consent to renew the bills. But, while a proceeding of this sort is rarely productive of ultimate advantage to either party, the fact of its having taken place makes other adventurers reckon that, in the event of their speculations proving to be less successful than they anticipated, their bills will be treated in the same manner, and thus aggravates and extends the evil.

In other respects, too, the discount of bills at long dates, or their renewal, or the making of permanent loans, is altogether inconsistent with sound banking principles, for it prevents the bankers from having that command over their resources which is advantageous at all times, and indispensable in periods of difficulty or distress.

Distinction between real and accommodation bills.

In the discounting of bills, a great deal of stress is usually laid, or pretended to be laid, on the distinction between those that arise out of real transactions and those that are fictitious, or that are intended for accommodation purposes. The former are said to be legitimate, while the latter are stigmatised as illegitimate.

Money. But Mr Thornton[1] has shown that the difference between these two classes of bills is neither so well marked nor so wide as most persons suppose. A notion seems to be generally entertained that all real bills are drawn against produce of one sort or other, which, or its value, is supposed to form a fund for their payment. Such, however, is not always, nor even most commonly the case. A, for example, sells to B certain produce, for which he draws a bill at sixty days' date. But prices are rising, trade is brisk, or a spirit of speculation is afloat, and in a week or two (sometimes much less), B sells the produce at an advance to C, who thereafter sells it to D, and so on. Hence it may, and in fact frequently does happen, that bills amounting to four, five, or even ten times the value of a quantity of merchandise, have grown out of its successive sales, before the first bill of the series has become due. And not only this, but bills are themselves very frequently rediscounted; and in this case the credit of the last indorser is generally the only thing looked to; and there is not, perhaps, one case in ten in which any inquiries are made in regard to the origin and history of the bills, though they are often of the most questionable description.

On the whole, therefore, it would seem that the real or presumed solidity of the parties signing a bill, and responsible for its payment, is the only safe criterion by which to judge whether it should or should not be discounted. But the fact of a merchant or other trader offering accommodation bills for discount ought unquestionably to excite a suspicion that he is trading beyond his capital. Inquiries of the most searching description should forthwith be instituted; and unless satisfactory explanations are given, his paper should be rejected. On the same principle, the offering of bills for rediscount ought to awaken suspicions of the bankers and others who resort to so questionable a mode of carrying on business. But, except in so far as a feeling of distrust may be thus very properly excited, there does not appear to be anything in an accommodation bill *per se* to hinder it from coming within the pale of negociability. It is a mode of obtaining a loan from a bank; and when the character of the bill is known to the banker, or is openly declared, it does not appear to be an objectionable mode.

Besides bills avowedly intended for accommodation purposes, another and a different variety of such bills is drawn by parties at a distance from each other, often men of straw, and made to appear as if they were bottomed on real transactions. And we are sorry to say, that bills of this sort are always current, and often to a large extent. Of course no person of respectability can be knowingly connected with such bills, which are almost always put in motion either to bolster up some bankrupt concern, or to cheat and defraud the public. But despite the mischief of which they are productive, it appears to be pretty generally supposed that the currency of these bills is an evil which cannot be prevented. There can, however, be no real doubt that it may, at all events, be very greatly diminished; and this desirable result would be effected were it enacted that all bills shall henceforth bear upon their face what they really are. That those that are intended for accommodation purposes shall have at their head the words "*Accommodation Bill;*" and that those only shall bear to be for "value received" that have grown out of *bonâ fide* transfers of property. An enactment of this sort could not be felt as a grievance by any one unless he had a fraudulent purpose in view. And were the impressing of a false character on a bill made a criminal offence punishable by three years' imprisonment, or some such penalty, there is every probability that a formidable check would be given to the issue of spurious bills, and to the manifold abuses to which the practice gives rise. Money.

Bill-discounters who have got fictitious paper on their hands, and attempt, as has been done, to get rid of it by concealing its character, or representing it in a favourable light, make themselves parties to the fraud. Such conduct is so very flagitious, that when it can be fairly brought home to the parties, it should subject them to the severest penalties.

The rates of discount charged by the bank, since its establishment in 1694, down to the present time (1857), have been as follows:— Rates of discount charged by bank.

From	Aug. 8, 1694	to Aug. 30, 1694	on	Foreign bills . .	6 per cent.
...	Aug. 30, 1694	Jan. 16, 1695		Foreign bills . .	4½ ...
...	Oct. 24, 1694	Jan. 16, 1695		Inland bills . .	6 ...
...	Jan. 16, 1695	May 19, 1695		Foreign bills . .	6 ...
...	Jan. 16, 1695	(to customers of the bank)		do. . .	3 ...
...	Jan. 16, 1695	July 26, 1716		Inland bills . .	4½ ...
...	May 19, 1695	Feb. 28, 1704		Foreign bills . .	4 ...
	Do.		on	Foreign bills, not payable at the bank	5 ...
...	Feb. 28, 1704	June 22, 1710		Foreign bills . .	5 ...
...	June 22, 1710	July 26, 1716		For. & Inland do.	4 ...
...	July 26, 1716	April 30, 1719		bills and notes .	5 ...
...	April 30, 1719	Oct. 27, 1720		bills	5 ...
...	Oct. 27, 1720	Aug. 23, 1722		bills	4 ...
...	Aug. 23, 1722	Oct. 18, 1742		Inland bills . .	5 ...
...	Do.	do.		Foreign bills . .	4 ...
...	Oct. 18, 1742	Dec. 12, 1744		Foreign bills . .	5 ...
...	Dec. 12, 1744	May 1, 1746.		do. (15 d. to run)	4 ...
...	Do.	do.		Inland bills . .	5 ...
...	May 1, 1746	April 5, 1773		Foreign bills . .	5 ...
...	May 1, 1746	June 20, 1822		Bills and notes . (95 days to run) .	4 ...
...	June 20, 1822	Dec. 13, 1825		do. .	5 ...
...	Dec. 13, 1825	July 5, 1827		do. .	5 ...
...	July 5, 1827	July 21, 1836		do. .	4 ...
...	July 21, 1836	Sept. 1, 1836		do. .	4½ ...
...	Sept. 1, 1836	July 15, 1838		do. .	5 ...
...	Feb. 13, 1838	May 16, 1839		do. .	4 ...
...	May 16, 1839	June 20, 1839		do. .	5 ...
...	June 20, 1839	Aug. 1, 1839		do. .	5½ ...
...	Aug. 1, 1839	Jan. 23, 1840		do. .	6 ...
...	Jan. 23, 1840	Oct. 15, 1840		65 day bills . .	5 ...
...	Oct 15, 1840	June 3, 1841		95 day bills . .	5 ...
...	June 3, 1841	April 7, 1842		do. .	5 ...
...	April 7, 1842	Sept. 5, 1844		do. .	4 ...
...	Sept. 5, 1844	Mar. 13, 1845		bills	2½ ...
...	Do.	do.		notes	3 ...
...	Mar. 13, 1845	Oct. 16, 1845		minimum rate .	2½ ...
...	Oct. 16, 1845	Nov. 6, 1845		do. .	3 ...
...	Nov. 6, 1845	Aug. 17, 1846		do. .	3½ ...
...	Aug. 17, 1846	Jan. 14, 1847		do. .	3 ...
...	Jan. 14, 1847	Jan. 21, 1847		do. .	3½ ...
...	Jan. 21, 1847	April 8, 1847		do. .	4 ...
...	April 8, 1847	Aug. 5, 1847		do. .	5 ...
...	Aug. 5, 1847	Sept. 23, 1847		do. .	5½ ...
...	Sept. 23, 1847	Oct. 25, 1847		do. .	6 ...
...	Oct. 25, 1847	Nov. 22, 1847		do. .	8 ...
...	Nov. 22, 1847	Dec. 2, 1847		do. .	7 ...
...	Dec. 2, 1847	Dec. 23, 1847		do. .	6 ...
...	Dec. 23, 1847	Jan. 27, 1848		do. .	5 ...
...	Jan. 27, 1848	June 16, 1848		do. .	4 ...
...	June 15, 1848	Nov. 2, 1848		do. .	3½ ...
...	Nov. 2, 1848	Nov. 22, 1849		do. .	3 ...
...	Nov. 22, 1849	Dec. 26, 1850		do. .	2½ ...
...	Dec. 26, 1850	Jan. 2, 1852		do. .	3 ...
...	Jan. 1, 1852	April 22, 1852		do. .	2½ ...
...	April 22, 1852	Jan. 6, 1853		do. .	2 ...
...	Jan. 6, 1853	Jan. 20, 1853		do. .	2½ ...
...	Jan. 20, 1853	June 2, 1853		do. .	3 ...
...	June 2, 1853	Sept. 1, 1853		do. .	3½ ...
...	Sept. 1, 1853	Sept. 16, 1853		do. .	4 ...
...	Sept. 15, 1853	Sept. 29, 1553		do. .	4½ ...
...	Sept. 29, 1853	May 11, 1854		do. .	5 ...
...	May 11, 1854	Aug. 3, 1855		do. .	5½ ...
...	Aug. 3, 1854	April 5, 1855		do. .	5 ...
...	April 5, 1855	May 3, 1855		do. .	4½ ...
...	May 3, 1855	June 14, 1855		do. .	4 ...
...	June 14, 1855	Sept. 6, 1855		do. .	3½ ...
...	Sept. 6, 1855	Sept. 13, 1855		do. .	4 ...
...	Sept. 13, 1855	Sept. 27, 1855		do. .	4½ ...
...	Sept. 27, 1855	Oct. 4, 1855		do. .	5 ...
...	Oct. 4, 1855	Oct. 18, 1855		do. .	5½ ...
...	Oct. 18, 1855	May 3, 1856		65 day bills . .	6 ...
...	Oct. 18, 1855	May 22, 1856		95 day bills . .	7 ...
...	May 22, 1856	May 29, 1856		Minimum rate .	6 ...

[1] On the Paper Credit of Great Britain, cap. 2.

From May	29, 1856 to June	26, 1856 on Minimum rate	5	per cent.
... June	26, 1856 Oct.	1, 1856 do.	4½	...
... Oct.	1, 1856 Oct.	6, 1856 do.	5	...
... Oct.	6, 1856 Nov.	13, 1856 do.	6 and 7	...
... Nov.	13, 1856 Dec.	4, 1856 do.	7	...
... Dec.	4, 1856 Dec.	18, 1856 do.	6½	...
... Dec.	18, 1856 April	2, 1857 do.	6	...
... April	2, 1857 June	18, 1857 do.	6½	...
... June	18, 1857 July	16, 1857 do.	6	...
... July	16, 1857 Oct.	8, 1857 do.	5½	...
... Oct.	8, 1857 Oct.	12, 1857 do.	6	..
... Oct.	12, 1857 Oct.	19, 1857 do.	7	...
... Oct.	19, 1857 Nov.	5, 1857 do.	9	...
... Nov.	5, 1857	do.	10	...

Dividends on bank stock.

The dividends on bank stock, from the establishment of the company to the present time, have been as follows :—

Years.	Dividend.	Years.	Dividend.
1694	8 per cent.	1764	5 per cent.
1697	9 ,,	1767	5½ ,,
1708 }	Varied from 9 to	1781	6 ,,
1729 }	5½ per cent.	1788	7 ,,
1730	6 ,,	1807	10 ,,
1730	5½ ,,	1823	8 ,,
1721	6 ,,	1839	7 ,,
1728	5½ ,,	1852	7½ ,,
1747	5 ,,	1853	8 ,,
1753	4½ ,,	1856	9½ ,,

Bank does not allow interest on deposits.

The Bank of England does not allow, either at the head office in London, or at her branches, any interest on deposits; and in doing so she acts wisely. Notwithstanding the non-payment of interest, she has often very large amounts of deposits on her hands, and were she to pay interest, the probability is that they would be very greatly increased, and might, in periods of difficulty, seriously compromise her safety. At present the bank may either retain deposits or invest them in those securities from which they may be most easily withdrawn. But if she allowed interest, the case would be different, and she would be obliged to look quite as much or more to the profits to be made by investments as to the facility of repossessing herself of funds. We beg, in corroboration of what has now been stated, to draw the reader's attention to the following extract from the evidence of Mr Weguelin, late governor of the bank, before the Committee of 1857 :—

"We," said he, "at the Bank of England, have always considered that the proper functions of a banker were to keep the spare cash of his customer, such cash as his customer required for his daily expenditure, for the sudden demands of his business, and any accidental accumulation which might happen before the customer had occasion to invest it. That is contrasted with the system pursued by the joint-stock banks. The joint-stock bank invites a large deposit by offering a certain rate of interest for the deposit; in point of fact, the joint-stock bank becomes the investor of the money instead of the customer. The customer of a joint-stock bank does not himself invest his own money, but he employs the joint-stock bank to do it, taking the guarantee of the joint-stock bank, and taking, possibly, a lower rate of interest. Now that system, if applied to the Bank of England, would be, I think, very prejudicial to the public interests. It would, in the first place, force upon the Bank of England to invest its reserves much more closely than it does now. If it had to pay interest upon its deposits, it could only do so by investing them in some securities that would pay a higher rate of interest than that which it pays. Its deposits also are of that particular character which would render it still more inexpedient that they should be closely invested. They consist, in the first place, of government deposits, which rise from a low rate at one period of a quarter up to five or six millions higher at another period of a quarter, and again collapse to a very low rate at another period. Again, the private deposits consist, to a certain extent, of the deposits of the bankers and the joint-stock banks of London Those deposits are the amounts which those bankers require to work their own business. Consequently, they are not deposits which should be very closely invested by the Bank of England. In times when there is a great accumulation of deposits in the Bank of England, it is because the public are not able at those times to find investments to their mind to employ those deposits; and consequently, it is not at all likely that the Bank of England, if that is the case with the public generally, will be able to find investments which the public themselves have not been able to do. All these reasons combined would lead me to think that to force a system upon the Bank of England by which it should be obliged to employ its deposits very closely—much more closely than it does at present—would be not only prejudicial and unsafe as regards the Bank of England, but would be prejudicial to the public interest."—*Quest.* 159.

The truth is, that the whole subject of deposits is beset with difficulties. The extent to which it has been already carried has deeply endangered the stability of the banking system, and we have seen that it is indispensable it should be subjected to regulation.

Management of national debt.

Previously to 1786, the bank received an allowance for trouble in paying the dividends, superintending the transfer of the stock, &c., of the national debt of £562 : 10s. a million on its amount. In 1786 this allowance was reduced to £450 a million, the bank being, at the same time, entitled to a considerable allowance for her trouble in receiving contributions on loans, lotteries, &c. This, though long regarded as a very improvident arrangement on the part of the public, was acquiesced in till 1808, when the allowance on account of management was reduced to £340 per million on £600,000,000 of the public debt, and to £300 per million on all that it exceeded that sum, exclusive of some separate allowances for annuities, &c. The impression, however, was still entertained that the allowances for management should be further reduced, and this has been effected in the interim.

Profit on fixed issue.

Exclusive of her functions as public banker, and manager of the public debt, the Bank of England is connected with government through the circulation. We have seen that she is entitled to issue upwards of £14,000,000 upon securities, that is, on the credit of the funds she has lent to government. But for these she receives about 3 per cent. interest, and such being the case, the public is clearly entitled to a portion, if not to the whole amount of the profits realised by the bank on the issue of these £14,000,000. It is difficult to say how much this may amount to. The issue department of the bank seldom re-issues notes, but for the most part destroys them as soon as they are returned to it. This practice is said to be necessary to enable the bank to obviate fraud, by keeping a proper account of the numbers of the notes afloat. An opinion is, however, pretty generally entertained that this might be effected by a less expensive process than that which is now resorted to. And, certainly, it seems to be a very wasteful proceeding, that a quantity of newly manufactured notes issued by the bank in the forenoon, and returned to her in the afternoon, should not be reissued, but consigned to the flames. The Scotch banks are justly censurable for keeping their notes too long afloat, but this is running with a vengeance into the opposite extreme.

But, as it is, the cost of maintaining an issue of £14,000,000 is estimated by the bank at about £113,000 a year; and taking the gross profits of the issue at 3 per cent., or £420,000, the nett profits may be estimated at £307,000 a year; and of this sum the bank pays to government £180,000, viz., £60,000 in lieu of the old charge for stamp duty, abolished in 1844, and a further sum of £120,000, leaving the bank £127,000 for her share of the profits. And so long as the cost of the issues remains at about its present amount, we do not know that there

Money. is much to object to in this arrangement. Probably, however, were the allowance to government further increased by some £50,000 or £60,000, the bank might find means, without injury to the public, of re-issuing her notes, or of otherwise reducing the cost of their circulation. During the year ended the 31st March 1856, the payments made to the bank for managing the national debt and annuities amounted to £95,875.

It should be observed that the responsibility and expense incurred by the bank, in managing the public debt, are very great. The temptation to the commission of fraud, in transferring stock from one individual to another, and in the payment of the dividends, is well known; and notwithstanding the skilfully devised system of checks adopted by the bank for its prevention, she has frequently sustained very great losses by forgery and otherwise. In 1803 the bank lost, through a fraud committed by one of her principal cashiers, Mr Astlett, no less than £340,000; and the forgeries of Fauntleroy, the banker, cost her a still larger sum! At an average of the ten years ending with 1831, the bank lost, through forgeries on the public funds, £40,204 a year.—(*Report on Bank Charter, Appen.* p. 165).

Dead weight. Besides the transactions alluded to, the bank entered, on the 20th of March 1823, into an engagement with government with respect to the public pensions and annuities, or, as they have been more commonly termed, the *dead weight*. At the end of the war, the naval and military pensions, superannuated allowances, &c., amounted to above £5,000,000 a-year. They would, of course, have been gradually lessened, and ultimately extinguished, by the death of the parties. But it was resolved in 1822 to attempt to spread the burden equally over the whole period of *forty-five* years, during which it was calculated the annuities would continue to decrease. To effect this purpose, it was supposed that, upon government offering to pay £2,800,000 a-year, for forty-five years, capitalists would be found who would undertake to pay the entire annuities, according to a graduated scale previously determined upon, making the first year a payment of £4,900,000, and gradually decreasing the payments until the forty-fifth and last year, when they were to amount to only £300,000. This supposition was not, however, realised. No capitalists were found willing to enter into such distant engagements. But in 1823 the bank agreed, on condition of receiving an annuity of £585,740 for *forty-four* years, commencing on the 5th of April 1823, to pay, on account of the pensions, &c., at different specified periods, between the years 1823 and 1828, both inclusive, the sum of £13,089,419.—(4 *Geo.* IV. c. 22).

Mode of transacting banking business at the bank. Formerly the business transacted at the bank was so much encumbered with forms and conditions, that the generality of merchants and ordinary people rarely thought of employing her to keep their money or make their payments. But in this respect an entire change has been effected. Cheques, the minimum amount of which was formerly £10, may now be drawn of any amount, great or small; and all sorts of banking business is conducted with facility and dispatch, and, we may add, with perfect security.

The bank opens banking accounts, or, as they are called, "drawing accounts," for the safe custody, and the receipt and payment of cash, not only with merchants and traders, but with all persons who choose to keep their money at a banker's, and to draw cheques against it. The bank also takes charge of their customers' bills of exchange, exchequer bills, and other securities, and does all that is needful either in the collection of bills of exchange, the exchange of exchequer bills, or the receipt of dividends, and so forth, free of any charge. Plate-chests, and deed and security boxes, may be deposited, free of expense, by customers, for safe custody. The bank looks to the average balance of cash on each account, to compensate for the trouble and expense of keeping it, and in this respect the requirements of the bank are certainly not greater than those of ordinary bankers. No particular sum is required to be lodged on opening an account; it is only necessary that the party should be known as respectable, and in a condition to require a banking account. But the bank receives and holds sums of money for safe custody for parties who have no current accounts.

The following are the regulations under which accounts are conducted:—

1. All letters should be addressed to the chief cashier.
2. It is desirable that drafts should be drawn upon cheques furnished by the bank.
3. Cheques upon city bankers, eastward of King Street, Cheapside,

   Paid in by 12 o'clock may be drawn for after 1.
   Do. 2 o'clock ,, ,, after 3.

4. Cheques paid in after 2, and before 3 o'clock, and cheques upon all other London bankers paid in before 12 o'clock, may be drawn for on the following morning.
5. Cheques paid in after 3 o'clock are sent out at 9 the following morning, and may be drawn for as soon as received.
6. Dividend warrants are received at the drawing office until 4 o'clock in the afternoon for all persons having accounts at the bank.
7. It is requested that notice be given at the drawing office of bills accepted payable at the bank, with the date of their maturity.
8. Persons keeping a drawing account with the bank (although not having a discount account) may tender bills for discount through the drawing office. Application for discounts, or for advances on stock, exchequer bills, &c., must be made before 2 o'clock.
9. Bills of exchange and notes not paid when due, will be noted.
10. The bank will make purchases or sales of British or foreign securities upon an order in writing addressed to the chief cashier; and dividends on stock may be received under powers of attorney granted to the cashiers of the bank.
11. Exchequer bills, bonds, railway debentures, or any other securities may be deposited, and the interest, when payable, will be received and placed to account.
12. Credits paid in to account are received without the bank-book, and are afterwards entered therein without the party claiming them.
13. Notes of country bankers, payable in London, are sent out the same day for payment if paid in before 3 o'clock.
14. The pass-books should be left at the drawing office, at least once a month, to be written up.
15. Where post-bills are required, or a payment is to be made to any office of the bank by cheque on the Bank of England, the cheque must be presented at the office upon which it is drawn, and exchanged for an order on the post-bill office, or on the office at which the payment is to be made.
16. Cash-boxes taken in, contents unknown, for such parties as keep accounts at the Bank.
17. A person having a drawing account may have a discount account; but no person can have the latter without at the same time having the former. When a discount account is opened, the signatures of the parties are entered in a book kept for that purpose, and powers of attorney are granted empowering the persons named in them to act for their principals. Bills of exchange having more than 95 days to run are not eligible for discount.

N.B.—All changes in the residence of persons keeping cash at the bank are requested to be made known at the drawing office; and it is particularly requested not to offer any gratuities to the clerks of the banking offices, such gratuities being strictly forbidden.

There are no holidays at the bank except Christmas and Good Friday.

TABLES exhibiting a View of the Issues, Securities, Bullion, &c., of the Bank of England, and of the Joint-Stock and Private Banks in England and Wales.

No. I.—An ACCOUNT of the Notes, Post Bills, &c., of the Bank of England in Circulation, on the 28th of February and 31st of August in each year, from 1698 to 1792 both included, as near as the same can be made up.

Year.	28th Feb.	31st Aug.	Year.	28th Feb.	31st Aug.	Year.	28th Feb.	31st Aug.	Year.	28th Feb.	31st Aug.
	£	£		£	£		£	£		£	£
1698	1,221,290	1,240,400	1722	2,365,640	3,006,430	1746	3,383,720	3,842,500	1770	5,237,210	5,736,780
1699	743,850	519,150	1723	3,516,110	3,482,210	1747	4,107,420	3,652,310	1771	6,822,780	6,014,110
1700	938,240	781,430	1724	3,232,830	3,857,710	1748	3,894,650	3,789,720	1772	5,962,160	5,987,570
1701	298,860	763,860	1725	3,734,480	3,343,400	1749	3,737,110	4,183,390	1773	6,037,060	6,362,220
1702	920,730	1,030,900	1726	3,076,850	3,152,340	1750	3,964,970	4,318,490	1774	7,550,780	9,886,220
1703	933,760	1,214,040	1727	3,888,180	4,677,640	1751	4,022,160	5,195,310	1775	9,135,930	8,398,310
1704	961,990	946,010	1728	4,574,920	4,513,790	1752	4,444,960	4,750,350	1776	8,699,720	8,551,090
1705	556,610	1,043,150	1729	4,152,590	4,199,910	1753	4,401,580	4,420,290	1777	8,712,230	7,753,590
1706	996,840	805,410	1730	3,998,280	4,416,870	1754	4,062,870	4,081,280	1778	7,440,330	6,758,070
1707	959,820	824,860	1731	4,451,720	5,249,880	1755	3,950,650	4,115,280	1779	9,012,610	7,276,540
1708	648,680	598,940	1732	4,251,660	4,592,400	1756	4,106,790	4,516,360	1780	8,410,790	6,341,600
1709	707,470	691,350	1733	4,385,060	4,543,000	1757	5,319,130	5,149,940	1781	7,092,450	6,309,430
1710	601,580	480,920	1734	4,203,070	4,671,930	1758	5,320,590	4,864,110	1782	8,028,880	6,759,310
1711	477,510	573,230	1735	4,627,990	4,738,550	1759	4,586,840	4,809,790	1783	7,675,090	6,307,270
1712	738,920	2,025,200	1736	4,907,750	5,077,570	1760	4,969,250	4,936,280	1784	6,202,760	5,592,510
1713	1,221,880	800,810	1737	5,215,010	4,414,690	1761	5,632,350	5,246,680	1785	5,923,090	6,570,650
1714	623,640	1,651,780	1738	4,766,280	4,609,420	1762	5,741,090	5,886,980	1786	7,581,960	8,184,330
1715	972,160	978,840	1739	4,347,270	4,152,420	1763	5,999,910	5,314,600	1787	8,329,840	9,685,720
1716	1,460,660	1,579,730	1740	4,550,980	4,444,000	1764	5,501,300	6,210,680	1788	9,561,120	10,002,880
1717	2,053,150	2,188,030	1741	4,841,840	4,084,450	1765	6,316,670	5,356,490	1789	9,807,210	11,121,800
1718	2,782,420	1,806,640	1742	4,471,510	4,911,390	1766	5,617,570	5,246,410	1790	10,040,540	11,433,340
1719	1,807,010	1,939,550	1743	4,654,890	4,250,180	1767	5,510,990	4,883,440	1791	11,439,200	11,672,320
1720	2,466,880	3,032,460	1744	4,253,610	4,270,590	1768	5,778,990	5,415,530	1792	11,307,380	11,006,300
1721	2,244,280	2,206,260	1745	4,279,610	3,465,350	1769	5,707,190	5,411,450			

No. II.—ACCOUNT of the Circulation, Deposits, Securities, Bullion, and Surplus (exclusive of Capital), of the Assets over the Liabilities of the Bank of England at (or as near thereto as the accounts can be made up) the undermentioned Dates in each of the following Years.

Dates.	Circulation.	Deposits.	Securities.	Bullion.	Rest or Surplus of Assets over Liabilities.
1793 February 28 . .	£11,888,910	£5,346,450	£16,005,250	£4,010,680	£2,780,570
August 31 . .	10,865,050	6,442,810	14,809,680	5,322,010	2,823,830
1794 February 28 . .	10,744,020	7,891,810	14,524,550	6,987,110	2,875,830
August 30 . .	10,286,780	5,935,710	12,446,460	6,770,110	2,994,080
1795 February 28 . .	14,017,510	5,973,020	16,811,340	6,127,720	2,948,530
August 31 . .	10,862,200	8,154,980	16,989,920	5,136,350	3,109,090
1796 February 28 . .	10,729,520	5,702,360	17,139,840	2,539,630	3,247,590
August 31 . .	9,246,790	6,656,320	17,025,470	2,122,950	3,245,310
1797 February 28 . .	9,674,780	4,891,530	16,837,750	1,086,170	3,357,610
August 31 . .	11,114,120	7,765,350	18,261,170	4,089,620	3,471,320
1798 February 28 . .	13,095,830	6,148,900	16,799,600	5,828,940	3,383,710
August 31 . .	12,180,610	8,300,720	17,349,640	6,546,100	3,414,410
1799 February 28 . .	12,959,800	8,131,820	17,039,030	7,563,900	3,511,310
August 31 . .	13,389,490	7,642,240	16,930,440	7,000,780	2,899,490
1800 February 28 . .	16,844,470	7,062,680	21,424,050	6,144,250	3,661,150
August 31 . .	15,047,180	8,335,060	22,138,420	5,150,450	3,906,630
1801 February 28 . .	16,213,280	10,745,840	26,424,730	4,640,120	4,105,730
August 31 . .	14,556,110	8,133,830	22,209,570	4,335,260	3,854,890
1802 February 28 . .	15,186,880	6,858,210	21,959,820	4,152,950	4,067,680
August 31 . .	17,097,630	9,739,140	27,113,360	3,891,780	4,169,370
1803 February 28 . .	15,319,930	8,050,240	23,914,900	3,776,750	4,321,480
August 31 . .	15,983,330	9,817,240	26,918,840	3,592,500	4,710,770
1804 February 29 . .	17,077,830	8,676,830	26,998,970	3,372,140	4,616,450
August 31 . .	17,153,890	9,715,530	25,826,680	5,879,190	4,836,450
1805 February 28 . .	17,871,170	12,083,620	28,661,390	5,883,800	4,590,400
August 31 . .	16,388,400	14,048,080	27,772,850	7,624,500	4,960,870
1806 February 28 . .	17,730,120	9,980,790	26,591,070	5,987,190	4,867,350
August 31 . .	21,027,470	9,636,330	29,473,100	6,215,020	5,024,320
1807 February 28 . .	16,950,680	11,829,320	27,408,460	6,142,840	4,771,300
August 31 . .	19,678,360	11,789,200	29,936,950	6,484,350	4,953,740
1808 February 29 . .	18,188,860	11,961,960	27,384,080	7,855,470	5,088,750
August 31 . .	17,111,290	13,012,510	29,244,090	6,015,940	5,136,230
1809 February 28 . .	18,542,860	9,982,950	29,118,200	4,488,700	5,081,090
August 31 . .	19,574,180	12,257,180	33,435,270	3,652,480	5,256,390

Tables.

Dates.	Circulation.	Deposits.	Securities.	Bullion.	Rest or Surplus of Assets over Liabilities.
1810 February 28 . .	£21,019,600	£12,457,310	£33,378,580	£3,501,410	£5,403,080
August 31 . .	24,793,990	13,617,520	40,973,770	3,191,850	5,754,110
1811 February 28 . .	23,360,220	11,445,650	37,122,350	3,350,940	5,667,420
August 31 . .	23,286,850	11,075,660	37,083,280	3,243,300	5,964,070
1812 February 29 . .	23,408,320	11,595,200	38,026,290	2,983,190	6,005,960
August 31 . .	23,026,880	11,848,910	38,176,120	3,099,270	6,399,600
1813 February 27 . .	23,210,930	11,268,180	37,930,950	2,884,500	6,336,340
August 31 . .	24,828,120	11,159,730	40,106,080	2,712,270	6,830,500
1814 February 28 . .	24,801,080	12,455,460	41,989,910	2,204,430	6,937,800
August 31 . .	28,368,290	14,849,940	48,345,960	2,097,680	7,225,410
1815 February 28 . .	27,261,650	11,702,250	44,558,500	2,036,910	7,631,510
August 31 . .	27,248,670	12,696,000	44,854,180	3,409,040	8,318,550
1816 February 29 . .	27,013,620	12,388,890	45,401,310	4,640,880	8,639,680
August 31 . .	26,758,720	11,856,380	37,279,540	7,562,780	6,227,220
1817 February 28 . .	27,397,900	10,825,610	34,278,630	9,680,970	5,736,090
August 30 . .	29,543,780	9,084,590	32,605,630	11,668,260	5,645,520
1818 February 28 . .	27,770,970	7,997,550	30,905,530	10,055,460	5,192,270
August 31 . .	26,202,150	7,927,730	32,370,760	6,363,160	4,604,040
1819 February 27 . .	25,126,700	6,413,370	31,455,000	4,184,620	4,099,550
August 31 . .	25,252,690	6,304,160	31,740,550	3,595,360	3,779,060
1820 February 29 . .	23,484,110	4,093,550	26,187,490	4,911,050	3,520,880
August 31 . .	24,299,340	4,420,910	23,846,120	8,211,080	3,336,950
1821 February 28 . .	23,884,920	5,622,890	20,796,270	11,869,900	3,158,360
August 31 . .	20,295,300	5,818,450	18,475,540	11,233,590	3,595,380
1822 February 28 . .	18,665,350	4,689,940	15,973,080	11,057,150	3,674,940
August 31 . .	17,464,790	6,399,440	17,290,510	10,097,960	3,524,240
1823 February 28 . .	18,392,240	7,181,100	18,319,730	10,384,230	3,130,620
August 30 . .	19,231,240	7,827,350	17,467,370	12,658,240	3,067,020
1824 February 28 . .	19,736,990	10,097,850	18,872,000	13,810,060	2,847,220
August 31 . .	20,132,120	9,679,810	20,904,530	11,787,430	2,880,030
1825 February 28 . .	20,753,760	10,168,780	24,951,330	8,779,100	2,807,890
August 31 . .	19,398,840	6,410,360	25,106,030	3,634,320	2,930,950
1826 February 28 . .	25,467,910	6,935,940	32,918,580	2,459,510	3,974,240
August 31 . .	21,563,560	7,199,860	25,083,630	6,754,230	2,074,440
1827 February 28 . .	21,890,610	8,801,660	23,529,530	10,159,020	2,996,280
August 31 . .	22,747,600	8,052,090	23,199,320	10,463,770	2,863,400
1828 February 29 . .	21,980,710	9,198,140	23,581,270	10,347,290	2,749,710
August 30 . .	21,357,510	10,201,280	23,905,530	10,498,880	2,845,620
1829 February 28 . .	19,870,850	9,553,960	25,384,750	6,835,020	2,794,960
August 31 . .	19,547,380	9,035,070	24,661,810	6,795,530	2,874,890
1830 February 27 . .	20,050,730	10,763,150	24,204,390	9,171,000	2,561,510
August 30 . .	21,464,700	11,620,840	24,565,690	11,150,480	2,630,630
1831 February 28 . .	19,600,140	11,213,530	25,208,980	8,217,050	2,612,360
August 31 . .	18,538,630	9,069,310	23,905,030	6,439,760	2,736,850
1832 February 29 . .	18,051,710	8,937,170	24,333,490	5,293,150	2,637,760
August 28 . .	18,320,000	10,278,000	23,420,000	7,514,000	2,336,000
1833 February 26 . .	19,372,000	12,455,000	23,850,000	10,205,000	2,228,000
August 27 . .	19,925,000	11,927,000	23,245,000	10,871,000	2,264,000
1834 February 25 . .	19,050,000	13,087,000	25,212,000	9,225,000	2,300,000
August 26 . .	19,195,000	13,300,000	27,732,000	7,303,000	2,540,000
1835 February 24 . .	18,510,000	10,071,000	24,895,000	6,289,000	2,603,000
August 25 . .	18,085,000	13,725,000	28,173,000	6,255,000	2,618,000
1836 February 23 . .	18,181,000	14,044,000	27,368,000	7,787,000	2,930,000
August 30 . .	18,018,000	12,040,000	27,697,000	5,250,000	2,889,000
1837 February 28 . .	18,165,000	10,007,000	27,297,000	4,077,000	3,202,000
August 29 . .	18,887,000	10,040,000	25,357,000	6,548,000	2,978,000
1838 February 27 . .	18,975,000	10,825,000	21,958,000	10,471,000	2,629,000
August 28 . .	19,488,000	8,922,000	21,611,000	9,540,000	2,741,000
1839 February 26 . .	18,098,000	7,739,000	21,741,000	6,773,000	2,677,000
August 27 . .	17,982,000	6,488,000	25,141,000	2,420,000	3,091,000
1840 February 25 . .	16,504,000	6,556,000	21,611,000	4,311,000	2,862,000
August 25 . .	17,170,000	6,254,000	22,075,000	4,299,000	2,950,000
1841 February 23 . .	16,399,000	6,407,000	21,344,000	4,335,000	2,873,000
August 31 . .	17,370,000	6,975,000	22,602,000	4,822,000	3,079,000
1842 February 22 . .	16,920,000	8,239,000	22,124,000	6,119,000	3,084,000
August 27 . .	20,332,000	8,690,000	22,159,000	9,729,000	2,866,000
1843 February 28 . .	20,284,370	11,262,560	23,134,370	11,149,790	2,737,230
August 31 . .	19,339,790	11,307,060	21,631,650	12,295,000	3,279,800
1844 February 29 . .	21,148,370	12,529,160	20,648,450	16,213,950	3,184,870
August 31 . .	21,485,260	12,137,590	21,872,100	15,314,540	3,563,790
1845 February 28 . .	21,201,720	15,722,960	24,730,610	15,767,590	3,573,520
August 30 . .	22,109,220	14,401,560	24,507,380	15,592,290	3,588,890
1846 February 28 . .	20,968,240	24,943,600	35,825,480	13,775,790	3,689,430
August 31 . .	21,390,420	16,322,310	25,164,380	16,388,100	3,839,750
1847 February 27 . .	20,151,760	15,250,180	27,256,230	12,044,930	3,899,220
August 31 . .	18,828,070	14,416,850	28,006,710	9,163,840	3,925,630

No. III.—A RETURN of the Average Aggregate Amount of Promissory-Notes, payable to Bearer on Demand, in Circulation in the United Kingdom, distinguishing those at the undermentioned Dates circulated by the Banks of England and Ireland, and by Private and Joint-Stock Banks in England, Scotland, and Ireland, together with Bullion in the Bank of England, from March 1840 to March 1857.

Years and Months ended	England.				Scotland.	Ireland.		Total, United Kingdom.	Bullion in the Bank of England.
	Bank of England.*	Private Banks.	Joint Stock Banks.	Ag. Mon. Circ. of Count. Is.	Chart. Priv. and Jt. Stock Banks.	Bank of Ireland.	Priv. and Jt. Stock Banks.		
	£	£	£	£	£	£	£	£	£
1840 March	16,224,400	6,190,306	3,895,748	10,148,430	2,764,692	3,132,500	2,663,925	34,933,947	4,360,000
1841 March	16,209,000	6,254,653	3,673,889	10,093,259	2,944,300	3,164,250	2,314,169	34,724,978	4,339,000
1842 Mar. 5	16,894,000	5,299,455	2,990,986	8,290,441	2,811,109	3,188,750	2,407,625	33,591,925	6,125,000
June 25	17,543,000	4,995,594	2,850,532	7,846,126	2,887,038	3,901,525	1,769,184	32,946,873	7,320,000
Sep. 17	19,914,000	5,098,259	2,819,749	7,918,008	2,648,519	2,806,025	1,663,012	34,949,594	9,336,000
Dec. 10	18,841,000	5,085,885	3,001,590	8,087,475	3,091,228	3,138,525	2,104,855	35,263,083	10,330,000
1843 Mar. 4	20,340,000	4,785,724	2,844,077	7,629,801	2,588,370	3,196,125	2,097,225	35,851,521	11,054,000
June 24	18,411,000	4,503,478	2,863,779	7,367,257	2,869,863	3,105,150	1,734,730	33,488,000	11,472,000
Sep. 16	19,132,000	4,288,180	2,763,302	7,051,482	2,659,176	3,975,950	1,699,946	33,518,554	12,018,000
Dec. 10	18,791,000	4,533,048	3,161,033	7,694,081	3,166,920	3,502,475	2,376,676	35,531,152	12,855,000
1844 Mar. 2	21,471,000	4,992,709	3,427,189	8,419,998	2,684,191	3,609,000	2,428,498	38,612,587	15,784,000
June 22	20,634,000	4,743,057	3,665,104	8,408,161	3,117,988	3,488,300	2,080,277	37,728,726	15,900,000
Sep. 14	21,285,000	4,338,569	3,158,290	7,496,859	2,940,456	3,359,150	2,052,262	37,133,727	15,443,000
Dec. 7	20,986,000	4,442,725	3,086,676	7,529,401	3,486,818	3,900,275	2,945,046	38,847,540	14,466,000
1845 Mar. 1	21,080,000	4,411,507	3,089,879	7,501,386	2,986,708	3,991,050	3,130,508	38,689,652	15,263,000
June 21	21,277,000	4,398,833	3,131,109	7,529,942	3,485,531	3,882,600	2,736,432	38,911,505	16,106,000
Sep. 13	21,931,000	4,358,253	3,142,142	7,500,395	3,341,397	3,712,725	2,547,130	39,032,647	15,986,000
Dec. 6	22,015,000	4,569,278	3,221,883	7,791,161	3,804,031	4,404,975	3,311,855	41,327,022	13,742,000
1846 Mar. 28	20,346,000	4,515,407	3,176,935	7,692,342	3,018,771	4,257,200	3,187,760	38,502,073	13,481,000
June 20	20,553,000	4,456,629	3,128,185	7,584,814	3,508,655	4,119,850	2,852,176	38,618,495	14,150,000
Sep. 12	21,192,000	4,407,765	3,111,536	7,519,301	3,446,787	3,923,575	2,664,600	38,746,263	15,937,000
Dec. 5	21,055,000	4,596,549	3,190,417	7,786,966	3,996,861	4,375,025	3,464,505	40,678,357	15,090,000
1847 Mar. 27	20,087,000	4,541,543	3,247,531	7,789,074	3,360,348	3,857,800	2,846,936	37,941,158	12,903,000
June 19	19,078,000	4,385,608	3,088,327	7,473,935	3,647,314	3,327,400	2,137,551	35,664,200	10,032,000
Sep. 11	18,918,000	4,179,178	2,954,347	7,133,525	3,497,525	3,026,550	2,021,760	34,597,360	9,752,000
Dec. 4	20,161,000	3,691,304	2,576,686	6,267,990	3,732,585	3,175,400	2,147,341	35,484,316	9,798,000
1848 Mar. 25	11,640,000	3,601,089	2,572,329	6,173,418	2,951,937	2,990,875	2,116,520	32,872,750	13,762,000
June 17	18,683,000	3,628,563	2,598,625	6,227,188	3,437,587	2,863,800	1,797,546	33,009,121	13,875,000
Sept. 9	19,134,000	3,482,809	2,471,710	5,954,519	3,021,307	2,583,825	1,683,307	32,376,958	13,740,000
Dec. 2	18,702,000	3,703,728	2,727,165	6,430,893	3,570,126	2,851,750	2,117,300	33,672,069	13,886,000
1849 Mar. 24	18,986,000	3,467,078	2,590,875	6,057,953	2,935,120	2,598,650	1,803,100	32,380,823	15,167,000
June 16	19,312,000	3,540,417	2,661,300	6,201,717	3,380,902	2,481,775	1,564,700	32,941,094	14,644,000
Sept. 8	19,520,000	3,327,758	2,457,526	5,785,284	3,053,322	2,308,575	1,502,870	32,170,051	14,789,000
Dec. 1	19,244,000	3,676,728	2,703,093	6,379,821	3,500,186	2,656,225	2,017,906	33,798,138	16,045,000
1850 Mar. 23	19,936,000	3,516,644	2,686,798	6,203,442	2,993,621	2,601,500	1,888,824	33,623,387	17,010,000
June 15	20,401,000	3,552,821	2,745,227	6,298,048	3,471,528	2,530,125	1,711,686	34,412,387	16,796,000
Sept. 7	20,949,000	3,412,011	2,611,505	6,023,516	3,173,784	2,438,700	1,715,279	34,300,279	16,857,000
Dec. 28	19,757,000	3,450,811	2,685,543	6,136,354	3,345,649	2,647,600	2,209,359	34,095,962	15,951,000
1851 Mar. 22	19,908,000	3,386,962	2,685,756	6,072,718	3,033,235	2,574,275	2,046,637	33,634,865	14,509,000
June 14	20,154,000	3,513,765	2,805,280	6,319,045	3,474,171	2,460,900	1,808,018	34,216,134	13,669,000
Sept. 6	21,018,000	3,219,275	2,569,918	5,789,193	3,125,691	2,252,350	1,719,907	33,905,141	14,097,000
Dec. 27	19,899,000	3,370,976	2,678,391	6,049,367	3,356,974	2,470,225	2,256,542	34,032,108	15,915,000
1852 Mar. 20	21,341,000	3,397,432	2,733,688	6,131,120	3,081,769	2,428,700	2,133,794	35,116,383	18,474,000
June 12	22,722,000	3,504,864	2,850,555	6,355,419	3,580,302	2,510,625	2,018,364	37,186,710	20,102,000
Sept. 4	24,157,000	3,406,593	2,764,442	6,171,035	3,334,198	2,505,875	2,002,826	38,170,934	21,838,000
Dec. 25	23,893,000	3,647,713	2,914,201	6,561,914	3,764,064	2,857,675	2,827,766	39,904,419	21,367,000
1853 Mar. 19	23,206,000	3,671,532	2,993,634	6,665,166	3,443,894	2,804,800	2,715,744	38,835,604	19,176,000
June 11	24,270,000	3,758,260	3,041,149	6,799,409	4,026,225	2,771,650	2,594,518	40,461,802	18,561,000
Sept. 3	24,296,000	3,648,294	2,984,629	6,632,923	3,728,890	2,693,250	2,537,137	39,888,200	17,813,000
Dec. 24	22,112,000	3,833,753	3,056,085	6,889,838	4,112,787	3,095,900	3,357,327	39,567,852	15,462,000
1854 Mar. 18	22,376,000	3,811,787	3,076,382	6,888,169	3,844,363	3,217,425	3,493,353	39,819,310	15,922,000
June 10	21,542,000	3,756,975	3,023,221	6,780,196	4,319,098	3,127,750	3,052,538	38,821,582	13,363,000
Sept. 2	21,100,000	3,485,046	2,853,908	6,338,954	3,867,441	2,869,125	2,708,286	36,883,806	13,619,000
Dec. 23	20,298,000	3,848,896	3,072,727	6,921,623	4,316,095	3,260,275	3,462,374	38,258,367	13,619,000
1855 Mar. 17	19,924,000	3,744,604	3,022,000	6,766,604	3,811,583	3,381,375	3,276,196	37,159,758	13,514,000
June 9	20,616,000	3,830,714	3,071,332	6,902,046	4,377,695	3,180 575	2,841,410	37,917,726	17,316,000
Sept. 1	21,227,000	3,605,892	2,900,971	6,506,863	3,963,833	2,936,875	2,657,687	37,292,258	15,719,000
Dec. 22	19,554,000	3,842,755	3,058,159	6,900,914	4,400,763	3,424,625	3,619,254	37,898,956	11,148,000
1856 Mar. 15	19,396,000	3,692,037	2,993,672	6,685,709	3,819,813	3,332,425	3,259,088	36,493,035	10,570,000
June 7	20,278,000	3,815,905	3,066,419	6,882,324	4,472,759	3,250,550	3,113,829	37,997,462	10,858,000
Sep. 27	20,850,000	3,669,837	3,048,232	6,718,069	4,002,666	3,132,475	3,254,236	37,957,446	12,055,000
Dec. 20	19,808,000	3,696,543	3,044,845	6,741,388	4,349,383	3,529,600	3,777,703	38,206,074	10,526,000
1857 Mar. 14	19,366,575	3,635,602	3,043,057	6,678,659	3,828,478	3,561,575	3,611,634	37,046,921	10,339,000

* This column does not (as it ought to have done) include the notes in the banking department of the Bank of England. The latter are given in Table No. IV.

Tables.

No. IV.—ACCOUNT of Bank of England Notes Issued in each Month of each Year from 1850 to 1856 inclusive, showing the Numbers held by the Public and by the Bank, with the Amounts of Bullion, Securities, and Deposits held by the latter; and showing, also, the Discounts and Advances made by the Bank, and the Rate of Interest.

Tables.

	Bank Notes Issued.		Amount of Bullion.	Government Securities.	Other Securities.	Public Deposits.	Other Deposits.	Minimum Rate of Interest.	Discounts and Advances.
	Held by the Public.	Held in Reserve by the Bank.							
1850,	£	£	£	£	£	£	£	*Per Cent.*	£
Jan. 5	18,257,000	12,011,000	17,020,000	14,375,681	11,691,026	10,321,413	9,735,268	2½	4,938,000
... 19	19,333,000	10,731,000	16,816,000	14,296,554	9,848,040	5,599,761	11,070,694	,,	3,113,000
Feb. 2	19,625,000	10,479,000	16,811,000	14,296,554	9,828,739	5,727,761	10,591,701	,,	3,139,000
... 16	19,187,000	11,154,000	17,090,000	14,399,368	9,657,067	7,087,030	9,846,781	,,	2,929,000
March 2	19,008,000	11,368,000	17,126,000	14,419,732	10,425,030	7,838,208	9,881,889	,,	3,183,000
... 16	19,009,000	11,478,000	17,273,000	14,418,854	11,322,296	8,542,182	10,260,861	,,	4,094,000
April 6	19,374,000	10,816,000	16,936,000	14,418,854	11,981,434	9,255,123	10,024,993	,,	5,002,000
... 20	20,335,000	9,538,000	16,630,000	14,292,170	9,779,210	4,627,318	10,946,342	,,	2,984,000
May 4	20,107,000	9,817,000	16,573,000	14,292,170	9,778,216	4,997,054	10,649,502	,,	2,982,000
... 18	19,469,000	10,494,000	16,631,000	14,292,170	9,746,392	6,764,415	9,582,999	,,	2,912,000
June 1	19,215,000	10,788,000	16,738,000	14,316,185	9,760,048	7,577,660	9,215,738	,,	2,937,000
... 15	19,460,000	10,739,000	16,942,000	14,315,770	11,057,149	8,415,694	9,646,380	,,	4,193,000
July 6	19,457,000	10,696,600	16,869,000	14,374,908	11,943,840	9,564,513	9,273,018	,,	4,945,000
... 20	20,568,000	9,689,000	16,911,000	14,285,583	10,184,360	4,645,194	11,122,418	,,	3,206,000
Aug. 3	20,714,000	9,477,000	16,822,000	14,285,583	10,139,611	5,480,874	9,976,414	,,	3,186,000
... 17	19,827,000	10,377,000	16,854,000	14,430,847	10,534,408	7,261,305	9,569,322	,,	3,633,000
Sept. 7	19,482,000	10,619,000	16,707,000	14,430,847	11,700,259	8,885,786	9,106,676	,,	4,358,000
... 21	18,862,000	11,314,000	16,812,000	14,433,230	12,158,839	10,222,879	8,968,161	,,	4,832,000
Oct. 5	19,304,000	10,527,000	16,452,000	14,443,637	13,389,578	10,652,937	8,899,290	,,	6,078,000
... 19	20,140,000	9,304,000	16,015,000	14,228,901	10,772,545	6,284,496	9,550,613	,,	3,635,000
Nov. 2	19,722,000	9,703,000	16,025,000	14,228,901	11,038,486	6,594,381	9,932,226	,,	3,638,000
... 16	19,102,000	10,397,000	16,176,000	14,228,901	11,320,567	8,240,884	9,385,599	,,	4,023,000
Dec. 7	18,707,000	10,642,000	15,942,000	14,228,901	12,722,488	9,775,399	9,511,556	,,	5,435,000
... 21	18,496,000	10,234,000	15,359,000	14,233,252	13,762,797	10,783,808	9,201,634	,,	6,420,000
1851,									
Jan. 4	19,037,000	9,236,000	14,830,000	14,232,319	15,181,698	10,796,555	9,480,319	3	7,860,000
... 18	19,947,000	7,971,000	14,526,000	14,150,256	12,619,768	5,847,019	10,517,783	,,	5,337,000
Feb. 1	19,630,000	8,074,000	14,347,000	14,145,696	11,946,360	6,051,128	9,787,615	,,	4,835,000
... 15	18,910,000	8,848,000	14,474,000	14,145,696	11,888,361	7,164,484	9,423,679	,,	4,801,000
March 1	19,236,000	8,537,000	14,448,000	14,145,696	13,174,857	7,794,344	9,521,505	,,	5,674,000
... 15	18,756,000	8,956,000	14,416,000	14,145,250	12,904,218	8,227,989	9,287,826	,,	5,412,000
April 5	19,065,000	8,229,000	13,907,000	14,145,250	14,147,070	8,866,091	9,572,840	,,	6,669,000
... 19	19,847,000	6,887,000	13,342,000	13,936,798	11,638,650	4,102,458	10,256,573	,,	4,659,000
May 3	19,685,000	6,957,000	13,254,000	14,125,102	11,441,155	4,762,496	9,563,751	,,	4,535,000
... 17	19,126,000	7,579,000	13,356,000	13,590,988	11,887,695	6,017,417	8,921,477	,,	4,982,000
June 7	19,008,000	8,190,000	13,837,000	13,544,329	12,558,110	7,488,615	8,726,683	,,	5,786,000
... 21	18,915,000	8,532,000	14,198,000	13,544,281	13,234,757	8,635,559	8,713,685	,,	6,443,000
July 5	19,545,000	8,037,000	14,213,000	13,545,235	14,251,192	8,931,362	8,695,802	,,	7,387,000
... 19	20,634,000	6,650,000	13,863,000	13,464,021	11,803,076	3,957,006	9,583,816	,,	5,186,000
Aug. 2	20,346,000	6,922,000	13,895,000	13,464,021	11,800,143	4,758,458	9,002,461	,,	5,207,000
... 16	20,132,000	7,412,000	14,177,000	13,464,216	12,698,000	6,393,552	8,617,141	,,	6,105,000
Sept. 6	19,363,000	8,344,000	14,290,000	13,464,216	13,193,878	8,093,413	8,121,431	,,	6,227,000
... 20	18,952,000	9,123,000	14,665,000	13,464,216	13,785,274	9,386,100	8,207,807	,,	6,809,000
Oct. 4	19,458,000	8,958,000	14,991,000	13,464,216	14,624,018	9,655,588	7,556,950	,,	7,551,000
... 18	20,676,000	7,782,000	15,055,000	13,241,768	13,083,883	5,396,169	10,339,401	,,	6,109,000
Nov. 1	20,469,000	8,175,000	15,290,000	13,241,768	12,688,022	5,437,553	10,337,251	,,	5,647,000
... 15	19,585,000	9,529,000	15,695,000	13,241,768	11,818,439	6,938,290	9,308,899	,,	4,836,000
Dec. 6	18,855,000	11,048,000	16,519,000	13,241,768	11,547,043	8,077,344	9,539,188	,,	4,570,000
... 20	18,676,000	12,142,000	17,414,000	13,244,220	11,366,148	9,202,522	9,360,449	,,	4,384,000
1852,									
Jan. 3	19,285,000	11,707,000	17,558,000	13,290,972	12,214,222	9,447,516	9,371,117	2½	5,138,000
... 17	21,038,000	10,113,000	17,725,000	13,269,098	11,388,726	4,715,153	11,656,776	,,	4,191,000
Feb. 7	20,348,000	11,364,000	18,282,000	13,420,923	11,181,921	5,263,972	12,128,638	,,	3,997,000
... 21	20,188,000	12,229,000	18,948,000	13,550,532	10,979,880	6,392,181	11,916,013	,,	3,744,000
March 6	20,237,000	12,660,000	19,410,000	13,565,323	11,602,383	6,902,929	12,124,056	,,	3,588,000
... 20	19,980,000	13,196,000	19,746,000	13,567,593	11,722,150	7,520,393	12,300,704	,,	3,493,000
April 3	20,687,000	12,397,000	19,597,000	13,567,593	11,720,843	7,687,708	11,191,626	,,	3,464,000
... 17	22,056,000	11,024,000	19,560,000	13,395,779	11,086,331	3,365,285	13,906,918	,,	3,272,000
May 1	21,832,000	11,586,000	19,901,000	13,338,023	11,022,332	3,194,817	14,365,920	2	3,261,000
... 15	21,670,000	12,149,000	20,305,000	13,451,657	10,765,581	4,265,675	13,686,289	,,	3,166,000
June 5	21,685,000	12,667,000	20,839,000	14,174,572	10,697,573	6,119,961	13,030,750	,,	2,976,000
... 19	21,437,000	13,516,000	21,435,000	13,874,526	10,868,650	6,856,819	13,030,979	,,	3,160,000
July 3	22,241,000	13,534,000	22,197,000	13,873,545	11,773,967	7,647,476	12,968,501	,,	4,032,000
... 17	23,748,000	11,911,000	21,989,000	13,979,616	10,671,902	3,077,870	14,715,088	,,	2,991,000
Aug. 7	23,040,000	12,116,000	21,474,000	13,790,720	10,756,634	3,823,713	13,885,973	,,	3,064,000

Tables.

	Bank Notes Issued.		Amount of Bullion.	Government Securities.	Other Securities.	Public Deposits.	Other Deposits.	Minimum Rate of Interest.	Discounts and Advances.
	Held by the Public.	Held in Reserve by the Bank.							
1852,	£	£	£	£	£	£	£	*Per Cent.*	£
Aug. 21	22,760,000	12,665,000	21,874,000	14,139,338	10,714,100	5,844,525	12,945,084	2	3,002,000
Sept. 4	22,811,000	12,543,000	21,853,000	14,189,182	11,100,487	6,667,129	12,136,546	,,	2,901,000
... 18	21,953,000	13,202,000	21,867,000	14,189,182	11,325,130	8,010,476	11,919,586	,,	3,166,000
Oct. 2	22,244,000	12,746,000	21,554,000	14,189,182	12,474,729	8,935,158	11,532,546	,,	4,344,000
... 16	23,660,000	11,392,000	21,670,000	13,950,375	11,187,061	4,898,568	13,107,431	,,	3,220,000
Nov. 6	23,351,000	11,242,000	20,895,000	13,950,375	11,362,535	5,040,143	12,653,673	,,	3,298,000
... 20	22,671,000	12,127,000	21,322,000	13,962,688	11,605,603	6,661,061	12,414,448	,,	3,531,000
Dec. 4	22,723,000	12,524,000	21,808,000	13,962,688	12,410,821	7,637,710	12,699,303	,,	4,263,000
... 18	22,236,000	12,259,000	21,165,000	13,962,688	13,356,036	8,648,726	12,496,270	,,	5,155,000
1853,									
Jan. 1	23,054,000	10,960,000	20,528,000	13,961,691	15,875,756	9,266,342	12,993,952	,,	7,585,000
... 15	23,662,000	9,004,000	19,149,000	13,870,796	14,157,548	4,939,878	13,284,158	2½	5,679,000
Feb. 5	22,695,000	9,339,000	18,701,000	13,764,651	13,705,812	5,568,205	12,606,230	3	5,349,000
... 19	22,081,000	9,667,000	18,315,000	13,619,393	14,177,702	6,738,059	12,081,941	,,	6,016,000
March 5	22,276,000	10,086,000	18,894,000	13,464,538	15,401,220	7,312,751	12,622,301	,,	7,156,000
... 19	21,465,000	11,132,000	19,163,000	13,464,538	15,447,272	8,203,555	12,874,698	,,	7,208,000
April 2	22,387,000	10,183,000	19,007,000	13,464,538	16,385,120	8,234,115	12,690,203	,,	8,050,000
... 16	23,613,000	8,907,000	18,793,000	13,221,382	14,085,037	3,780,216	13,622,968	,,	6,006,000
May 7	23,470,000	8,274,000	18,225,000	13,221,382	13,608,166	4,265,469	12,201,614	,,	5,607,000
... 21	22,639,000	8,734,000	17,951,000	13,124,653	14,368,263	5,815,477	11,953,498	,,	6,317,000
June 4	23,423,000	8,367,000	18,254,000	13,124,653	14,632,359	4,635,454	12,902,839	3½	6,909,000
... 18	22,696,000	9,420,000	18,636,090	13,123,910	13,700,971	4,615,831	13,174,519	,,	5,985,000
July 2	22,848,000	9,204,000	18,554,000	13,116,997	14,372,331	5,615,362	12,504,620	,,	6,737,000
... 16	23,888,000	7,662,000	18,023,000	13,757,333	13,064,310	2,332,814	13,422,004	,,	5,345,000
Aug. 6	23,523,000	7,529,000	17,435,000	13,027,333	13,226,701	2,218,227	12,475,528	,,	5,528,000
... 20	23,003,000	7,645,000	17,172,000	13,027,582	13,876,950	4,063,046	11,623,583	,,	6,180,000
Sept. 3	22,466,000	7,697,000	16,500,000	12,773,176	14,546,194	4,701,598	11,017,313	4	6,384,000
... 17	22,422,000	6,977,000	15,862,000	12,527,893	16,740,682	6,007,833	11,053,973	4½	8,481,000
Oct. 1	22,773,000	6,259,000	15,613,000	12,339,083	19,124,799	6,738,755	11,885,565	5	10,881,000
... 15	23,667,000	5,013,000	15,271,000	12,455,161	17,425,089	3,700,859	12,664,226	,,	9,435,000
Nov. 5	22,627,000	6,420,000	15,680,000	11,498,152	16,749,699	4,077,159	12,171,032	,,	8,787,000
... 19	21,591,000	7,560,000	15,819,000	12,477,425	15,989,650	6,034,154	11,632,208	,,	8,090,000
Dec. 3	21,206,000	7,201,000	15,093,000	13,622,039	16,586,818	7,659,924	11,480,162	,,	8,687,000
... 17	20,606,000	8,124,000	15,443,000	15,043,730	16,237,015	10,492,686	10,699,684	,,	8,308,000
1854,									
Jan. 7	21,348,000	7,801,000	15,831,000	14,833,299	16,736,409	8,291,993	12,744,634	,,	8,830,000
... 21	22,272,000	7,135,000	16,096,000	13,537,638	14,297,849	2,646,783	13,894,599	,,	6,438,000
Feb. 4	22,557,000	6,967,000	16,227,000	12,537,716	13,570,465	2,121,718	12,008,926	,,	5,670,000
... 18	21,655,000	7,858,000	16,253,000	11,757,704	13,346,376	2,440,107	12,177,209	,,	5,396,000
March 4	21,558,000	7,600,000	15,909,000	11,751,555	13,241,821	2,741,851	11,244,639	,,	4,875,000
... 18	20,784,000	7,279,000	14,823,000	11,844,700	14,512,895	3,678,817	11,305,383	,,	6,181,000
April 1	21,684,000	5,998,000	14,450,000	11,607,616	16,522,726	4,445,788	11,037,153	,,	8,194,000
... 15	22,490,000	4,278,000	13,511,000	13,686,596	14,763,256	1,765,364	12,795,201	,,	6,775,000
May 6	21,974,000	3,900,000	12,608,000	12,566,607	14,749,460	2,338,822	10,688,531	5	6,866,000
... 20	20,679,000	5,100,000	12,514,000	10,406,309	15,425,281	2,671,551	10,146,428	5½	7,530,000
June 3	20,540,000	5,467,000	12,750,000	9,856,309	15,494,525	2,557,654	10,212,244	,,	7,672,000
... 17	19,700,000	6,673,000	13,109,000	9,720,499	15,374,237	3,212,382	10,513,491	,,	7,585,000
July 1	20,099,000	7,385,000	14,216,000	10,332,795	16,750,401	5,315,198	11,119,344	,,	9,064,000
... 15	20,683,000	6,403,000	13,824,000	12,470,237	14,234,926	3,207,955	11,655,973	,,	6,615,000
Aug. 5	20,302,000	6,291,000	13,300,000	11,360,383	13,638,937	2,347,590	10,609,668	5	5,973,000
... 19	20,123,000	6,880,000	13,701,000	11,030,873	14,740,797	3,891,195	10,380,618	,,	7,019,000
Sept. 2	19,852,000	6,836,000	13,368,000	10,980,029	15,178,013	3,996,427	10,402,859	,,	6,910,000
... 16	19,583,000	7,049,000	13,279,000	10,996,955	15,353,432	4,985,233	9,780,712	,,	6,965,000
Oct. 7	19,959,000	6,391,000	12,972,000	11,015,466	16,677,317	5,766,065	9,598,807	,,	8,321,000
... 21	20,871,000	5,947,000	13,406,000	11,113,273	14,742,463	1,893,487	11,702,867	,,	6,522,000
Nov. 4	20,604,000	6,366,000	13,525,000	11,524,492	14,155,089	2,858,100	10,932,023	,,	6,025,000
... 18	19,828,000	7,024,000	13,495,000	11,429,871	13,850,566	4,465,918	9,685,004	,,	5,802,000
Dec. 2	19,617,000	7,627,000	13,870,000	11,517,738	13,710,468	4,994,893	9,759,246	,,	5,561,000
... 16	19,039,000	8,331,000	14,029,000	11,565,237	13,869,287	6,035,675	9,710,512	,,	5,724,000
1855,									
Jan. 6	19,682,000	7,307,000	13,667,000	11,611,800	15,481,228	6,391,361	9,981,364	,,	7,297,000
... 20	20,046,000	5,463,000	12,162,000	11,637,721	14,196,909	2,257,127	10,842,228	,,	5,882,000
Feb. 3	19,826,000	6,266,000	12,800,000	11,538,652	14,590,176	3,740,512	10,583,727	,,	6,325,000
... 17	19,246,000	7,067,000	12,981,000	11,538,227	14,584,340	4,898,602	10,174,871	,,	6,351,000
March 3	19,098,000	7,415,000	13,190,000	11,626,463	15,012,782	5,033,184	10,607,057	,,	6,354,000
... 17	18,984,000	8,496,000	14,201,000	11,583,885	14,521,596	5,077,843	11,155,862	,,	5,887,000
April 7	19,812,000	8,580,000	15,079,000	13,026,749	13,655,995	6,008,895	11,396,875	4½	5,217,000
... 21	20,283,000	8,089,000	15,056,000	14,274,373	13,032,442	4,450,664	13,019,567	,,	4,706,000
May 5	20,168,000	8,743,000	15,619,000	13,591,373	12,721,050	4,337,590	12,645,651	4	4,393,000

Tables.

	Bank Notes Issued.		Amount of Bullion.	Government Securities.	Other Securities.	Public Deposits.	Other Deposits.	Minimum Rate of Interest.	Discount and Advances.
	Held by the Public.	Held in Reserve by the Bank.							
1855,	£	£	£	£	£	£	£	*Per Cent.*	£
May 19	19,622,000	10,281,000	16,648,000	10,823,132	12,455,155	3,358,272	12,230,771	4	4,183,000
June 2	19,740,000	11,343,000	17,789,000	12,677,816	12,419,158	5,211,168	13,282,876	„	4,006,000
... 16	19,536,000	11,814,000	18,061,000	12,681,068	12,399,704	5,586,754	13,307,714	3½	3,849,000
July 7	20,483,000	10,412,000	17,584,000	13,757,224	13,328,806	6,852,350	12,586,891	„	4,856,000
... 21	20,773,000	9,208,000	16,644,000	13,071,978	12,706,108	3,178,033	13,604,199	„	4,002,000
Aug. 4	20,709,000	8,892,000	16,232,000	12,851,030	13,592,925	5,152,221	11,857,328	„	4,796,000
... 18	20,277,000	9,230,000	16,117,000	12,810,164	14,943,006	6,407,739	12,250,406	„	6,110,000
Sept. 1	20,105,000	8,263,000	14,939,000	13,031,088	15,661,985	7,267,969	11,098,018	„	6,464,000
... 15	19,713,000	7,397,000	13,698,000	12,799,368	17,388,784	7,838,531	11,146,762	4½	8,338,000
Oct. 6	20,292,000	5,473,000	12,279,000	11,413,143	19,791,293	7,106,524	10,837,643	5½	10,706,000
... 20	20,372,000	4,310,000	11,230,000	10,635,359	18,789,512	3,825,021	11,764,080	60 days and under, 6 per cent; above 60 and under 95 days, 7 per cent.	9,865,000
Nov. 3	20,097,000	4,644,000	11,300,000	10,201,276	18,355,548	3,369,984	11,694,200		9,409,000
... 17	19,422,000	5,240,000	11,263,000	10,124,848	17,787,150	4,110,130	10,886,746		8,974,000
Dec. 1	19,075,000	5,505,000	11,227,000	10,275,480	18,868,757	4,439,589	12,234,788		10,072,000
... 15	18,581,000	6,557,000	11,306,000	9,789,376	18,360,761	4,428,440	12,322,462		9,644,000
1856,									
Jan. 5	18,901,000	5,520,000	10,537,000	10,827,515	19,871,874	5,514,535	12,607,840		11,295,000
... 19	19,371,000	4,913,000	10,425,000	13,728,246	16,857,056	3,858,237	13,512,245		8,410,000
Feb. 2	19,122,000	5,412,000	10,706,000	12,092,361	18,216,497	3,782,879	13,807,258		9,929,000
... 16	18,724,000	5,644,000	10,532,000	11,931,006	17,743,632	4,164,823	12,964,125		9,500,000
March 1	18,935,000	5,493,000	10,600,000	11,451,006	19,490,762	4,083,033	13,918,279		10,830,000
... 15	18,493,000	5,885,000	10,554,000	11,451,006	19,285,028	5,506,124	12,650,535		10,659,000
April 5	19,445,000	4,470,000	10,057,000	11,871,778	19,711,720	6,010,439	11,510,329		11,108,000
... 19	20,015,000	3,669,000	9,876,000	13,117,833	15,929,363	2,958,753	11,907,623		7,699,000
May 3	20,226,000	3,431,000	9,807,000	13,755,083	15,446,266	3,871,799	10,806,090		7,268,000
... 17	19,537,000	4,137,000	9,802,000	12,479,416	16,710,812	2,991,956	12,351,097		8,568,000
June 7	19,579,000	5,953,000	11,688,000	11,682,126	14,333,306	3,297,127	10,734,513	5	6,197,000
... 21	19,323,000	6,915,000	12,418,000	11,276,155	14,411,854	4,132,110	10,602,674	„	6,271,000
July 5	19,947,000	6,552,000	12,611,000	11,308,515	15,527,912	4,817,074	10,470,957	4½	7,111,000
... 19	20,863,000	5,321,000	12,331,000	14,798,464	13,153,664	3,242,869	11,902,473	„	4,760,000
Aug. 2	20,476,000	5,795,000	12,433,000	12,483,045	14,186,000	3,677,416	10,581,413	„	5,790,000
... 16	20,079,000	6,201,000	12,456,000	12,010,078	15,270,195	4,668,218	10,560,407	„	6,872,000
Sept. 6	19,980,000	6,022,000	12,179,000	12,114,078	16,126,951	6,087,068	9,624,407	„	7,262,000
... 20	19,789,000	6,226,000	12,133,000	11,964,953	18,291,557	7,909,724	9,958,972	„	9,433,000
Oct. 4	20,926,000	3,776,000	10,784,000	11,464,278	21,582,464	7,759,499	10,323,552	5	12,746,000
... 18	21,155,000	2,551,000	9,760,000	11,103,896	19,054,088	4,040,590	10,481,220	„	10,336,000
Nov. 1	20,536,000	2,944,000	9,596,000	10,737,841	19,053,446	4,713,654	9,912,776	„	10,341,000
... 15	19,929,000	3,607,000	9,684,000	10,457,869	19,054,017	4,924,785	10,113,368	7	10,412,000
Dec. 6	19,195,000	5,151,000	10,486,000	10,640,867	17,389,715	5,870,709	9,297,193	6½	8,791,000
... 20	18,513,000	5,864,000	10,514,000	10,870,431	17,654,460	6,891,949	9,493,093	6	9,063,000

Tables.

No. V.—ACCOUNT of the Joint-Stock Banks of England and Wales, with their Partners, Branches, Capital, and the Fixed Issues of such as issue Notes, &c.—(Abridged from the *Bankers' Almanac* for 1858).

Banks.	Date of Establishment.	Partners.	Paid-up Capital.	Branches.	Fixed Issues.
Ashton, Stalybridge, Hyde, and Glossop Bank	1836	152	£25,000	...	...
Bolton Bank	1836	115	64,940	...	...
London Bank	1855	400	300,000	1	...
Stockport Bank	1836	155	60,000	...	...
Westmoreland Bank	1833	121	21,400	...	£12,225
Whitehaven Bank	1837	125	50,000	1	32,681
Liverpool Bank	1831	395	625,000	...	...
Manchester Bank	1828	88	106,068	...	...
Barnsley Banking Company	1832	88	34,200	...	9,563
Bilston District Bank	1836	95	30,375	...	9,418
Birmingham Town and District Banking Company	1836	206	75,000	...	...
Birmingham Banking Company	1829	495	200,000	2	...
Birmingham and Midland Bank	1836	101	150,000	1	...
Bradford Commercial Bank	1833	140	47,550	...	20,084
Bradford Banking Company	1827	140	154,000	...	49,292
Bucks and Oxon Union Bank	1853	9	55,000	7	...
Burton, Uttoxeter, and Ashbourne Union Bank	1839	198	97,312	2	60,701
Bury Banking Company	1836	90	53,820	...	...
Carlisle City and District Bank	1837	237	58,000	1	19,972
Carlisle and Cumberland Banking Company	1836	221	51,925	2	25,610
Chesterfield and North Derbyshire Banking Company	1834	92	25,000	...	10,421
City Bank	1855	268	225,000	...	...

Tables.

Tables.

Banks.	Date of Establishment.	Partners.	Paid-up Capital.	Branches.	Fixed Issues.
Commercial Bank of London	1840	346	300,000	...	...
County of Gloucester Bank	1836	265	181,000	10	144,352
Coventry Banking Company	1836	114	56,000	1	16,251
„ and Warwickshire Banking Company	1835	126	76,000	...	28,734
Cumberland Banking Company	1829	153	60,000	5	35,395
Darlington District Banking Company	1831	220	...	5	26,134
Derby and Derbyshire Banking Company	1833	145	62,500	1	20,093
Devon and Cornwall Banking Company	1832	223	100,000	12	...
Dudley and West Bromwich Banking Company	1833	142	91,400	1	37,696
East of England Bank	1835	170	100,000	11	25,025
Glamorganshire Banking Company	1836	132	125,000	2	...
Gloucestershire Banking Company	1831	438	200,000	9	155,920
Halifax Commercial Banking Company	1836	102	61,700	...	13,733
„ Joint-Stock Banking Company	1829	135	75,000	...	18,534
„ and Huddersfield Union Banking Company	1836	260	170,000	1	44,137
Hampshire Banking Company	1834	156	100,000	6	...
Helston Banking Company	1836	10	...	...	1,503
Herefordshire Banking Company	1836	88	45,257	4	25,047
Huddersfield Banking Company	1827	229	140,000	2	37,354
Hull Banking Company	1833	220	Unknown.	3	29,333
Kingsbridge Joint-Stock Bank	1841	...	Unknown.	...	3,952
Knaresborough and Claro Banking Company	1831	104	Unknown.	7	28,059
Lancaster Banking Company	1826	221	125,000	3	64,311
Leamington Priors and Warwickshire Bank	1835	44	Unknown.	3	13,875
Leeds Banking Company	1832	231	110,100	...	23,076
Leicestershire Banking Company	1829	162	142,500	6	86,060
Lincoln and Lindsey Bank	1833	190	77,000	10	51,620
Liverpool Borough Bank*	1836	329	1,000,000	...	...
„ Commercial Banking Company	1832	237	326,400	...	...
„ Royal Bank	1836	200	650,000	...	...
„ Union Bank	1835	208	375,000	...	...
London and County Joint-Stock Banking Company	1836	850	500,000	64	...
„ Joint-Stock Bank	1836	...	600,000	1	...
„ and Westminster Bank	1834	...	1,000,000	6	...
Ludlow and Tenbury Banking Company	1840	11	Unknown.	...	10,215
Manchester and Salford Bank	1836	151	285,000	...	...
„ and Liverpool District Banking Company	1829	683	750,000	14	...
Nottinghamshire Banking Company	1836	182	82,224	...	35,813
National Provincial Bank of England	1833	1,067	600,000	78	442,371
Northamptonshire Banking Company	1836	267	60,000	3	26,401
„ Union Bank	1836	629	192,500	3	84,356
Northumberland and Durham District Bank	1836	408	652,891	8	...
North and South Wales Bank	1836	215	161,587	17	63,951
North Wilts Banking Company	1835	173	40,000	10	63,939
Nottingham and Nottinghamshire Banking Company	1834	245	203,500	5	29,477
Pares' Leicestershire Bank	1836	157	168,750	4	59,300
South Hants Banking Company	1839	60	Unknown.	1	...
Preston Banking Company	1844	3	100,000	3	...
Saddleworth Banking Company	1833	101	Unknown.	2	8,122
Sheffield Union Banking Company	1843	88	81,600	1	...
„ and Rotherham Banking Company	1836	215	121,231	3	52,496
„ Banking Company	1831	181	146,400	1	35,843
„ and Hallamshire Bank	1836	282	158,650	...	23,524
Shropshire Banking Company	1836	250	45,000	3	47,951
Stamford, Spalding, and Boston Bank	1832	About 70	Unknown.	7	55,721
Stourbridge and Kidderminster Bank	1834	136	100,000	3	56,830
Stuckey's Banking Company	1826	75	...	23	356,976
Swaledale and Wensleydale Banking Company	1836	204	53,400	3	54,372
Unity Joint-Stock Banking Association	1855	549	150,000	62	...
Union Bank of London	1839	930	600,000	3	...
„ of Manchester	1836	135	192,000	1	...
West Riding Union Bank	1832	460	Unknown.	2	34,029
Whitchurch and Ellesmere Banking Company	1840	32	Unknown.	1	7,475
Wakefield and Barnsley Union Bank	1832	92	40,000	1	14,604
Warwick and Leamington Banking Company	1834	44	32,800	4	37,124
West of England and South Wales District Bank	1834	732	498,925	15	83,535
Western Bank of London	1856	398	200,000	...	...
Whitehaven Bank	1829	220	42,375	1	31,916
Wilts and Dorset Banking Company	1835	251	100,000	23	76,162
Worcester City and County Bank	1840	60	30,000	1	6,848
Wolverhampton and Staffordshire Banking Company	1832	195	100,000	...	35,378
Yorkshire Banking Company	1843	260	144,964	13	122,532
York City and County Bank	1830	...	100,000	8	94,695
„ Union Banking Company	1833	166	99,000	4	71,240
Total Fixed Issues	...	...	...	...	£3,303,357

* This bank has stopped payments.

Tables. No. VI.—AN ACCOUNT of the Average Amount of Bank Notes, of the Several Private Banks of Issue in England and Wales, in Circulation during the Weeks ending 8th of November 1856, and the 7th November 1857, with the Fixed Issues of said Banks.—(*From the London Gazette*). Tables.

Banks.	Average Amount, Nov. 8, 1856.	Average Amount, Nov. 7, 1857.	Authorised, or Fixed Issue.
	£	£	£
Andover Bank	13,627	10,931	17,751
Ashford Bank	13,277	10,733	11,849
Aylesbury Old Bank	32,829	27,533	48,461
Baldock and Biggleswade Bank	33,631	29,473	37,223
Barnstaple Bank	10,514	10,187	17,182
Basingstoke and Oldham Bank	21,443	22,038	24,730
Bedford Bank	32,511	32,205	34,218
Bewdley Bank	11,546	12,636	18,597
Bicester and Oxfordshire Bank	14,983	16,070	27,090
Birmingham Bank	22,943	23,450	23,695
Birmingham and Warwick Bank	9,998	9,354	18,132
Blandford Bank	6,094	6,401	9,723
Boston Bank	68,657	69,011	75,069
Boston Bank	14,892	15,263	15,161
Bridgewater Bank	7,546	7,244	10,028
Bristol Bank	33,823	33,619	48,277
Brosely and Bridegnorth Bank	19,628	19,584	26,717
Buckingham Bank	23,033	23,880	29,657
Bury, Suffolk, Sudbury, and Stowmarket Bk.	73,254	64,327	82,362
Banbury Bank	36,235	35,017	43,457
Banbury Old Bank	28,226	32,537	55,153
Bedfordshire Buzzard Bk.	36,194	34,308	36,829
Birmingham Bank	29,799	27,351	38,816
Bradford Old Bank	12,123	11,556	12,676
Brecon Old Bank	63,011	64,145	68,271
Brighton Union Bank	20,097	16,968	33,794
Burlington and Driffield Bank	12,594	12,474	12,745
Bury Saint Edmunds Bk.	...	2,393	3,201
Cambridge Bank	14,948	13,475	25,744
Cambridge and Cambridgeshire Bank	49,772	47,299	49,916
Canterbury Bank	28,604	32,051	33,671
Carmarthen Bank	23,859	24,606	23,597
Chertsey Bank	2,545	2,745	3,436
Colchester Bank	17,905	17,197	25,082
Colchester and Essex Bk.	36,410	38,596	48,704
Cornish Bank, Truro	47,146	45,490	49,869
Coventry Bank	7,618	6,634	12,045
City Bank, Exeter	21,342	19,880	21,527
Craven Bank	75,253	73,524	77,154
Chepstow Old Bank	9,383	8,519	9,387
Derby Bank	10,002	10,331	13,332
Derby Bank	40,828	37,315	41,304
Derby Old Bank	27,201	25,872	27,237
Devizes and Wiltshire Bk.	9,735	8,840	20,674
Diss Bank	10,330	10,385	10,657
Doncaster and Retford Bk.	73,087	69,664	77,400
Darlington Bank	84,999	82,698	86,218
Devonport Bank	9,315	9,276	10,664
Dorchester Old Bank	47,966	47,642	48,807
East Cornwall Bank	94,863	96,036	112,280
East Riding Bank	54,090	52,717	53,392
Essex and Stortford Bk.	46,158	41,794	69,637
Exeter Bank	27,552	25,312	37,894
Farringdon Bank	7,637	7,147	8,977
Farnham Bank	12,479	11,160	14,202
Faversham Bank	5,805	5,923	6,681
Godalming Bank	4,603	4,977	6,322
Guildford Bank	13,260	12,619	14,524
Grantham Bank	29,743	26,774	30,372
Hastings Old Bank	30,919	...	...
Carry forward	1,687,865	1,597,186	1,951,570

Banks.	Average Amount, Nov. 8, 1856.	Average Amount, Nov. 7, 1857.	Authorised, or Fixed Issue.
	£	£	£
Brought forward	1,687,865	1,597,186	1,951,570
Hereford City and County Bank	18,841	22,063	23,635
Huntingdon Town and County Bank	53,842	48,537	56,591
Harwich Bank	5,252	4,705	5,778
Hertfordshire, Hitchin Bk.	31,885	29,958	38,764
Hereford and Ross Bank	24,384	23,398	27,625
Ipswich Bank	21,497	20,996	21,901
Ipswich and Needham Bank, Suffolk and Hadleigh Bank	67,041	65,329	80,699
Kentish Bank	17,559	15,900	19,895
Kingston-upon-Hull Bk.	20,131	20,633	19,979
Kington and Radnor Bk.	25,956	25,927	26,050
Knaresborough Old Bank	21,459	21,472	21,825
Kendal Bank	45,366	44,251	44,663
Kettering Bank	8,839	...	...
Longton Staffordshire Bk.	5,259	5,140	5,624
Leeds Bank	52,435	52,358	53,357
Leeds Union Bank	36,694	36,921	37,459
Leicester Bank	31,028	30,030	32,322
Lewes Old Bank	28,988	19,776	44,836
Lincoln Bank	93,223	90,882	100,342
Llandovery Bank	31,739	29,805	32,945
Loughborough Bank	7,273	6,602	7,359
Lymington Bank	3,599	3,390	5,038
Lynn Regis and Lincoln Bank	40,894	38,860	42,817
Lynn Regis and Norfolk Bank	13,330	11,670	13,917
Macclesfield Bank	14,924	14,321	15,769
Manningtree Bank	2,995	1,545	7,690
Merionethshire Bank	9,710	10,632	10,902
Miners' Bank	17,764	17,874	18,688
Monmouth Agric. and Commercial Bank	28,112	29,028	29,335
Monmouth Old Bank	16,929	15,871	16,385
Newark Bank	27,398	22,693	28,788
Newark and Sleaford Bk.	51,293	50,670	51,615
Newbury Bank	19,404	19,277	36,787
Newmarket Bank	22,227	22,130	23,098
Norwich Crown Bank	48,200	48,776	49,671
Norwich and Norfolk Bk.	96,996	95,938	99,655
Nottingham and Notts Bk.	9,953	10,187	10,867
Nuneaton Bank	3,284	3,497	5,898
Naval Bank, Plymouth	19,003	21,548	27,321
New Sarum Bank	9,159	9,614	15,659
Nottingham Bank	32,305	31,437	31,047
Oswestry Bank	11,419	11,841	18,471
Oxford Old Bank	32,680	33,905	34,391
Old Bank, Tonbridge	11,916	7,755	13,183
Oxfordshire Witney Bank	11,360	9,615	11,852
Pease's Old Bank	47,879	46,056	48,807
Penzance Bank	10,836	10,599	11,405
Peterborough Bank	10,580	10,557	12,545
Pembrokeshire Bank	12,399	12,565	12,910
Reading Bank	32,190	27,951	37,519
Reading Bank	29,662	28,933	43,271
Richmond Bank	6,595	6,357	6,889
Rochdale Bank	4,403	4,471	5,590
Rochester and Strood Bk.	7,961	7,141	10,480
Royston Bank	14,490	11,790	16,393
Rugby Bank	8,313	9,446	17,250
Rye Bank	15,868	13,836	29,864
Ross Old Bank, Herefordshire	3,259	3,926	4,420
Saffron Walden Bank	29,073	29,006	47,646
Carry forward	3,114,918	2,976,577	3,610,508

Money.

Banks.	Average Amount, Nov. 8, 1856.	Average Amount, Nov. 7, 1857.	Authorised, or Fixed Issue.
	£	£	£
Brought forward . .	3,114,918	2,976,577	3,610,508
Salop Bank	15,396	14,425	22,338
Scarborough Old Bank .	24,677	24,653	24,813
Shrewsbury Old Bank .	39,797	40,562	43,191
Sittingbourne and Milton Bank . . .	2,731	3,815	4,789
Southampton Town and County Bank . . .	11,457	11,486	18,589
Southwell Bank . . .	14,272	12,323	14,744
Southampton and Hampshire Bank . . .	3,358	2,973	6,770
Stone Bank	340	....	9,154
Stafford Old Bank . .	11,912	13,333	14,166
Stamford and Rutland Bk.	31,044	29,932	31,858
Shrewsbury and Welsh Pool Bank . . .	24,459	22,741	25,336
Taunton Bank	27,583	29,328	29,799
Tavistock Bank . . .	10,415	8,910	13,421
Thornbury Bank . . .	8,224	9,808	10,026
Tiverton and Devonshire Bank	10,820	12,863	13,470
Thrapston and Kettering Bank	11,497	11,188	11,559
Tring Bank, and Chesham Bank	12,995	13,274	13,531
Towcester Old Bank . .	7,544	7,760	10,801
Town and County of Poole Bank . . .	11,413	8,513	11,856
Carry forward . .	3,394,852	3,254,464	3,940,719

Banks.	Average Amount, Nov. 8, 1856.	Average Amount, Nov. 7, 1857.	Authorised, or Fixed Issue.
	£	£	£
Brought forward . .	3,394,852	3,254,464	3,940,719
Union Bank, Cornwall .	16,825	16,594	17,003
Uxbridge Old Bank . .	13,454	12,764	25,136
Wallingford Bank . .	7,753	7,233	17,064
Warwick and Warwickshire Bank . . .	26,554	22,344	30,504
Wellington Somerset Bank	3,918	4,498	6,528
West Riding Bank . .	45,820	44,353	46,158
Whitby Old Bank . .	13,424	13,975	14,258
Winchester and Alton Bank	19,436	18,573	25,892
Weymouth Old Bank .	15,549	16,161	16,461
Wirksworth and Ashbourne Bank . .	36,766	36,952	37,602
Wisbeach and Lincoln Bank	59,080	57,326	59,713
Wivcliscombe Bank . .	7,275	7,226	7,602
Wolverhampton Bank .	12,742	10,640	14,180
Worcester Bank . . .	5,624	6,242	15,463
Worcester Old Bank .	68,872	74,294	87,448
Worcestershire Bank .	7,772	...	...
Wolverhampton Bank .	11,344	10,993	11,867
Yarmouth and Suffolk Bank	48,305	44,297	53,060
Yarmouth, Norfolk, and Suffolk Bank . .	12,747	12,168	13,229
York Bank	43,873	44,575	46,387
Totals . .	3,871,985	3,715,672	4,486,274

The amount of notes afloat varies from time to time, with the varying condition of the country, the state of credit, and so forth. It may, however, in ordinary years, be estimated as follows, viz.—

Issued by Bank of England . .		£28,000,000
,,	Private banks in England .	3,700,000
,,	Joint-stock banks in England	3,050,000
,,	Scotch banks . . .	4,000,000
,,	Irish banks . . .	7,000,000
	Total Issues .	£45,750,000

Of this sum, from five to six millions is usually in the till of the banking department of the bank.

Sect. VII.—*Banks (Scotch).*

The Act of 1708, preventing more than six individuals from entering into a partnership for carrying on the business of banking, did not extend to Scotland. In consequence of this exemption, several banking companies, with numerous bodies of partners, have existed, for a lengthened period, in that part of the empire.

Bank of Scotland.

The Bank of Scotland was projected by Mr. John Holland, merchant, of London, and was established by Act of the Scotch Parliament (Will. III. Parl. 1, § 5) in 1695, by the name of the Governor and Company of the Bank of Scotland. Its original capital was £1,200,000 Scotch, or £100,000 sterling, distributed in shares of £1000 Scotch, or £83 : 6 : 8 sterling, each. The Act exempted the capital of the bank from all public burdens, and gave it the exclusive privilege of banking in Scotland for 21 years. The objects for which the bank was instituted, and its mode of management, were intended to be, and have been, in most respects, similar to those of the Bank of England. The responsibility of the shareholders is limited to the amount of their shares.

The capital of the bank was increased to £200,000 in 1744, and was enlarged by subsequent Acts of Parliament, the last of which (44 Geo. III. c. 23) was passed in 1804, to £1,500,000, its present amount. Of this sum £1,000,000 has been paid up. The last-mentioned Act directed that all sums relating to the affairs of the bank should henceforth be rated in sterling money; that the former mode of dividing bank stock by shares should be discontinued; and that, for the future, it should be transferable in sums or parcels of any amount. On the union of the two kingdoms in 1707, the Bank of Scotland undertook the recoinage, and effected the exchange of the currency in Scotland. It was also the organ of government in the issue of the new silver coinage in 1817.

The Bank of Scotland is the only Scotch bank constituted by Act of Parliament. It began to establish branches in 1696, and issued notes for one pound so early as 1704. The bank also began, at a very early period, to receive deposits on interest, and to grant credit on cash-accounts, a minute of the directors with respect to the mode of keeping the latter being dated so far back as 1729. It is, therefore, entitled to the credit of having introduced and set on foot the distinctive principles of the Scotch banking system, which, whatever may be its defects, is perhaps superior to most other systems hitherto established. Generally speaking, the Bank of Scotland has been cautiously and skilfully conducted; and there can be no doubt that it has been productive, both directly and as an example to other banking establishments, of much public utility and advantage.

It may be worth mentioning, that the Act of Will. III. establishing the Bank of Scotland, declared that all foreigners who became partners in the bank should, by doing so, become, to all intents and purposes, naturalised Scotchmen. After being for a long time forgotten, this clause was taken advantage of in 1818, when several

Money. aliens acquired property in the bank in order to secure the benefit of naturalisation. But after being suspended, the privilege was finally cancelled in 1822.

We subjoin an *official* abstract of the constitution and objects of the Bank of Scotland, printed for the use of the proprietors;—the terms and mode of transacting business are, of course, sometimes altered, according to circumstances.

I. The Bank of Scotland is a public national establishment; erected and regulated by the legislature alone: and expressly as a public bank in this kingdom; for the benefit of the nation, and for the advancement of agriculture, commerce, and manufactures; and for other objects of public policy.—(Will. Parl. 1, § 5; 14 Geo. III. c. 32; 24 Geo. III. c. 8; 32 Geo. III. c. 25; 34 Geo. III. c. 19; 44 Geo. III. c. 23.)

II. The statutory capital is at present £1,500,000 sterling. It is raised by voluntary subscription; and has been subscribed for. £1,000,000 has been called for, and paid in.—(44 Geo. III. c. 23.)

III. Subscribers, if not under obligations to the bank, may, at pleasure, transfer their right. If under obligation to the bank, the obligation must be previously liquidated; or the proceeds of the sale, at a price to the satisfaction of the directors, must be applied towards such liquidation. Transfers are made by a short assignment and acceptance thereof, both in a register appointed for that purpose. The expense, beside the government stamp, is 11s.—(Will. Parl. 1, § 5.)

IV. Bank of Scotland stock may be acquired, in any portions, by any person, community, or other lawful party whatsoever; without selection, exclusion, or limitation of numbers. —(Will. Parl. 1, § 5; 44 Geo. III. c. 23.)

V. Bank of Scotland stock may be conveyed by will, and, if specially mentioned, without expense of confirmation. It cannot be arrested: the holder's right may be adjudged. Dividends may be arrested.—(Will. Parl. 1, § 5.)

VI. The Bank of Scotland is a public corporation by Act of Parliament. The bank's transactions are distinct from those of the stockholders: and theirs from those of the bank.—(Will. Parl. 1, § 5.)

VII. The establishment is expressly debarred from any other business than that of banking.—(Will. Parl. 1, § 5.)

VIII. The management is vested, by statute, in a governor, deputy governor, twelve ordinary, and twelve extraordinary directors. They are chosen annually, on the last Tuesday of March, by the stockholders having £250 of stock or upwards. Those above £250, have a vote for every £250, to £5000, or 20 votes. No person can have more than 20 votes. The governor must hold, at least, £2000 of stock; the deputy governor £1500; and each director £750. They swear to be equal to all persons; and cannot hold any inferior office in the bank.—(Will. Parl. 1, § 5; 14 Geo. III. c. 32; 44 Geo. III. c. 23.)

IX. The executive part is conducted by a treasurer, secretary, and other public officers, all sworn. Those having the official charge of cash find due security.—(Will. Parl. 1, § 5.)

X. The board of directors sits for the general administration of the bank, at the bank's public head office in Edinburgh. The local business of that district is also conducted at that office. For the local business in the other parts of the kingdom, the bank has its regular public offices in the principal towns. At each of these offices there is the bank agent or cashier, who gives due security, and conducts the bank's business for that district in the manner after mentioned.—(Will. Parl. 1, § 5.)

XI. The bank takes in money at all its public offices, on deposit receipts or on current deposit accounts. At the head-office drafts on the branches, and at the branches drafts on the other branches and on the head-office are granted. Both at the head-office and branches drafts are granted on the London, Dublin, and English and Irish provincial correspondents of the bank. All receipts and drafts are on the bank's engraved forms, and bear to be granted "for the Bank of Scotland" or "for the Governor and Company of the Bank of Scotland." At the head office official documents are signed by the treasurer, and at the branches by the agents, and all are countersigned.

Remittances can be made to the principal colonial and continental towns; and bills, payable in the colonies, and in foreign countries, can be negotiated through the bank.—(*Resolution of Court*, 1793, *as since modified.*)

N.B.—The bank has always allowed interest on deposits, at a rate varying according to circumstances. At present (November 1857) it is 4 per cent. Money.

XII. Bills on London, Edinburgh, or any town in the United Kingdom, are discounted at all the bank's public offices. The bank's agents judge, in ordinary cases, of the bills presented; so that parties meet with no delay. The bank does not re-issue the bills which it has discounted.—(*Resolution of Court*, 23d Feb. 1789, *and Subsequent Modifications*).

XIII. Government stock and other public funds may be purchased or sold, and dividends thereon may be received through the Bank.

XIV. The bank gives credit on cash accounts at any of its offices, on bond, with security. The security may be personal co-obligants, or such other security as may be specially agreed on. Applications for cash accounts are given in to the office where the cash account is wanted, and must specify the credit desired, and the security proposed; and the individual partners, where copartneries are proposed. Cash accounts are granted by the directors only; and are not recalled unless by their special authority. It is understood that these credits are not used as dead loans, to produce interest only. In the fair course of business, the advantage of the bank is consulted by an active circulation of its notes, and by frequent repayments to it in a way least affecting that circulation.—(*Resolution of Court*, 6th Nov. 1729, and 23d Feb. 1789).

XV. The Bank's dividend has been for some time 8 per cent. per annum on its paid-up capital of £1,000,000 sterling. The dividends are paid regularly twice a year, without expense. They may be drawn either at the bank's head office, or at any of its other offices, as most agreeable to the stockholder.

The above may suffice as a general outline of the mode in which the business of banking is conducted in Scotland.

The *Royal Bank of Scotland* was established in 1727. Its original capital of £151,000 has been increased to £2,000,000.

The *British Linen Company* was incorporated in 1746, for the purpose, as its name implies, of undertaking the manufacture of linen. But the views in which it originated were speedily abandoned; and it became a banking company only. Its capital amounts to £1,000,000.

None of the other banking companies established in Scotland are chartered associations with limited responsibility, the partners being liable, to the whole extent of their fortunes, for the debts of the firms. Some of them, such as the Edinburgh and Glasgow Bank, the National Bank, the Western Bank, the Commercial Bank, &c., have very numerous bodies of partners. Their affairs are uniformly conducted by a Board of Directors, annually chosen by the shareholders.

The Bank of Scotland began, as already stated, to issue £1 notes so early as 1704; and their issue has since been continued without interruption. "In Scotland," to use the statement given in the Report of the Committee of the House of Commons of 1826, on the Promissory Notes of Scotland and Ireland, "the issue of promissory notes payable to the bearer on demand, for a sum of not less than 20s., has been at all times permitted by law; nor has any act been passed limiting the period for which such issue shall continue legal in that country."

All the Scotch banks receive deposits of so low a value as £10, and sometimes lower, and allow interest upon them. Deposits.

The interest allowed by the banks upon deposits varies, from time to time, according to the variations in the current rate of interest. At present (1857) it amounts to 4 per cent. And it has been estimated, by the best authorities, that the aggregate amount of the sums deposited with the Scotch banks was, previously to the late panic, little, if any thing, under £50,000,000.

Money. The following TABLE exhibits an account of the different Scotch Banks, their Partners, Branches, Authorised Circulation, Actual Circulation, Coin, &c., in 1856 (from Oliver & Boyd's Almanac). Money.

BANKS.	Instituted.	Partners.	Br.	Paid up Capital.	Authorised Circulation.	Average Circulation, 1855-56.	Coin, 1855-56.
	Years.			£	£	£	£
Bank of Scotland* . .	1695	645	35	1,000,000	300,485	397,388	177,295
Royal Bank* . . .	1727	958	35	2,000,000	183,000	225,092	88,832
British Linen Co.* . .	1746	630	48	1,000,000	438,024	480,572	186,570
Commercial Bank* . .	1810	657	61	600,000	374,880	482,134	183,439
National Bank of Scotland* .	1825	1453	49	1,000,000	297,024	336,407	87,628
Union Bank of Scotland .	1829	930	73	1,000,000	415,690	530,569	175,262
Edinburgh & Glasgow Bank .	1838	1575	23	1,000,000	136,657	163,697	54,138
Aberdeen Town & County Bank	1825	495	20	134,575	70,133	118,969	58,291
North of Scotland Banking Co.	1836	1437	30	200,000	154,319	214,306	89,422
Dundee Banking Co. . .	1763	79	1	60,000	33,451	41,240	14,587
Eastern Bank of Scotland .	1838	400	4	121,140	33,636	41,973	16,295
Western Bank of Scotland† .	1832	1280	98	1,500,000	337,938	482,501	265,938
Clydesdale Banking Co. .	1838	1381	13	807,380	104,028	158,207	78,082
City of Glasgow Bank† . .	1839	1306	97	1,000,000	72,921	255,282	208,715
Caledonian Banking Co. .	1838	803	10	125,000	53,434	69,450	32,126
Perth Banking Co. . .	1766	200	10	100,050	38,656	50,369	26,104
Central Bank of Scotland .	1834	440	8	78,125	42,933	58,367	26,288

A witness, connected for many years with different banks in Scotland, and who had experience of their concerns at Stirling, Edinburgh, Perth, Aberdeen, and Glasgow, being examined by the Commons' Committee of 1826, stated that more than half the deposits in the banks with which he had been connected were in sums from ten pounds to two hundred pounds. Being asked what class of the community it is that makes the small deposits, he gave the following answer; from which it appears that the mode of conducting this branch of the banking business in Scotland has long given to that country most part of the benefits derivable from the establishment of savings banks.

"*Question.* What class of the community is it that makes the smallest deposits?—

"*Answer.* They are generally the labouring classes in towns like Glasgow: in country places like Perth and Aberdeen, it is from servants and fishermen, and that class of the community who save small sums from their earnings, till they come to be a bank deposit. There is now a facility for their placing money in the Provident Banks, which receive money till the deposit amounts to £10. When it comes to £10 it is equal to the minimum of a bank deposit. The system of banking in Scotland is an extension of the Provident Bank system. Half-yearly or yearly those depositors come to the bank, and add the savings of their labour, with the interest that has accrued upon the deposits from the previous half-year or year, to the principal; and in this way it goes on, without being at all reduced, accumulating (at compound interest) till the depositor is able either to buy or build a house, when it comes to be £100, or £200, or £300, or till he is able to commence business as a master in the line in which he has hitherto been a servant. A great part of the depositors of the bank are of that description, and a great part of the most thriving of our farmers and manufacturers have arisen from such beginnings."

Cash-accounts. The loans or advances made by the Scotch banks are either in the shape of discounts, or upon cash-credits, or, as they are more commonly termed, *cash-accounts*.

A cash-credit is a credit given to an individual by a banking company for a limited sum, seldom under £100 or £200, upon his own security, and that of two or three individuals approved by the bank, who become sureties for its payment. The individual who has obtained such a credit is enabled to draw the whole sum, or any part of it, when he pleases, replacing it, or portions of it, according as he finds it convenient; interest being charged upon such part only as he draws out. "If a man borrows £5000 from a private hand, besides that it is not always to be found when required, he pays interest for it whether he be using it or not. His bank credit costs him nothing, except during the moment it is of service to him, and this circumstance is of equal advantage as if he had borrowed money at a much lower rate of interest." —(*Hume's Essay on the Balance of Trade.*) This, then, is plainly one of the most commodious forms in which advances can be made. Cash-credits are not, however, intended to be a *dead loan;* a main object of the banks in granting them is to get their notes circulated, and they do not grant them except to persons in business, or to those who are frequently drawing out and paying in money.

The system of cash-credits has been very well described in the Report of the Lords' Committee of 1826 on Scotch and Irish Banking. "There is also," say their Lordships, "one part of their system which is stated by all the witnesses (and, in the opinion of the Committee, very justly stated) to have had the best effects upon the people of *Scotland*, and particularly upon the middling and poorer classes of society, in producing and encouraging habits of frugality and industry. The practice referred to is that of cash-credits. Any person who applies to a bank for a cash-credit is called upon to produce two or more competent sureties, who are jointly bound; and, after a full inquiry into the character of the applicant, the nature of his business, and the sufficiency of his securities, he is allowed to open a credit, and to draw upon the bank for the whole of its amount, or for such part as his daily transactions may require. To the credit of the account he pays in such sums as he may not have occasion to use, and interest is charged or credited upon the daily balance, as the case may be. From the facility which these cash-credits give to all the small transactions of the country, and from the opportunities which they afford to persons who begin business with little or no capital but their character, to employ profitably the

* The capital of the Banks marked with an asterisk is not in shares, but in stock transferable to any amount.
† These banks stopped payments in November 1857. The latter, however, has resumed business.

minutest products of their industry, it cannot be doubted that the most important advantages are derived to the whole community. The advantage to the banks who give these cash-credits arises from the call which they continually produce for the issue of their paper, and from the opportunity which they afford for the profitable employment of part of their deposits. The banks are indeed so sensible that, in order to make this part of their business advantageous and secure, it is necessary that their cash-credits should (as they express it) be frequently operated upon, that they refuse to continue them unless this implied condition be fulfilled. The total amount of their cash-credits is stated by one witness to be £5,000,000, of which the average amount advanced by the banks may be one-third."

The expense of a bond for a cash-credit of £500. is 12*s.* 6*d.* stamp duty, and a charge of from 5*s.* to 10*s.* 6*d.* per cent. for preparing it.

Stability of the Scotch banks.

There have been, until lately, comparatively few failures among the Scotch banks. In 1793 and 1825, when so many of the English banks were swept off, there was not a single establishment in Scotland that gave way. This superior solidity appears to have been owing to various causes, partly to the banks having, for the most part, large bodies of partners, who, being conjointly and individually bound for the debts of the companies to which they belong, go far to render their ultimate security all but unquestionable; and partly to the facility afforded by the law of Scotland, of attaching a debtor's property, whether it consist of land or movables, and making it available for the payment of his debts. This last-mentioned circumstance was referred to as follows, in the report already alluded to.

"A creditor in Scotland is empowered to attach the real and heritable, as well as the personal estate of his debtor, for payment of personal debts, among which may be classed debts due by bills and promissory notes; and recourse may be had, for the purpose of procuring payment, to each description of property at the same time. Execution is not confined to the real property of a debtor merely during his life, but proceeds with equal effect upon that property after his decease.

"The law relating to the establishment of records gives ready means of procuring information with respect to the real and heritable estate of which any person in Scotland may be possessed. No purchase of an estate in that country is secure until the sasine (that is, the instrument certifying that actual delivery has been given) is put on record, nor is any mortgage effectual until the deed is in like manner recorded.

"In the case of conflicting pecuniary claims upon real property, the preference is not regulated by the date of the transaction, but *by the date of its record.* These records are accessible to all persons; and thus the public can with ease ascertain the effective means which a banking company possesses of discharging its obligations; and the partners in that company are enabled to determine, with tolerable accuracy, the degree of risk and responsibility to which the private property of each is exposed."

But, on the whole, we are inclined to think that the long familiarity of the inhabitants with banks and paper money, and the less risk that has attended the business of banking in Scotland, have been the principal causes of the greater stability of the Scotch banks. Latterly, however, owing to the rapid growth of Glasgow, Dundee, and other commercial towns, the risk attending banking in Scotland has materially increased. And while hazard has been augmenting on the one hand, there appears, on the other, to have been a still more rapid decrease of that cautious policy that was supposed to be a characteristic of Scotch bankers. In the recent crisis two of the principal Scotch banks, the head-quarters of which were in Glasgow, were compelled to stop payments. They had very large capitals, the Western Bank £1,500,000, and the City of Glasgow Bank £1,000,000, with a great many branches, large amounts of deposits, and very numerous and wealthy proprietary bodies. Had their management displayed anything like ordinary skill and prudence, they might have gone triumphantly through a far more serious trial. But it was characterised, especially that of the Western Bank,[1] by the most marvellous folly and recklessness. Having advanced immense sums to a few firms that never were entitled to any considerable credit, the Western Bank was so crippled that, for a lengthened period before their stoppage, they were reduced to the miserable expedient of sending up the bills they had discounted in Glasgow to be rediscounted in London; and when this resource failed them, and the other banks declined to come forward to their assistance, they had nothing for it but to shut their doors. On the affairs of the bank being investigated by a committee appointed for the purpose, it was found that they were in a much worse state than any one could have anticipated. Their entire losses are said to amount to the enormous sum of £2,020,584; so that, in addition to the capital and rest of the bank, making together £1,715,892, which have wholly disappeared, a further deficiency of £304,692 will have to be provided for! No such gigantic failure has ever occurred in Scotland; and it is not easy to imagine the misery of which it cannot fail to be productive.

Bankruptcy of the Western Bank.

Eventually, there can be no doubt that the creditors of the Western Bank will be fully paid, for the proprietary comprises some of the most opulent individuals in Scotland. Unhappily, however, it also comprises hundreds belonging to the middle and lower classes, who were tempted, by the dividend of 9 per cent., and the assurance of prosperity, to embark in the concern. And a loss that may be of little or no consequence to the former may send the latter to the workhouse.

The ruin in which the bank has been involved did not come suddenly upon it. On the contrary, it has been accumulating for years. And yet the directors took no steps, or none that were efficient, to arrest the progress of the evil; nor did they apprise their confiding constituents of the perilous condition into which the bank had got. Concealment was practised to the very last moment, till the concern was irretrievably sunk in the abyss of bankruptcy. It is much to be wished that directors who have so acted were really responsible for their conduct. No charge of corruption is brought against them; but their inattention to, and neglect of, the important interests committed to their charge, has been wholly inexcusable. They were bound, on undertaking the office of directors, to bestow unremitting care and diligence upon the performance of the duties which it imposed on them. They might neglect their own business; but they could not, without a flagrant breach of trust, neglect the duties they had undertaken to discharge on account of others. This, however, is precisely what they have done. They appear to have selected the most reckless and incompe-

[1] The management of the City of Glasgow Bank, though in many respects blameworthy, has been, as compared with that of the Western Bank, prudent and skilful. It has recommenced business; and it is to be hoped that its managers will profit by the lesson they have received.

Money.

tent managers, and then to have given them *carte blanche*. Whatever such conduct may be in law, it is, morally and politically, in the highest degree culpable. Hundreds have been sent to the antipodes and the treadmill for offences that were comparatively innocuous. No doubt, however, the grand source of mismanagement in banks and other associations is to be found in the apathy of the shareholders, in the blind and often undeserved confidence they place in those who are, no matter how, at the head of their concerns. If those who may be ruined by the proceedings of their own officers and servants will not look after them, it were idle to attempt to throw such a duty upon others.

In a public point of view the stoppage of the Glasgow banks was productive of the very worst results. By creating a panic, and occasioning a heavy internal demand for gold, it may indeed be said to have been the main cause of the suspension of the Act of 1844.

£1 notes should be suppressed.

The recent occurrences would seem to show that the time for the suppression of £1 notes in Scotland has arrived. The panic, which has had such mischievous results, principally prevailed among the smallest class of depositors and the holders of £1 notes. Everybody in the least degree familiar with money matters knew that, however the Western Bank might have been perverted and abused, its solvency could admit of no doubt. But such considerations could not be expected to influence the lower classes, who are the principal holders of £1 notes, and to whom large sums are due by the savings and other banks; and hence the run on the Western Bank, the City of Glasgow Bank, and on other banks whose character stood highest. It may be fairly presumed that if £1 notes be permitted to continue in circulation, the like results will take place on future occasions. And with a view to obviate their recurrence, and to strengthen the basis of the currency, sovereigns should be introduced instead of £1 notes. The change would occasion little, if any, immediate loss to the banks, and the increased security of which it would be productive would be as advantageous to them as it would be to the other classes of the community.

We also think that it would be good policy to make Bank of England notes legal tender in Scotland and Ireland as well as in England. This might occasionally be a convenience to all parties, and it would tend to familiarise the public in those parts of the empire to the use of Bank of England notes, which ought eventually to be the only notes in circulation.

Sect. VIII.—*Banking in Ireland.*

Banking in Ireland.

"In no country, perhaps," says Sir Henry Parnell, "has the issuing of paper money been carried to such an injurious excess as in Ireland. A national bank was established in 1783, with similar privileges to those of the Bank of England, in respect to the restriction of more than six partners in a bank; and the injury that Ireland has sustained from the repeated failure of banks may be mainly attributed to this defective regulation. Had the trade of banking been left as free in Ireland as in Scotland, the want of paper-money that would have arisen with the progress of trade, would in all probability have been supplied by joint-stock companies, supported with large capitals, and governed by wise and effectual rules.

"In 1797, when the Bank of England suspended its payments, the same privilege was extended to Ireland; and after this period the issues of the Bank of Ireland were rapidly increased. In 1797, the amount of the notes of the Bank of Ireland in circulation was £621,917; in 1810, £2,266,471; and in 1814, £2,986,999. Money.

"These increased issues led to corresponding increased issues by the private banks, of which the number was fifty in 1804. The consequence of this increase of paper was its great depreciation; the price of bullion and guineas arose to ten per cent. above the mint price; and the exchange with London became as high as eighteen per cent., the par being 8⅓. This unfavourable exchange was afterwards corrected, not by any reduction in the issues of the Bank of Ireland, but by the depreciation of the British currency in the year 1810, when the exchange between London and Dublin settled again at about par. (See Art. Exchange.)

"The loss that Ireland has sustained by the failure of banks may be described in a few words. It appears, by the Report of the Committee on Irish Exchanges in 1804, that there were, at that time, in Ireland fifty registered banks. Since that year a great many more have been established, but the whole have failed, one after the other, involving the country from time to time in immense distress, with the following exceptions:—*First*, a few that withdrew from business; *secondly*, four banks in Dublin; *thirdly*, three at Belfast; and, *lastly*, one at Mallow. These eight banks, with the new Provincial Bank and the Bank of Ireland, are the only banks now (1827) existing in Ireland.

"In 1821, in consequence of eleven banks having failed nearly at the same time, in the preceding year, in the south of Ireland, government succeeded in making an arrangement with the Bank of Ireland, by which joint-stock companies were allowed to be established at a distance of fifty miles (Irish) from Dublin, and the bank was permitted to increase its capital from 2½ to 3 millions sterling. The Act 1 and 2 Geo. IV. c. 72, was founded on this agreement. But ministers having omitted to repeal in this Act various restrictions on the trade of banking that had been imposed by 33 Geo. II. c. 14, no new company was formed. In 1824, a party of merchants of Belfast, wishing to establish a joint-stock company, petitioned Parliament for the repeal of this Act of Geo. II.; and an Act was accordingly past in that session, repealing some of its most objectionable restrictions. (5 Geo. IV. c. 73.)

"In consequence of this Act, the Northern Bank of Belfast was converted into a joint-stock company, with a (nominal) capital of £500,000, and commenced business on the 1st of January 1825. But the restrictions of 33 Geo. II., and certain provisions contained in the Acts 1 and 2 Geo. III., and 5 Geo. IV., obstructed its progress, and they found it necessary to apply to government to remove them; and a bill was accordingly introduced, which would have repealed all the obnoxious clauses of the 33 Geo. II., had it not been so altered in the committee as to leave several of them in force. In 1825 the Provincial Bank of Ireland commenced business with a (nominal) capital of £2,000,000; and the Bank of Ireland has of late established branches in all the principal towns."[1]

Since Sir Henry Parnell published the pamphlet from which we have taken the foregoing extract, several joint-stock banking companies have been founded in Ireland. The Provincial Bank, to which Sir Henry alludes, has a paid up capital of £540,000, and has been well and profitably managed. But others have been less fortunate. The Agricultural and Commercial Bank of Ireland, established in 1834, with 2170 partners, a paid-up capi-

[1] *Observations on Paper-Money*, &c., by Sir Henry Parnell, p. 171.

Money. tal of £352,790, and many branches, stopped payment during the pressure in November 1836, and by doing so involved many persons in great distress. It appears to have been extremely ill-managed. The auditors appointed to examine into its affairs, reported that "Its book-keeping has been found to be so faulty, that we are convinced no accurate balance-sheet could at any time have been constructed." And they significantly added "the personal accounts at the head office require a diligent and searching revision."

The Tipperary Joint-Stock Bank, which was established in 1839, and stopped payments in 1855, appears to have been little, if at all, better than a mere swindling engine. Luckily it did not issue notes; and the sphere of its operations was not very extensive. But, so far as its influence went, nothing could be worse, being ruinous alike to the majority of its partners and the public. Money.

The existing Irish joint-stock banks, amounting to seven, have been all established between 1824 and 1836. We borrow principally from Thom's *Irish Almanac*, the most valuable publication of its class, the following details with respect to the Irish banks in 1856:—

ACCOUNT of the Banks existing in Ireland in 1856, their Branches, Capital, Fixed Issues, &c.

Banks.	Instituted.	Partners.	No. of Branches.	Nominal Capital.	Capital paid up.	Reserved Fund.	Fixed Issues.
Bank of Ireland	1783	...	23	£3,000,000	£3,000,000	£1,040,000	£3,738,428
*Hibernian Joint-Stock Company, Dublin	1824	604	3	1,000,000	250,000	68,000	...
Provincial Bank of Ireland	1825	945	40	2,000,000	540,000	196,787	927,667
Northern Banking Company, Belfast	1825	230	12	500,000	150,000	59,778	243,440
Belfast Banking Company	1827	246	22	500,000	125,000	...	281,611
National Bank	1835	777	47	1,000,000	450,000	66,482	852,269
Ulster Banking Company, Belfast	1836	398	18	1,000,000	187,000	46,222	311,079
*Royal Bank, Dublin	1836	633	...	1,044,250	209,175	67,500	...

* Thus marked do not issue their own notes.

ANNUAL AVERAGE of the Returns of the several Banks of Issue in Ireland under the Provisions of the Act 8 and 9 Vic. c. 37, for the Years 1846 to 1856.

Years.	Certified Issue of all the Banks.	Notes of £5 and upwards.	Notes under £5.	Total Issue of all the Banks.	Gold held.	Silver held.	Total Specie held by all the Banks.
1846	£6,354,494	£3,121,259	£4,144,461	£7,265,721	£2,106,004	£334,258	£2,440,266
1847	6,354,494	2,844,049	2,986,375	5,830,425	1,263,517	491,953	1,755,475
1848	6,354,494	2,439,121	2,389,868	4,823,992	1,083,919	502,975	1,586,898
1849	6,354,494	2,204,474	2,105,802	4,310,283	1,089,476	528,783	1,541,094
1850	6,354,494	2,197,117	2,315,401	4,512,443	1,017,036	375,322	1,315,439
1851	6,354,494	2,113,077	2,349,870	4,462,909	937,408	318,574	1,255,985
1852	6,354,494	2,215,503	2,602,935	4,818,238	994,548	249,028	1,243,576
1853	6,354,494	2,517,570	3,132,883	5,650,455	1,393,867	182,729	1,576,600
1854	6,354,494	2,872,007	3,423,597	6,295,607	1,745,329	213,711	1,959,043
1855	6,354,494	3,046,460	3,315,833	6,362,303	1,777,110	232,078	2,009,496
1856	...	3,338,718	3,968,583	7,307,361	...	...	2,622,687

Sect. IX.—*Banks of Venice, Amsterdam, &c.*

It would far exceed our limits to enter into any detailed statements with respect to the banks and banking systems of foreign countries; we shall therefore confine ourselves to a brief notice of such banks as have been most celebrated, or are at present of the greatest importance.

Bank of Venice. The Bank of Venice was the most ancient bank in Europe. Historians inform us that the republic being hard pressed for money, was obliged, upon three different occasions, in 1156, 1480, and 1510, to levy forced contributions upon the citizens, giving them in return perpetual[1] annuities at certain rates per cent. The annuities due under the forced loan of 1156, were, however, finally extinguished in the sixteenth century. And the offices for the payment of the annuities due under the other two loans having been consolidated, eventually became the Bank of Venice.[2] This might be effected as follows: The interest on the loan to government being paid punctually, every claim registered in the books of the office would be considered as a productive capital; and these claims, or the right of receiving the annuity accruing thereon, must soon have been transferred, by demise or cession, from one person to another. This practice would naturally suggest to holders of stock the simple and easy method of discharging their mutual debts by transfers on the office books, and as soon as they became sensible of the advantages to be derived from this method of accounting, bank-money was invented.

The Bank of Venice was essentially a deposit bank. Though established without a capital, its bills bore at all times an agio or premium above the current money of the republic. The invasion of the French in 1797 occasioned the ruin of this establishment.

Bank of Amsterdam. The Bank of Amsterdam was founded in 1609, on strictly commercial principles and views, and not to afford any assistance, or to commix with the finances of the State. Amsterdam was then the great entrepôt of the commerce of the world, and of course the coins of all Europe passed current in it. Many of them, however, were so worn and defaced as to reduce their general average value to about nine per cent. less than their mint value; and, in consequence, the new coins were immediately melted down and exported. The currency of the city was thus exposed to great fluctuations; and it was chiefly to remedy this inconvenience, and to fix the value or par of the current money of the country,

1 The annuities on the forced loan of 1480, were to be suspended during periods of war.
2 Cleirac, *Du Negoce, de la Banque*, &c.—(Bordeaux, 1656), pp. 112-117, a scarce and valuable volume.

Money. that the merchants of Amsterdam established a "bank," on the model of that of Venice. Its first capital was formed of Spanish ducats or ducatoons, a silver coin which Spain had struck in the war with Holland, and with which the tide of commerce had enriched the country it was formed to overthrow. The bank afterwards accepted the coins of all countries, worn or new, at their intrinsic value, and made its own bank-money payable in standard coin of the country, of full weight, deducting a "brassage" for the expense of coinage, and giving a credit on its books, or "bank-money," for the deposits.

The Bank of Amsterdam professed not to lend out any part of the specie enstrusted to its keeping, but to retain in its coffers all that was inscribed on its books. In 1672, when Louis XIV. penetrated to Utrecht, almost every one who had an account with the bank demanded his deposit, and these were paid off so readily, that no suspicion could exist as to the fidelity of the administration. Many of the coins then brought forth bore marks of the conflagration which happened at the Hôtel de Ville, soon after the establishment of the bank. This good faith was maintained till about the middle of last century, when the managers secretly lent part of their bullion to the East India Company and Government. The usual "oaths of office" were taken by a religious magistracy, or rather by the magistracy of a religious community, that all was safe; and the good people of Holland believed, as an article of their creed, that every florin which circulated as bank-money, had its metallic constituent in the treasury of the bank, sealed up, and secured by oaths, honesty, and good policy. This blind confidence was dissipated in December 1790, by a declaration that the bank would retain ten per cent. of all deposits, and would return none of a less amount than 2500 florins.

Even this was submitted to and forgiven. But, four years afterwards, on the invasion of the French, the bank was obliged to declare that it had advanced to the States of Holland and West Friesland, and the East India Company, more than 10,500,000 florins, which sum they were, of course, unable to make up to their depositors, to whom, however, they assigned their claims on the States and the company. Bank-money, which previously bore an agio of five per cent., immediately fell to sixteen per cent. below current money.

This epoch marked the fall of an institution which had long enjoyed an unlimited credit, and had rendered the greatest services. The amount of treasure in the vaults of the bank, in 1775, was estimated by Mr Hope at 33,000,000 florins.[1]

Bank of Hamburgh. The Bank of Hamburgh was established in 1619, on the model of that of Amsterdam. It is purely a deposit bank for the transfer of sums from the account of one individual to that of another. It receives no deposits in coin, but only in bullion of a certain degree of fineness. Down to 1845, it charged itself with the bullion at the rate of 442 schillings the mark, and issued it at the rate of 444 schillings, being a charge of four-ninths, or nearly one-half per cent., for its retention; but since that date, it receives and issues bullion at the same rate, charging one per mille for its expenses. It advances money on jewels to three-fourths of their value. The city is answerable for all pledges deposited with the bank: they may be sold by auction if they remain one year and six weeks without any interest being paid. If the value be not claimed within three years, it is forfeited to the poor. This bank is universally admitted to be very well managed.

Sect. X.—*The Bank of France,*

Money. Bank of France. Which is second only in magnitude and importance to the Bank of England, was originally founded in 1800, but was not placed on a solid and well defined basis till 1806. Her capital, which was originally fixed at 45,000,000 fr., was raised in the last mentioned year to 90,000,000 fr., divided into 90,000 shares or *actions*, of 1000 fr. each. Of these shares, 67,900 have passed into the hands of the public, the remaining 22,100 having been purchased up by the bank, out of her surplus profits, were subsequently cancelled. Hence her capital amounted, down to 1848, to 67,900,000 fr. (£2,716,000), with a reserve fund, first of 10,000,000 fr., and more recently of 12,980,750 fr. Since 1806 the bank has enjoyed the privilege of being the only institution in Paris entitled to issue notes payable on demand; and, as will be afterwards seen, she is now the only authorised issuer of such paper in France. Her charter and exclusive privileges have been prolonged and varied by laws passed at different periods; according to existing arrangements they are not terminable till 1897.

The bank has established, at different periods, between 1817 and 1856, offices or branches (*succursales*) in different parts of the country. They are managed nearly in the same way as the parent establishment; but their operations have been on a comparatively small scale. These are exclusive of the departmental banks united, as will be immediately seen, to the bank in 1848.

Notwithstanding the skill and caution with which her affairs have generally been conducted, the Revolution of 1848 brought the bank into a situation of extreme danger. She had to make large advances to the provisional government and the city of Paris. And these circumstances, combined with the distrust that was universally prevalent, occasioned so severe a drain upon her for gold, that to prevent the total exhaustion of her coffers, she was authorised, by a decree of the 16th March 1848, to suspend cash payments, her notes being at the same time made legal tender. But to prevent the abuse that might otherwise have taken place under the suspension, the maximum amount of her issues was fixed at 350 millions. She was then also authorised to reduce the value of her notes from 500 fr. to 200 and 100 fr.

Previously to 1848, joint-stock banks, on the model of that of Paris, and issuing notes, had been established in Lyons, Marseilles, Bordeaux, Rouen, and other large cities. And it was then determined that these banks should be incorporated with the Bank of France, and made branches of the latter. This was effected by decrees issued on the 27th April and 2d May 1848, by which the shareholders of the banks referred to (nine in number) were allowed, for every 1000 fr. nominal value of their shares, a share of 1000 fr. nominal value of the stock of the Bank of France. And, in consequence of this measure, 23,351 new shares, representing a capital of 23,351,000 fr., were added to the stock of the Bank of France, making the latter consist of 91,250,000 fr., divided into 91,250 shares. In 1851, the bank resumed, and has since continued specie payments.

The suppression of the local issues of the departmental banks was, no doubt, a judicious measure, and was indispensable, indeed, to secure the equal value of the paper circulating in different parts of the country. This, however, might have been effected by the mere stoppage of the issues of the departmental banks, without consolidating them with the Bank of France. The latter measure is one of which the policy is very questionable; and

[1] Storch, *Cours d'Economie Politique*, tom. iv. p. 102.

Money. there are, as already seen, good grounds for thinking that the banking business of the departments would have been more likely to be well conducted by local associations, than by branches of the Bank of France.

Owing to the peculiar circumstances of the last few years, occasioned partly by the war with Russia, but more by the rage for speculation and the drain for silver to the east, the Bank of France has been exposed to considerable difficulties. And in the view of strengthening her position, and also, it may be presumed, of providing a loan for government, a law has been recently passed (9th June 1857), by which the capital of the bank has been doubled. Previously to this law, her capital amounted, as already seen, to 91,250 shares of 1000 fr. each; whereas it now consists of 182,500 shares of 1000 fr. each. The new shares were assigned to the existing proprietors at the rate of 1100 fr. per share, producing a total sum of 100,370,000 fr., of which 100 millions have been lent to government at 3 per cent. Hence the measure, though it has added to the credit and security of the bank, has not made any addition to the means directly at her disposal.

Down to the passing of this law, the bank could not raise the rate of interest on loans and discounts above six per cent. But this impolitic restriction is now removed, and the bank may charge any rate of interest which she reckons expedient, except upon advances to government, the maximum interest on which is limited to 3 per cent. The bank has been farther authorised to issue notes of the value of 50 fr., to make advances on railway shares, &c., and the charter has been extended to 1897.

The bank is obliged to open a *compte courant* for any one who requires it, and performs services, for those who have such accounts, similar to those performed for their customers by the banks in London. She does not charge any commission on current accounts, so that her only remuneration arises from the use of the money placed in her hands by the individuals whose payments she makes. It is probable, therefore, as has been alleged, that this part of her business is but little profitable. The bank also discounts bills with three signatures, at variable dates; but not having more than three months or ninety days to run. In 1855, the aggregate amount of these discounts in Paris and the departments, amounted to the very large sum of 3,262,000,000 frs., the interest being five per cent. till the 18th of October, and afterwards 6 per cent. Besides discounting bills, the bank makes advances on stocks and pledges of various kinds, and undertakes the care of valuable articles, such as plate, jewels, title-deeds, &c., at a charge of $\frac{1}{8}$ per cent. on the value of the deposit, for every period of six months and under. Nothing can show more clearly the petty retail character of the trade of Paris, and generally of France, than the smallness of the value of the bills discounted by the bank. Thus, of 963,000 bills disounted in 1847, the average amount was only £55 : 4s., and of these no fewer than 126,000 were for less than 200 frs. (£8), and 470,000 for less than 1000 frs. (£20), each! (Tooke and Newmarch *On Prices*, vi. 51.)

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The administration of the bank is vested in a council of twenty-one members, viz., a governor and two subgovernors, nominated by the Emperor; and fifteen directors and three censors, nominated by the shareholders. The bank has a large surplus capital or rest. In 1855 and 1856 she divided no less than 200 and 272 fr. profits on each share; but these have much exceeded the dividends in any previous year. In 1848 the dividends only amounted to 75 frs. per share. In July 1856, the 1000 fr. share of bank-stock was worth 4075 frs.; in July 1857, it had sunk to 2880 frs. Her intimate connection with the government is decidedly the most objectionable feature in the constitution of the Bank of France.

PARTICULARS in the Condition of the Bank of France, including its Branches and the Departmental Banks, from 1846 to 1856, both inclusive, viz.:—

Years.	Notes in Circulation.	Amount of Discounts.	Bullion in Coffers of Bank.			Dividend per Share.	Highest Price of Share.
			Gold.	Silver.	Total.		
1846 .	262,190,000 fr.	1,618,957,841 fr.	6,800,000 fr.	94,282,000 fr.	101,082,000 fr.	159 fr.	3,505 fr.
1847 .	241,140,000 „	1,808,246,438 „	440,000 „	169,060,000 „	169,500,000 „	177 „	3,600 „
1848 .	409,120,000 „	1,643,728,634 „	4,700,000 „	248,600,000 „	253,300,000 „	75 „	3,230 „
1849 .	431,022,000 „	1,025,666,213 „	4,600,000 „	429,270,000 „	433,370,000 „	106 „	2,500 „
1850 .	481,552,000 „	1,176,423,896 „	11,980,000 „	446,840,000 „	458,820,000 „	101 „	2,425 „
1851 .	583,040,000 „	1,241,412,880 „	82,260,000 „	486,460,000 „	568,720,000 „	105 „	2,650 „
1852 .	689,910,000 „	1,824,469,438 „	68,936,000 „	434,974,000 „	503,910,000 „	118 „	3,108 „
1853 .	644,280,000 „	2,842,930,205 „	103,598,000 „	219,482,000 „	323,080,000 „	154 „	2,950 „
1854 .	636,970,000 „	2,944,643,591 „	193,937,000 „	198,723,000 „	392,660,000 „	194 „	3,000 „
1855 .	612,237,000 „	3,762,000,000 „	99,000,000 „	100,000,000 „	199,000,000 „	200 „	3,300 „
1856 .	612,332,000 „	4,674,000,000 „	81,000,000 „	109,900,000 „	190,000,000 „	272 „	4,075 „ July.

THE NOTES of the Bank of France in Circulation from 1848 to 1856, both inclusive, have been as follows, viz.:—

Years.	Notes of 5000 francs.	Notes of 1000 francs.	Notes of 500 francs.	Notes of 200 francs.	Notes of 100 francs.[1]	Total of Circulation.
1848	1,120,000	210,000,000	72,000,000	55,000,000	71,000,000	409,120,000 francs.
1849	1,145,000	270,050,000	68,330,000	49,075,000	42,422,000	431,022,000 „
1850	530,000	287,868,000	89,174,000	57,318,000	46,632,000	481,552,000 „
1851	120,000	372,051,000	90,198,000	53,890,000	66,781,000	583,040,000 „
1852	490,000	428,012,000	96,053,000	84,663,000	78,167,000	689,910,000 „
1853	290,000	419,232,000	87,003,000	74,767,000	62,988,000	644,280,000 „
1854	90,000	403,649,000	76,707,000	79,221,000	75,303,000	636,970,000 „
1855	120,000	381,991,000	72,744,000	74,747,000	80,416,000	[2]612,237,000 „
1856	50,000	371,505,000	69,954,000	72,704,000	95,927,000	[3]612,332,000 „

[1] Notes for 50 fr. were not issued till this year, 1857. [2] Comprises 2.219,000 fr. old notes. [3] Comprises 2,102,000 fr. old notes.

Sect. XI.—*Banking in the United States.*

Banking in United States.

It has been the uniform practice of the different States of the Union to allow banks to be established for the issue of notes, payable in specie on demand. In cases where the liability of shareholders in banks was to be limited to the amount of their shares, they had, previously to 1838, to be established by Acts of the local legislatures. But, in general, these were easily obtained; and down to a comparatively late period, it may be said that banking was quite free; and that, practically, all individuals or associations might issue notes, provided they abided by the rules laid down for their guidance, and engaged to pay them when presented.

Under this system, the changes in the amount and value of the paper currency of the United States have been greater than in any other country; and it has produced an unprecedented amount of bankruptcy and ruin.

Between 1811 and 1820, about 195 banks, in different parts of the Union, became bankrupt; and it is said, in a report by the Secretary of the Treasury of the United States, dated 12th May 1820, that these failures, which mostly happened in 1814 and 1819, produced a state of distress so general and severe, that few examples of the like had then occurred.

But bad as this instance was, it was nothing to that which took place subsequently to 1834. The accounts of the aggregate issues of the banks differ a little; but the following statement is believed to be very nearly accurate, viz,—

Years.	Notes.
1830	$66,628,898
1834	94,839,570
1835	103,692,495
1836	140,310,638
1837	149,185,890

Now observe, that this sudden and enormous increase took place under the obligation, which we are told is quite enough to prevent all abuse, of paying notes on demand. The result was, what most men of sense must have anticipated, viz., that a revulsion took place, and that every bank within the Union, without, it is believed, a single exception, stopped payment in 1837.

In 1838 such of the banks as had been best managed, and had the largest capitals, resumed payment in specie. But in 1839 and 1840, a farther crash took place. And the bank-notes afloat, which, as has been seen, amounted to $149,185,890 in 1837, sunk to $83,734,000 in 1842, and to $58,563,000 in 1843. It is supposed that in this latter crash nearly 180 banks, including the Bank of the United States, were totally destroyed. And the loss occasioned, by the depreciation which it caused in the value of stocks of all kinds, and of all sorts of property, was quite enormous. And yet, vast as that loss was, it was really trifling, as a writer in the American Almanack has stated, compared with "the injury resulting to society from the upheaving it occasioned of the elements of social order, and the utter demoralization of men by the irresistible temptation to speculation which it afforded, ending in swindling to retain ill-gotten riches."

The evils of the American system have been aggravated by the lowness of the notes which most banks have issued. This brings them into the hands of retail traders, labourers, and others in the humbler walks of life, who always suffer severely by the failure of a bank.

Since 1838 and 1842, various measures have been taken in nearly all the States, but principally in New York, to restrain the free action of the banks, and to prevent a repetition of the calamities referred to.

In New York, for example, the banks have been divided into two great classes—the incorporated and the free banks. The former, which are incorporated by a State law, have to conform to certain regulations, and have to contribute a half per cent. annually upon their capital to a security fund, which is devoted to the payment of the notes of defaulting banks. But this is a most objectionable plan; for, in the first place, it does not prevent bankruptcies; and, in the second place, it compels the well-managed banks to contribute to a fund which goes to pay the debts of those that are mismanaged. It has consequently declined in favour, and is now rarely acted upon.

In the other, or free banking system, all individuals or associations who choose to deposit securities (minimum amount $100,000) for their payment, are allowed to issue an equal amount of notes. And this is certainly by far the more efficient as well as the most popular of the two plans. But it is objectionable, because, 1st, A longer or shorter, but always a considerable, period necessarily elapses after a bank stops before its notes can be retired; and, 2d, Because the securities lodged for the notes are necessarily at all times of uncertain and fluctuating value; while, in periods of panic or general distrust, they become all but inconvertible. The Sub-secretary of the Treasury of the United States has animadverted as follows on this plan, in a letter dated 27th Nov. 1854:—

"The policy of many of the State governments has of late years consisted in encouraging the issue of small notes, by sanctioning the establishment of what are popularly called 'free banks,' with deposits of stocks and mortgages for the 'ultimate' security of their issues. This 'ultimate' security is, it may be admitted, better than no security at all The mischief is, that it is least available when most wanted. The very causes which prevent the banks from redeeming their issues promptly, cause a fall in the value of the stocks and mortgages on 'the ultimate security' of which their notes have been issued. The 'ultimate security' may avail something to the broker who buys them at a discount, and can hold them for months or years; but the labouring man who has notes of these 'State security banks' in his possession, finds, when they stop payment, that 'the ultimate security' for their redemption does not prevent his losing twenty-five cents, fifty cents, or even seventy-five cents in the dollar.

"In a circulating medium we want something more than 'ultimate security.' We want also 'immediate' security; we want security that is good to-day, and will be good to-morrow, and the next day, and for ever thereafter. This security is found in gold and silver, and in these only."[1]

It appears from the Report of the Superintendent of Banking for the State of New York for 1856, that the securities he then held in trust amounted to $39,359,071, which were almost wholly lodged by banking associations and individual bankers.

During the year the securities held in trust for the under-mentioned banks that had become insolvent in 1855 were disposed of. But the sums realised by their sale did

[1] The above statements are taken from a paper read by Lord Overstone to the late Committee on Banks.

Money. not in any case suffice to pay the notes at par, while a period, varying from two to four years, would have to elapse before the affairs of the insolvent banks will be finally settled. Money.

Names of Banks that failed.	Notes redeemed.	Rates of Redemption.	Time for Redemption will expire.
Eighth Avenue Bank	All	94 cents.	May 21, 1861
Farmers' Bank, Onondaga	All	85 cents.	Nov. 12, 1859
James' Bank	All	91 cents.	June 17, 1858
Merchants and Mechanics' Bank, Oswego	All	77 cents.	Sept. 28, 1860
New Rochelle, Bank of	Stock notes	Par	June 17, 1858
New Rochelle, Bank of	Stock and estate notes	81 cents.	June 17, 1858

This statement sets the defective nature of the security system, as administered in New York, in the clearest point of view. It might, no doubt, be improved by increasing the proportion of securities to notes. But, owing to the variety of securities that are taken (viz., all manner of bonds and mortgages, state, canal, and railway stocks, &c. &c.), and the uncertainty of their value, a great deal of risk is always incurred in accepting them, and they can never form a proper foundation on which to issue notes.

But, however desirable, it would, we fear, be visionary to expect that local issues should be suppressed in America, or that her paper currency should be placed on a really sound foundation. But it may, nevertheless, be easily and greatly improved. And, perhaps, this would be best effected by suppressing low notes, or those for less than twenty dollars, and increasing the proportion of securities to issues. The rules on which so much stress is laid, in most parts of America, for making the issues of banks depend on the magnitude of their capitals, or the amount of specie in their vaults, are really of no use whatever. They may be and have been eluded and defeated in a thousand ways, and serve only to make the public look for protection to what is altogether impotent and worthless for any good purpose.

The following table from Hunt's Commercial Magazine for March 1857, gives an account of the number and condition of the banks of the United States, as officially reported, in certain years from 1834 to 1856.

Table of the Secretary of the Treasury, showing the Number of Banks and Branches, with their Capitals, Discounts, Specie, Circulation, and Deposits, in the Union, in the following years from 1834 to 1856. The last line gives the position of the Banks near January 1, 1856:—

Years.	Banks.	Capital.	Discounts.	Specie.	Circulation.	Deposits.
		Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
1834	506	200,005,944	324,119,499	26,641,753	94,839,570	75,666,986
1836	713	251,875,292	457,506,080	40,019,594	140,301,038	115,104,440
1837	788	270,772,091	525,115,702	37,915,340	149,185,890	127,397,185
1843	691	228,861,948	254,544,937	33,515,806	58,563,608	56,168,628
1848	751	204,833,175	344,476,582	46,369,765	128,500,091	103,226,177
1851	879	227,807,553	413,756,799	48,671,048	155,165,251	128,957,712
1854	1,208	301,376,071	557,397,779	59,410,253	204,689,207	188,188,744
1855	1,307	332,177,288	576,144,758	53,944,545	186,952,223	190,400,342
1856	1,398	343,874,272	634,183,280	59,314,063	195,747,950	212,705,662

Since writing the above, another crash has taken place, and *all* the banks in the Union, from the Gulph of Mexico to the frontiers of Canada, have again stopped payments!

This new crash affords, had that been necessary, a fresh and striking illustration of the truth of the principles we have endeavoured to establish in the course of this treatise; and it may be expected to awaken, if that be possible, the American people to a proper sense of the enormous abuses connected with their banking system; and the necessity of placing it on an entirely new foundation.

The above account shows that there had been a rapid increase of discounts since 1851, and that increase was especially great in 1856, and went on augmenting down to August last (1857). On the 8th of that month, the discounts and advances by the New York banks, amounted to $122,077,252, the deposits in their possession being, at the same time, $94,436,417. This was the maximum of both. On the 24th of August, the Ohio Life and Trust Company, which carried on an extensive banking business in New York, stopped payments; and by so doing gave a severe shock to credit and confidence, which the suspension of two or three more banks turned into a panic. Notes being in a certain degree secured, the run upon the banks was principally for deposits. And to meet it they so reduced their discounts and advances, that on the 17th October, they amounted to only $97,245,826. This sudden and violent contraction necessarily occasioned the suspension of many of those mercantile houses that had depended on the banks for discounts. And it did this without stopping the drain for deposits, which had sunk on the 17th October to $52,894,623, being a decrease of $41,546,784 in about two months. The universal stoppage of the banks was a consequence of these proceedings.

There seems to be no doubt that improvident advances on the part of the banks, and overtrading, were the main causes of the crisis. And it is important to observe that it is stated in the Bankers' Magazine for November 1857 (p. 430), and other works of authority published in New York, that the improvidence referred to was, in part at least, occasioned by the too high interest allowed at New York on deposits on current accounts, or at call. This

Money. made the opulent bankers and capitalists in the Western States keep large balances at New York; and it tempted, and in some degree obliged, the bankers and money-dealers in the latter to make advances on questionable security, for the sake of the high interest payable on them. A system of this sort may be truly said to force capital into the hands of the least deserving, and to be a prolific source of wild speculation and overtrading. And whenever any serious check is given in any quarter of the Union to the process of inflation, the consequences are sure to be in the last degree disastrous: for, the greater number of the banks being very ill supplied with specie, they can resist no serious demand upon them either for payment of notes or deposits; and when one or a few stop, a panic is generated, which involves even the best managed banks in the common ruin.

A tendency to panics is, in fact, one of the peculiarities of the American system. Owing to the liability of the partners in banks being limited, the depositors in them, and the holders of notes not issued upon securities, having nothing to trust to, make all imaginable haste, when their suspicions are awakened, to save themselves by withdrawing their deposits, and cashing their notes. And hence the rapidity with which panics spread throughout the Union: and, we may add, that the slowness with which they are disseminated in this country, arises from the contrary circumstances, from the confidence placed by the public in the unlimited obligation of the partners to make good all demands.

In the city of New York, the action of the foreign exchanges compels the banks to have always on hand a very considerable amount of specie. But the reader will hardly believe with what a small stock of coin the banks in the country parts of that state, and generally throughout the Union, contrive to carry on their business. In illustration of this statement, we may mention, that in June last (1857), the fifty-six banks in the city of New York are reported in the official returns to have had $8,000,000 notes in circulation, with an aggregate amount of no less than $12,000,000 specie in their coffers. But at the same time that the city banks were in this situation, the circulation of the 255 country banks then existing in the state is returned at $24,000,000, and their specie at only $1,200,000, being only $\frac{1}{20}$th part of their notes afloat. And as these returns give only average results, it follows that, while some of the banks would have more, others would have proportionally less specie than this medium rate.

A notion, indeed, would appear to be gaining ground among the banks, in some parts of the States, that when they have given security for their issues, they have done quite enough, and that they may dispense with the troublesome obligation to pay them on demand. It appears, for example, that in the moral and religious state of Massachusetts, there were, on the 7th July 1856, no fewer than 135 banks (excluding those in Boston), which had $6,601,130 of deposits, and notes in circulation amounting to $13,106,068, while their specie on hand amounted to only $1,092,463, or about $\frac{1}{13}$th part of the circulation. And in other parts of the Union the stock of bullion was still more scanty. Thus, in Illinois, on the 6th of July 1857, the State Bank, with notes afloat to the amount of $725,000, had, to meet all demands, $61,000 in specie in her coffers; while the Grayville Bank, with a circulation of $471,556, was provided with a supply of $18,951, in specie, and the Raleigh Bank, with a circulation amounting to $248,000, had a specie fund of no less than $1000! It may be supposed, perhaps, that this would be the minimum amount of specie, but no. For some banks (such as the Bank of the Commonwealth, with notes afloat to the extent of $84,915) were honest enough to admit that they had a considerable circulation without being encumbered with a single dollar! Money.

It is evident that a banking system of this sort has no better foundation than a house of cards. It is sure to fall to pieces at the first touch. The grand object of by far the greater number of the bankers is to get their notes into circulation; and as these are often issued for very small sums, cost nothing, and at the same time yield some 8, 10, or 12 per cent., or more, of interest, we need not wonder at the eagerness with which they pursue this object, or at their success, or the abuses to which it leads. The discount of bills at distant dates, and their renewal, make part of the system.

The security system followed in New York, even were it generally adopted, affords no guarantee against these evils. Instead of preventing, it really tends to encourage over-issue, and it is impotent to insure a proper supply of bullion. All that it contemplates is the ultimate payment of the notes; but it does not prevent the bankruptcy of those by whom they are issued, and we have seen that it does not even accomplish that ultimate payment which it has exclusively in view. The whole system is rotten to the core; and unhappily, too, it is deeply injurious to all those with whom the Americans have any dealings, as well as to themselves.

We are glad to be able to corroborate our views of these matters by the high authority of the President of the United States. Mr. Buchanan, in his message to Congress, delivered on the 8th December 1857, makes the following conclusive statement:—"The first duty which banks owe to the public is to keep in their vaults a sufficient amount of gold and silver to insure the convertibility of their notes into coin at all times and under all circumstances. No bank ought ever to be chartered without such restrictions on its business as to secure this result. All other restrictions are comparatively vain. This is the only true touchstone—the only efficient regulator of a paper currency—the only one which can guard the public against over-issues and bank suspensions. As a collateral and eventual security it is doubtless wise, and in all cases ought to be required, that banks shall hold an amount of United States' or State securities equal to their notes in circulation, and pledged for their redemption. This, however, furnishes no adequate security against over-issues. On the contrary, it may be perverted to inflate the currency; indeed it is possible by this means to convert all the debts of the United States and State governments into bank-notes, without reference to the specie required to redeem them. However valuable these securities may be in themselves, they cannot be converted into gold and silver at the moment of pressure, as our experience teaches, in sufficient time to prevent bank suspensions and the depreciation of bank-notes."

To show the worthlessness of the returns published by the American banks, we may state that they continue, down to the latest advices (December 1857), to represent the capital of the New York banks as quite unimpaired, and as large as it had been twelve months ago! But everybody knows that it is impossible such should be the case. A very large proportion, not less, perhaps, than from a third part to a half or more of the capital of the banks, must have been lost by the late bankruptcies in that city, and by the depreciation of the stocks held by the banks.

It is truly stated by Mr. Buchanan, in the message now referred to, "that it is easy to account for our financial history for the last forty years. It has been a history of

Monflanquin ‖ Monge.

extravagant expansions in the business of the country, followed by ruinous contractions. At successive intervals the best and most enterprising men have been tempted to their ruin by excessive bank loans of mere paper credit, exciting them to extravagant importations of foreign goods, wild speculations, and ruinous and demoralizing stock gambling. When the crisis arrives, as arrive it must, the banks can extend no relief to the people. In a vain struggle to redeem their liabilities in specie, they are compelled to contract their loans and their issues; and at last, in the hour of distress, when their assistance is most needed, they and their debtors together sink into insolvency."

We have already seen that the real value of our exports to the United States in 1856 amounted to £21,476,000. But we have been too much in the habit of estimating our commercial prosperity by the magnitude of the exports, which is a most fallacious criterion. We have heard it stated by well-informed parties, and we believe the statement to be true, that but for the extreme inflation of the banking and credit system of the United States, the imports from England during last year would not have exceeded 15 or 16 millions; and that those from France and other countries would have been reduced in something like the same proportion. And, had such been the case, production here would not have been unnaturally stimulated, and a fair profit would have been obtained from our exports, whereas they will now entail a large and most serious loss.

Besides the bankruptcy and ruin that periodically arise from such a system, it is at all times productive of the greatest inconvenience and trouble. Where there are so many separate and independent banks (about 1400), the sphere of the influence and circulation of each is necessarily circumscribed; and when notes get to any considerable distance from the place where they are issued, especially when they get into a different State, they circulate with difficulty, and generally at a discount. But this is not the only evil by which their circulation is attended. Banks are every now and then suspending payments, or getting into discredit. And lists are regularly published of such defaulting or suspected banks, and of the rates of discount at which their notes are current, without which no traveller can leave his house, and no shopkeeper can venture to transact any business. It is truly astonishing, seeing the extreme inconvenience resulting from such a state of things, that it should be tolerated even for a week. If the general government be not sufficiently strong to suppress local issues, and to substitute in their stead a national paper issued on deposits of bullion, the public may, if they choose, rid themselves of the evil, by refusing to accept payment otherwise than in coin. The banking interest is, however, so very powerful, and embraces so great a number of individuals, that we doubt whether, even with the co-operation of the general government, the time has yet arrived for anything effectual being done for the amendment of the system. But the longer it exists, the more intolerable will it become; and in the end, no doubt, it will be suppressed. It forms, at present, the most gigantic abuse by which an intelligent people ever permitted themselves to be disgraced and oppressed. (J. R. M.)

Monge.

PROSPECTUS

OF THE

ENCYCLOPÆDIA BRITANNICA.

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MDCCCLVIII.

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(*List of Contributors continued on page* 23.)

ENCYCLOPÆDIA BRITANNICA.

IN every country where Science and Literature have been long and successfully cultivated, and books extensively multiplied, attempts, more or less skilful, have been made to reduce the mass of information to a compendious and regulated form, and to furnish a ready access to its varied details by means of Encyclopædias. Of the importance and advantages of such publications there can scarcely be two opinions. Executed on a plan sufficiently comprehensive, they ought to embrace all the departments of human learning, rendering the Alphabet a ready key, not only to the Arts and Sciences, but to the multiplied details of History, Biography, Geography, and Miscellaneous Literature. A work thus constructed is not only valuable to the Scholar and the man of Science, as a Dictionary of universal reference, but the subjects being treated in a form consistent with Systematic Exposition, as well as with Alphabetical Arrangement, the book becomes an inestimable treasure to those who, although they cannot afford leisure for very laborious research or profound investigation, are yet desirous to possess that general information on all subjects, which constitutes an intelligent and well-informed man.

Among books of this class, the ENCYCLOPÆDIA BRITANNICA has long been conspicuously eminent. The publication of Seven Editions, with successive improvements, and the sale of upwards of Thirty Thousand Copies, afford unequivocal proofs of the high estimation in which the work has hitherto been held.

The Publishers of the Eighth Edition, when they commenced the undertaking, were fully aware that extensive alterations were required to accommodate the work to the improved taste and advanced intelligence of the times. Arrangements were accordingly made to secure the co-operation of the most eminent living Authors, who have contributed Treatises in the various departments of Science, Literature, the Arts, Manufactures, Commerce, Statistics, and General Knowledge, to supersede those of former editions rendered obso-

lete by the progress of discovery, improvements in the Arts, or the general advancement of society.

In giving effect to this extensive plan of reconstruction, it has been the leading object of its conductors to combine abstract with practical, and solid with pleasing information, in such proportions as would be most useful and most acceptable to the public—to deliver the truths of Science in the most accurate and intelligible form, and, at the same time, to pay due attention to those branches of knowledge, which, though not admitting of a scientific shape, are yet deservedly popular, and have a powerful influence on the taste, habits, and character of the individual,—in a word, to render the work at once a DICTIONARY OF SCIENCE, a copious ABSTRACT OF LITERATURE AND PHILOSOPHY, and a BOOK OF UNIVERSAL REFERENCE.

The narrow limits of a Prospectus will admit of only a very imperfect enumeration of the important articles with which the pages of the work are enriched. The Publishers will therefore select only some of the leading contents, as evidence of the distinguished co-operation by which it has been conducted throughout.

THE FIRST VOLUME forms an introduction to the whole work, and consists of Six Dissertations on the PROGRESS of DISCOVERY in the INTELLECTUAL and PHYSICAL SCIENCES by Stewart, Mackintosh, and Whately; Playfair, Leslie, and Forbes. With Sir James Mackintosh's Dissertation is incorporated the able preface by Dr Whewell. Four of these Dissertations were contained in the Seventh Edition, but those by Archbishop Whately and Professor Forbes are now added for the first time. Though called a "Dissertation on the Rise, Progress, and Corruptions of Christianity," Dr Whately's contribution is something more; it is a review of man in a state of nature, and of the different religions that preceded Christ, as well as a treatise on Christianity and its corruptions.* The Dissertation throughout is remarkable for a clearness of style, and an ease and plenitude of thought almost unexampled. Within its limited range, the argument is conducted with almost faultless accuracy, and with a logical precision that may be justly considered wonderful.† Professor Forbes' Dissertation on the "Progress of Mathematical and Physical Science during the Nineteenth Century," leaves little to be desired, *and makes the work complete as a masterly sketch of the history and present condition of the Sciences.*‡ It is admirably executed, and it is a matter almost of surprise that it should have been written with a union of interest in narrative and clearness in scientific exposition altogether unusual.§

* Spectator. † Morning Chronicle. ‡ Critic, June 15, 1853. § Guardian.

VOL. II. contains—ABERRATION, by George Buchanan, F.R.S.E.; ACHROMATIC GLASSES, ACOUSTICS, and AERONAUTICS, by Sir John Leslie; ADMIRAL and ADMIRALTY, by Sir John Barrow, Bart., revised by John Barrow, Esq. of the Admiralty; JOSEPH ADDISON, by William Spalding, A.M., Professor of Logic in the University of St Andrews; ÆSCHYLUS, by J. S. Blackie, Professor of Greek in the University of Edinburgh; ÆTNA and ALPS, by Robert Jameson, late Professor of Natural History in the University of Edinburgh; AFGHANISTAN, by David Buchanan and Edward Thornton, of the East India House; AFRICA, by Augustus Petermann, F.R.G.S.; AGRICULTURE and AGRICULTURAL CHEMISTRY, by John Wilson, Eddington Mains, Berwickshire, and Thomas Anderson, M.D., Professor of Chemistry in the University of Glasgow; AGRARIAN LAWS, by George Ferguson, Professor of Humanity, King's College, Aberdeen; ALGEBRA, by William Wallace, LL.D., late Professor of Mathematics in the University of Edinburgh; AMERICA, by Charles Maclaren, F.R.S.E.; ANATOMY, by David Craigie, M.D., F.R.S.E.; also numerous other articles, among which may be noted, Abbreviation, Abyssinia, Academy, Algiers, Alphabet, Alum.

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F.R.S., Author of the Fifth Bridgewater Treatise; ANTRIM and ARMAGH, by Henry Senior; APPARITIONS, by James Browne, LL.D.; AQUEDUCT, by George Buchanan, C.E.; ARABIA, by D. Buchanan and W. Plate, LL.D.; ARCH, by Sir John Robison, late Professor of Natural Philosophy in the University of Edinburgh, and William Wallace, LL.D.; ARCHÆOLOGY, by Daniel Wilson, LL.D.; ARCHITECTURE, by William Hosking, Professor of Arts and Construction, King's College; ARISTOTLE and ARISTOTLE'S PHILOSOPHY, by Renn Dickson Hampden, D.D., Bishop of Hereford; ARMY, by J. Browne, LL.D., and J. H. Stocqueler; ARTILLERY, by Capt. Spearman and Colonel Portlock; ARTS, by W. Hazlitt and W. B. Johnstone, R.S.A.; ASIA, by H. Murray, F.R.S.E., and W. Plate, LL.D.; ASSAYING, by Robert Mushet, of the Royal Mint; ASTRONOMY (First Part, the remaining portion being in the next volume), by Thos. Galloway, Sir John Playfair, and Thos. Henderson, with Supplement by Rev. Robert Main, Royal Observatory, Greenwich. Also numerous other articles, among which are Archery and Arithmetic.

"The third volume of this noble work begins with 'Anatomy,' and ends with 'Astronomy.' In the former of these treatises we are shown that we are indeed 'fearfully and wonderfully made;' in the latter, we are raised above the things of this earth to the contemplation of the marvels of the material universe. The one carries us within ourselves, the other to the farthest limits which the eye or the imagination can reach. In the intermediate articles which make up this stately volume, there is much that is scientific and profound, with much that is intensely interesting to the popular reader. The article 'Angling' is so genial and full of gentle enthusiasm, although abounding in useful details concerning lines, fly-hooks, and other mysteries of the angler's craft, that it would have done the heart of old Isaak Walton good to read it. Under the heads 'Animal Kingdom' and 'Animalcule,' we have a vast amount of instructive research and curious speculation. . . . The article 'Annuities' is a very elaborate paper embodying a lucid exposition of the science of probabilities, and full of abstruse calculations on a subject of great practical utility. Passing over many excellent articles in natural history, biography, &c., we arrive at an extremely readable paper on 'Apparitions.' . . . 'Arabia,' with its wild and wandering tribes, its immense deserts made habitable by the extraordinary powers of endurance of the camel, and its wonderful religious history, as the birth-country of Mahomet, is very fully and ably described. Then follows a singularly interesting article, 'Arachnides,' relating to the spider class of insects. . . . One of the most complete treatises in the present volume is the article 'Architecture.' It comprises the masterly account of the science given in the previous edition of the *Encyclopædia*, together with a *Supplement* from the same pen, disclosing such farther light as the author has, in the course of his investigations, received since 1830. . . . Passing over 'Aristotle' and 'Arithmetic'—both very learned disquisitions—we arrive at a weighty and eloquent essay under the head 'Army.' . . . The information embodied in the treatise before us is very full, and

is brought up to the most recent date. Besides its historical digest, the article gives a detailed account of all the armies of all the prominent countries of the world. . . . The article 'Artillery' which follows is profoundly scientific, and written in a spirit of high appreciation of the importance of that arm of the military service. 'Arts,' 'Asia,' and 'Astronomy' complete the larger and more elaborate essays in this bulky quarto. Equal care, however, is shown in the preparation of the smaller articles, all of which, where necessary, are brought up to the present state of information. . . . The beautiful series of plates appended to this volume are chiefly illustrative of the articles 'Anatomy' and 'Architecture.'"—*Glasgow Citizen*, November 19, 1853.

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poetical reader will linger over the pleasant memoir of 'Coleridge;' while readers of a more practical turn will pass on to the admirable article 'Colliery.' In the latter, the whole busy subterranean world, so dark in itself, yet so invaluable as supplying the elements both of light and heat to the world above ground, is laid open to the wonder of the uninitiated. . . . The important subject of 'Colony' is handled in a masterly manner, through the republication of the celebrated treatise of the late Mr James Mill, supplemented, and brought up to the present time, by a hand which we recognise as that of our friend Mr John Hill Burton, advocate, one of our soundest politico-economical writers. 'Combination,' from the distinguished pen of Mr J. R. M'Culloch, embodies a wholesome argument against workmen's 'strikes.' After an erudite article on 'Comets,' we reach a paper on 'Commerce,' which may be read with great advantage in this time of war. The subject of commercial fluctuations is very intelligently explained, and the true principles of trade are discussed in a philosophical spirit. 'Communism' is shown up in capital style by Mr Burton, and the dreams of Fourier, Louis Blanc, and Robert Owen, are dissipated into thin air. . . . Jumping over the profound treatise on 'Conic Sections,' which, however valuable to the student of geometrical science, has an alarming appearance to ordinary readers, we find a variety of articles of marked ability and interest."—*Glasgow Citizen.*

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F.R.S.E.; FLINTSHIRE, by John Girdwood; FLORIDA, by J. Smith Homans, New York; FLUXIONS, by William Wallace, LL.D.; FONTANA, FOSTER, and FOURCROY, by Thomas Young, M.D.; FOOD, by Thomas Lindley Kemp, M.D.; FORFAR, by James Cowie; FORTIFICATION, by Colonel Portlock, Woolwich; FOSTER, by J. E. Ryland, M.A.; C. J. FOX, by John Allen.

"The volume opens with a magnificent treatise on 'Entomology,' from the pen of James Wilson, F.R.S.E. When we state that it extends to upwards of 260 quarto pages, our readers will excuse us from attempting to do justice to it in such brief space as we can command. The subject, however, is a large one, and no intelligent person who reads this elaborate and deeply interesting paper will consider that it has been treated at too great length. Indeed, the learned author apologizes for its brevity. 'We have somewhere seen it stated,' he says, 'that there were two kinds of beetles, the black and the brown. Naturalists are now acquainted with not less than 35,000 insects of that order. Above 12,000 different sorts of butterflies and moths have been collected; and in Britain alone, though with somewhat of a cold and cloudy clime, we have about 2000 species of the Lepidopterous order. Several of the other great ordinal divisions contain an equal number of component members, so that the entire amount of insects now described by naturalists may be safely computed as above 72,000. If we were to devote,' he argues, 'a page a-piece to these (and we have no desire to doubt that each deserves it), then we should require to occupy about four times the contents of the present *Encyclopædia*, to the entire exclusion of all other subjects, which would be inconsistent with the object of this great work.' . . . Although not prepared, however, for any such overwhelming 'plague of flies' as that hinted at, we are in truth most heartily reconciled to the rather more than 260 pages which Mr Wilson has monopolized for the elucidation of his wondrous theme. No science has had more devoted and delighted followers than that of entomology, and we are much mistaken if this brilliant treatise do not add to the number of its votaries. . . . To this volume Mr Wilson likewise contributes the article 'Fisheries.' It extends to 60 pages, and, like the treatise on 'Entomology,' is singularly elaborate and complete. . . . . As a matter of course, the salmon fisheries occupy the first place, and are discussed in all their bearings, natural, legal, and commercial."—*Glasgow Citizen*, November 3, 1855.

"To these we have to add an article of high interest on 'Ethnology,' from the pen of Dr R. G. Latham, who may be regarded as the creator of this science. In the department of geography we have, besides an elaborate paper on the figure of the earth, a well-digested article on Europe, accompanied by a neatly executed map. Mathematics claim a large share in this volume; besides the article on 'Mathematical' Geography already noticed, and a richly illustrated essay on 'Fortifications,' which brings down the subject to the evacuation of the south side of Sebastopol, we have articles on 'Equations' and 'Fluxions,' the latter prefaced by a history of the fluxional calculus, including the controversy respecting the conflicting claims of Newton and Leibnitz. The theological department, likewise, has received much attention, and among others a paper on 'Episcopacy,' from the pen of the Right Rev. Dr Gleig, presents an exceeding fair and conclusive statement of the argument for and against Apostolic Episcopacy."—*John Bull*, November 3, 1855.

"In *biography* it is particularly rich. . . . The miscellaneous articles are exceedingly attractive, and each of them will reward the general reader who may care nothing for science and graver topics. . . . Dr Doran, whose gossiping books have achieved so great a popularity, has discoursed in his own peculiar fashion, or we should rather say chatted, about 'Fashion;' and Dr Kemp is the author of the very instructive and interesting article on 'Food,' which should be read by everybody."—*Critic*, 1855.

"Dr Latham has supplied an article on 'Ethnology,' which places the reader in full possession of the existing state of knowledge upon that subject. No man, indeed, could be better qualified for that office, for his own researches have done much to dignify this new branch of knowledge with the character of a science, and he has spared no pains to describe its various departments, and the progress which has been made in each, clearly and thoroughly, though concisely."—*Morning Post.*

"An article on 'Fortification,' by Lieut.-Colonel Portlock, Woolwich, will be read with special interest at a time when the thunder of Sebastopol is still ringing in our ears. The author gives a lucid description of the systems of fortification, both ancient and modern, details, by way of example, the celebrated sieges of Dantzic in 1807, and of Antwerp in 1832, and affords biographical sketches of some of the most eminent military engineers of the Napoleonic era."—*Glasgow Herald*, November 14, 1855.

VOL. X. contains—FRANCE, by A. V. Kirwan, of the Middle Temple, Barrister at Law; BENJAMIN FRANKLIN, by Alexander Nicholson; Sir JOHN FRANKLIN, by Sir John Richardson; FUEL and GAS LIGHT, by Charles Tomlinson, Editor of "Cyclopædia of Useful Arts," &c.; ANDREW FULLER, by J. E. Ryland, M.A.; FUNDING SYSTEM, by D. Ricardo, supplemented by J. L. Ricardo, M.P.; FURNACE, by George Buchanan, F.R.S.E.; GALILEO, by James Browne, LL.D.; GALWAY, by Henry Senior; GANGES, by Edward Thornton, India House; GASSENDI and GIBBON, by Henry Rogers, Author of the "Eclipse of Faith," &c.; GEOGRAPHY, by Rev. John Wallace, D.D.; GEOMETRY, by William Wallace, LL.D. and Rev. P. Kelland, M.A., Professor of Mathematics in the University of Edinburgh; GERMANY, by W. Jacob, revised by James Laurie; GLACIER and FRESNEL, by J. D. Forbes, Professor of Natural Philosophy in the University of Edinburgh; GLASGOW, by John Strang, LL.D.; GLASS, by James Ballantyne; GNOSTICISM, by John Tulloch, D.D., Primarius Professor of Divinity, St Andrews; GOETHE, by Thomas de Quincey; GOLDSMITH, by the Right Hon. Lord Macaulay; CAPE of GOOD HOPE, by Sir B. C. Pine, late Lieutenant-Governor of Natal; GOTAMA BUDDHA, by Rev. R. Spence Hardy, Hon. M.R.A.S., Author of "Eastern Monachism," &c.; GOTHS, by Leonard Schmitz, LL.D.; GOVERNMENT, by P. E. Dove, Author of the "History of Human Progression," &c.; GRAMMAR, by Dr Doig, revised by W. Spalding, Professor of Logic in the University of St Andrews.

"Every part of the volume bears evidence of careful supervision and judicious arrangement, while the additions show an endeavour to keep abreast of the advancing science and knowledge of the times. More than ever will the *Encyclopædia Britannica* maintain its present place among this class of publications as a standard book of universal reference."—*Literary Gazette*, March 15, 1856.

VOL. XI. contains—GRAY, HERRICK, and HOGG, by Robert Carruthers; GREECE, by Charles Maclaren, F.R.S.E., revised; GREEK CHURCH, by W. M. Hetherington, D.D., LL.D.; GREGORY of NAZIANZUM, by John Tulloch, D.D.; GREGORY (Dr JAMES), by W. P. Alison, M.D.; GUINEA and HOUSSA, by Augustus Petermann, F.R.G.S., &c.; GUN-COTTON, GUNPOWDER, GUTTA PERCHA, and HAT-MAKING, by Charles Tomlinson; GUNMAKING, by P. E. Dove; GUNNERY, by Colonel Portlock; ROBERT HALL, by Henry Rogers; HARBOURS, by Thomas Stevenson, C.E.; C. J. HARE, by W. L. Alexander, D.D.; HARVEY, by Thomas Laycock, M.D., Professor of the Practice of Physic in the University of Edinburgh; HEAT, by T. S. Traill, M.D., Professor of Medical Jurisprudence in the University of Edinburgh; HELMINTHOLOGY, by James Wilson, F.R.S.E.; HEMP, by T. C. Archer, Author of "Popular Economic Botany," &c.; HERALDRY, by T. W. King, York Herald, Herald's College; HEYNE, by Sir William Hamilton, Bart.; HIEROGLYPHICS, by R. S. Poole, M.R.S.L., &c.; HIMALAYA MOUNTAINS, by Joseph D. Hooker, M.D., F.R.S.; HINDUSTAN, revised by Edward Thornton, India House; HISTORY, by David Masson, M.A., Professor of English Literature, University College; HOLLAND, revised by the Rev. James Ingram, M.A.; HOMER, by John S. Blackie, Professor of Greek in the University of Edinburgh; HOMŒOPATHY, by W. T. Gairdner, M.D.; THOMAS HOOD, by Richard Monckton Milnes; HORACE, by Theodore Martin; HORSE, HORSEMANSHIP, and HOUND, by Charles Apperley ("Nimrod")—Revised by W. H. Langley, Editor of "Bell's Life in London;" HORTICULTURE, by Charles Macintosh, Author of the "Book of the Garden;" JOHN HOWARD, by Hepworth Dixon; ROYAL HOUSEHOLD, by Samuel Redgrave.

"Some articles are new, many are re-written, and nearly all are improved. We are glad to find that the remarks of critics have been received by editors and publishers in a right spirit; and that this great work of republication, all things considered, the most notable of our time, increases in care and utility as it proceeds."—*Athenæum*, August 30, 1856.

VOL. XII. contains—DAVID HUME, by Henry Rogers, Author of the "Eclipse of Faith," &c.; HUNGARY, by Emeric Szabad, late Secretary under the Hungarian National Government of 1849; JOHN and WILLIAM HUNTER, and JENNER, by Thomas Laycock, M.D., Professor of the Practice of Medicine in the

University of Edinburgh; HUNTING, by Charles Apperley ("Nimrod")—Revised by W. H. Langley, Editor of "Bell's Life in London;" HYDRODYNAMICS, by Sir David Brewster, K.H., LL.D.; HYPATIA and IAMBLICHUS, by the Rev. Charles Kingsley, Author of "Westward Ho," &c.; ICELAND, by Robert Allan, revised by Robert Chambers; ICHTHYOLOGY, by Sir John Richardson, K.B., &c.; FOSSIL ICHTHYOLOGY, by T. S. Traill, M.D., Professor of Medical Jurisprudence in the University of Edinburgh; LIFE INSURANCE, by W. T. Thomson, Manager of the Standard Life Insurance Company; FIRE INSURANCE, by F. G. Smith, Secretary of the Scottish Union Fire and Life Insurance Company; MARINE INSURANCE, by John Warrack; INTEREST, by J. R. M'Culloch; IONIAN ISLANDS, by William Blair, late Member of the Supreme Council of Justice of the Ionian Islands, and Author of "Inquiry into Slavery amongst the Romans;" IRELAND (HISTORY), by Rev. E. Groves, (STATISTICS) by Henry Senior; IRON, by William Fairbairn, F.R.S., F.G.S., &c.; IRON BRIDGES, by Robert Stephenson, M.P., President of the Institution of Civil Engineers; IRRIGATION, by James Caird, Author of "English Agriculture in 1850–51;" ITALY, by * * *; JAMAICA, by Stephen Cave; JAPAN and JAVA, by John Crawfurd, F.R.S., Author of "A Descriptive Dictionary of the Indian Islands;" JESUITISM, by Isaac Taylor, Author of the "Natural History of Enthusiasm," &c.; JESUS and JEWS, by the Rev. David Welsh, D.D., late Professor of Ecclesiastical History in the University of Edinburgh, revised; SAMUEL JOHNSON, by the Right Hon. Lord Macaulay; JOINERY, by Thomas Tredgold, C.E., revised by Arthur Asphitel.

"This great work is slowly, but now, we believe, steadily advancing. Rapidity, or even certainty, in the delivery of the volumes is not to be expected in the case of a work so large and expensive, and in which writers of such eminence are engaged; and Messrs Black have met a complaint of want of punctuality in delivery by the irresistible answer that great writers cannot and will not be tied to time. On the whole it is well done; some of it admirably, as, for example, the life of 'Hume,' by Mr Rogers, and that of Dr Johnson, by Mr Macaulay, and the articles on 'Jamaica' and 'Japan,' in this volume."—*Guardian.*

VOL. XIII. contains—KAFRARIA, by Sir Benjamin Pine; KANT, by the Rev. John Cairns, M.A.; KARS, revised by Dr Sandwith, K.B.; KNIGHTS, KNIGHTHOOD, LIVERY, and LORRAINE, by Dr Doran; LABRADOR and LAPLAND, revised by Augustus Petermann, F.R.G.S., &c.; LAGRANGE and LALANDE, by Thomas Young, M.D.; LANGUAGE, revised by R. G. Latham, M.A., M.D., &c.; LAW, by J. F. M'Lennan, M.A., Advocate; LAW of NATIONS and LIBERTY of the PRESS, by James Mill; LEAD,

LEATHER, and LIFE PRESERVERS, by Charles Tomlinson; LEPROSY, by J. Y. Simpson, M.D., Professor of Midwifery in the University of Edinburgh; LIBRARIES, by Edward Edwards, Free Library, Manchester; LIGHT, by T. S. Traill, M.D., Professor of Medical Jurisprudence in the University of Edinburgh; LIGHTHOUSES, by Alan Stevenson, C.E.; LOCK, by E. B. Denison, M.A., Q.C.; LOGIC, by William Spalding, M.A., Professor of Logic and Metaphysics in the University of St Andrews; LOMBARDS and LOMBARDY, by the Author of the Article "Italy;" LONDON, revised by H. G. Reid; LUTHER, by C. C. J. Bunsen, D.D., D.C.L., D.Ph., &c.; MADAGASCAR, by the Rev. W. Ellis, Author of "Polynesian Researches," &c.; MADEIRA, by J. Y. Johnson, Author of a "Handbook for Madeira."

"So numerous and important are the improvements and additions in the new edition of this famous *Encyclopædia*, that as to many of the most essential parts of it we may consider it a new work. In the volume now before us there is a most careful and interesting article on 'Public Libraries,' by Mr Edward Edwards of the Free Library at Manchester, which brings their history down to the recent opening of the great Reading Room at the British Museum, and which contains very much information that deserves to be extensively diffused. We should be glad to see Mr Edwards' articles on 'Libraries and the History of Libraries,' reprinted, in a little volume, like that which contains a republication of Professor Spalding's treatise on 'Logic,' also included in the thirteenth volume of the *Encyclopædia*. The essay on 'Language' is by Dr Young and Dr Latham, that on 'Luther' by the Chevalier Bunsen. The volume comprises also full and excellent accounts of London and of Liverpool, and an article on 'Life Preservers' by Dr Young and Charles Tomlinson, in which due attention is paid to the latest suggestions for the rescue of the crews in the case of shipwreck. In the shorter articles, to which attention is less drawn, we find ample evidence that the reviser's hand has been at work for the removal of all obsolete doctrine, and the introduction of the latest knowledge, and the most recent opinions that have made good their place in science and philosophy."—*Examiner.*

"We notice with pleasure the increased care bestowed on the new edition of this standard *Encyclopædia*. Many articles in the thirteenth volume excite attention by the new lights they throw on old subjects, or by the power of writing, or of illustration. We may mention, as examples, the papers on 'Logic,' by Mr Spalding; on 'Liberty of the Press,' by Mr James Mill; on 'Libraries,' by Mr E. Edwards, and many others. Among the other chief articles of interest we notice 'Kafraria,' by Sir B. Pine; 'Leprosy,' by Dr Simpson; 'Language,' revised by Dr Latham; and 'Lock,' by Mr E. B. Denison. Dr Doran contributes two or three articles, one of which on 'Knights and Knighthood' is an excellent specimen of his humour. The article on 'Logic' is full of new matter, and is worth notice. But as we see it announced for separate publication, we may reserve discussion of its facts and arguments for another day."—*Athenæum.*

VOL. XIV. contains—MAGNETISM, MICROMETER, and MICROSCOPE, by Sir David Brewster, K.H., &c.; MAMMALIA, by James Wilson, Author of the Article "Ento-

mology," &c.; MANCHESTER, by Thomas Bazley, Chairman of the Chamber of Commerce, Manchester; MANUFACTURES, by J. R. M'Culloch; MECHANICS, by W. J. M. Rankine, Professor of Civil Engineering and Mechanics in the University of Glasgow; MEDICAL JURISPRUDENCE, by T. S. Traill, M.D., Professor of Medical Jurisprudence in the University of Edinburgh; MEDICINE, by Thomas Laycock, M.D., Professor of the Practice of Physic in the University of Edinburgh; MENSURATION, by William Swan, Lecturer on Mathematics and Natural Philosophy; MENTAL DISEASES, by David Skae, M.D., Physician to the Royal Edinburgh Asylum; METAPHYSICS, by Rev. H. L. Mansel, Reader in Moral and Metaphysical Philosophy, Magdalen College, Oxford; METEOROLOGY, by Sir John F. W. Herschel, Bart., K.H., M.A., D.C.L., &c.

"The new volume of this valuable periodical contains many articles of the greatest interest by eminent men; and the information they contain is uniformly brought down to the latest date. One of the most important articles of the present number is that by Mr Macculloch on 'Manufactures,' which will be read with the greatest interest and benefit. The article on 'Magnetism,' by Sir David Brewster; on 'Manchester,' by Mr Bazley, the Chairman of the Chamber of Commerce; on 'Metaphysics,' by the Rev. H. L. Mansell, of Magdalen College, Oxford; and on 'Meteorology,' by Sir John Herschel,—are all very elaborate and valuable."—*The Economist.*

This list is to be understood as including only the more prominent articles, the number of shorter contributions being much too large to be embraced by an ordinary Prospectus. Of these articles, by far the greater number are entirely new, and the remainder have been recast, modified, and improved, so as to adapt them to the actual state of knowledge, and the general design of the work.

THE GENERAL INDEX—which is now in preparation, and will be published as soon as the work is complete—is intended, not merely to facilitate reference, but to serve the important purpose of bringing into view, and directing the inquirer to the miscellaneous information scattered throughout the work. In this way much information upon various topics not indicated under specific heads will be found in these treatises; and it is obviously of the greatest importance that those making inquiries regarding such topics should be enabled to turn at once to the places in which the scattered information may be found. Besides this, however, there are many other subjects which do not occur under distinct alphabetical heads at all, but which, notwithstanding, are fully explained and discussed in the General Treatises. The utility of a key of this description to a digest of knowledge so varied and comprehensive, will be acknowledged by all who have ever had occasion to consult books of reference.

America. the new continent, though less than half the size of the old, contains at least an equal quantity of useful soil, and much more than an equal amount of productive power. America is indebted for this advantage to its comparatively small breadth, which brings nearly all its interior within reach of the fertilizing exhalations of the ocean. In the old continent, owing to its great extent from east to west, the central parts, deprived of moisture, are almost everywhere deserts; and a belt round the western, southern, and eastern shores, comprises nearly all that contributes to the support of man. How much fruitful land, for instance, is there in Continental Asia? If we draw a line from the Gulf of Cutch (near the Indus) to the head of the Yellow Sea, we cut off India and China, with the intervening Birman empire, and the southern valleys of Thibet; and this space, which comprises only about one-fifth of the surface of Asia, embraces five-sixths of its productive power. Arabia, Persia, Central Thibet, Western India, Chinese and Independent Tartary, are deserts, with scattered patches of useful soil not amounting to the twentieth part of their extent. Siberia, or northern Asia, is little better, owing to aridity and cold together. Anatolia, Armenia, the Punjab, and a narrow strip along the western shores of the Pacific Ocean, north as far as the 60th parallel, compose the only valuable agricultural territory beyond India and China. Europe, which is merely the western margin of Asia, is all fruitful in the south; but on the north its fruitfulness terminates at the 60th or 62d parallel. Africa has simply a border of useful soil round three-fourths of its sea-coast, with some detached portions of tolerably good land in its interior. Of the 31,000,000 of square miles which these three continents occupy, we cannot find, after some calculation, that the productive soil constitutes so much as one-third, and of that third a part is but poor.

Now, in estimating the useful soil in America, we reject, 1. all the region northward of the latitude of 53°, amounting to 2,600,000 square miles; 2. a belt of barren land about 300 miles broad by 1000 in length, or 300,000 square miles, lying on the east side of the Rocky Mountains; 3. a belt of arid land of similar extent situated on the east side of the Andes, between 24° and 40° of south latitude; 4. the desert shore of Peru, equal to 100,000 square miles; 5. an extent of 100,000 square miles for the arid country of Lower California and Sonora; and, 6. an extent of 500,000 square miles for the summits of the Andes and the south extremity of Patagonia. These make an aggregate of 3,900,000, square miles; and this, deducted from 13,900,000, leaves 10,000,000 square miles as the quantity of useful soil in the new world.

Ratio of fertility to latitude. Now, what relation does the fruitfulness of the ground bear to the latitude of the place? The productive powers of the soil depend on two circumstances, heat and moisture; and these increase as we approach the equator. First, the warm regions of the globe yield larger returns of those plants which they have in common with the temperate zones; and, next, they have peculiar plants which afford a much greater portion of nourishment from the same extent of surface. Thus, maize, which produces 40 or 50 for one in France, produces 150 for one on an average in Mexico; and Humboldt computes that an arpent (five-sixths of an acre), which will scarcely support two men when sown in wheat, will support fifty when planted with bananas. From a consideration of these and other facts, we infer that the productive or rather nutritive powers of the soil, will be pretty correctly indicated by combining the ratios of the heat and the moisture, expressing the former of these in degrees of the centigrade scale. Something, we know, depends on the distribution of the heat through the different seasons; but as we do not aim at minute accuracy, this may be overlooked.

Latitude.	Annual rain, inches.	Mean annual heat.	Product.	Ratio.
60	16	7	112	4
45	29	14	406	15
0	96	28	2688	100

America

Thus, if the description of food were a matter of indifference, the same extent of ground which supports four persons at the latitude of 60°, would support 15 at the latitude of 45°, and 100 at the equator. But the food preferred will not always be that which the land yields in greatest abundance: and another most important qualifying circumstance must be considered,—it is labour which renders the ground fruitful; and the power of the human frame to sustain labour is greatly diminished in hot climates. In the torrid zone, in low situations, we doubt if it is possible for men to work regularly in the fields for more than five hours a day, or half the daily period of labour in England. On these grounds, and to avoid all exaggeration, we shall consider the capacity of the land to support population as proportional to the third power of the cosine (or radius of gyration) for the latitude. It will therefore stand thus in round numbers:—

Latitude,	0°	15°	30°	45°	60°
Productiveness,	100	90	65	35	12½

In England the density of population is above 300 persons per square mile; but England is in some measure the workshop of the world, and supports, by her foreign trade, a greater population than her soil can nourish. In France the density of population is about 160; in Germany it varies from 100 to 200. Assuming, on these grounds, that the number of persons whom a square mile can properly sustain, without generating the pressure of a redundant population, is 150 at the latitude of 50°, we have 26 as the sum which expresses the productiveness of this parallel. Then taking, for the sake of simplicity, 35 as the index of the productiveness of the useful soil beyond 30° in America, and 85 as that of the country within the parallel of 30° on each side of the equator, we have about 4,000,000 square miles, each capable of supporting 200 persons, and 5,700,000 square miles, each capable of supporting 490 persons. It follows, that if the natural resources of America were fully developed, it would afford sustenance to 3,600,000,000 of inhabitants, a number nearly five times as great as the entire mass of human beings now existing upon the globe! The novelty of this result may create perplexity and doubt on a first view; but we are satisfied that those who investigate the subject for themselves will be satisfied that our estimate is moderate. But, what is even more surprising,—there is every probability that this prodigious population will be in existence within three or at most four centuries. We are quite aware of the objections which may be raised to this conclusion, but they all seem to us to admit of an answer. In particular, we would observe, that the expense and difficulty of transporting men from situations where they are redundant, to others where vacant space exists, which is so much felt in the Old World, will be incredibly facilitated by the employment of steam-navigation upon the innumerable rivers which are ramified over four-fifths of the New Continent.

The imagination is lost in contemplating a state of things which will make so great and rapid a change in the condition of the world. We almost fancy that it is a dream; and yet the result is based on principles quite as certain as those which govern the conduct of men in their ordinary pursuits. Nearly all social improvements spring from the reciprocal influence of condensed numbers and diffused intelligence. What, then, will be the state of society in America two centuries hence, when two thousand millions of civilised men are crowded into a space *comparatively* so narrow, and when this immense mass of human beings speak only two languages, perhaps only one! Such a state of things may

IRON.

The manufacture of iron.

The manufacture of iron.

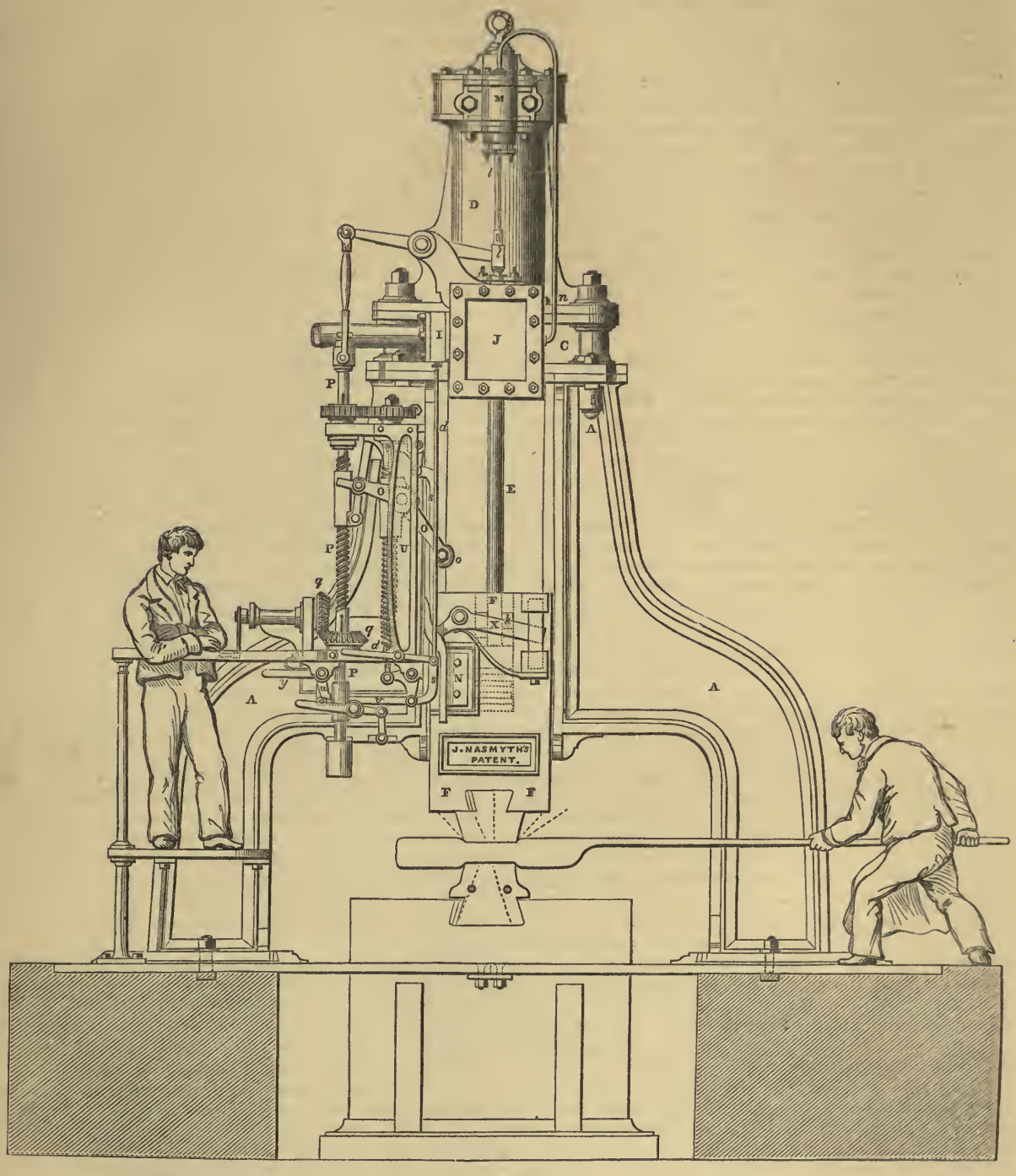

Fig. 34.—Elevation.

ing rolls, where the required form and size is given to it, either round or square bars, &c. These are straightened and cut to the required sizes, and are then ready for delivery. In most large works all these operations are carried on simultaneously with the smelting process, and in some with extensive mining operations for procuring the coal, ore, and limestone required to supply a production of several thousand tons of manufactured iron per month.

THE FORGE.

The forging of iron has entered, of late years, so largely into the constructive arts, that the manufactures, however perfect in the rolling-mill, would be very imperfect indeed without the forge. To the discussion of this part of the subject there are many inducements, and we cannot but wonder at the many devices, and the numerous contrivances which present themselves for the attainment of the operations of the forge. In effecting these objects, Mr Nasmyth's steam-hammer is evidently the most effective, and to that instrument we are indebted for the formation and welding of iron upon a scale previously unknown to the workers in that metal. Nasmyth's Hammer.

Mr Nasmyth took out his patent for this invention

(From Article by William Fairbairn, Esq., C.E., Vol. XII.)

Luther. Holy Ghost at the opening of the diet, on which occasion an Italian archbishop preached a most fanatical and insulting sermon against the Germans, as being worse enemies of God than the Turks. In the imperial opening speech, Charles spoke of the lamentable dissensions which encroached upon the imperial majesty, and must produce sedition and murder. The Protestants were required to present their confession. The elector signed it first; four other princes and two cities after him, without any observation; the landgrave of Hesse, however, did not sign it without saying he did not agree as to the doctrine of the communion. The article says,—"That the body and blood of Christ are verily present, and are administered in the Lord's Supper to those who partake of it [and we disapprove those who teach otherwise]." The words in brackets were left out in later editions made during Luther's lifetime. On this occasion the princes took really the lead, and the whole was done as a great national, not as a sacerdotal work, in spite of poor Melancthon's scruples. This good man was indeed entirely out of his sphere, and lost his time, and committed the cause of Protestantism, by trying to bring about a compromise where there was no possibility of an honest understanding. In the mean time, Luther was left in complete and cruel ignorance of all that was going on; and when at last the letters of Melancthon arrived, they were full of fears and sad misgivings. During all this anxious time, Luther sought and found his comfort in constant prayer and occupation with the Word of God. "Where is Christ's church, if it is not with us? Faith alone is required. I will rather fall with Christ than stand with Cæsar." Luther reprimanded Melancthon sharply for his pusillanimity, and some of his letters to him are addressed—"To Master Philip Kleinmuth" (pusillanimous).

After many tergiversations, the Protestants obtained their just demand; the confession, drawn up by Melancthon and approved by Luther, was read in public sitting on the 25th June 1530. A great day, worthy of the most glorious days of the apostolic times. Luther was not present; he was dead as a public man. But he lived in God, and for his faith and country. Nothing could damp his spirits. "I also have my diet," he said; "and what lively discussions!" —referring playfully to the rooks which swarmed round his tower.

The emperor ordered the confession to be read in Latin. "No," said the elector; "we are Germans, and on German ground. I hope, therefore, your majesty will allow us to speak German." The emperor gave way, recollecting for the nonce he was in Germany, and that the Germans had a language of their own, and the strange fancy of using it even in theological affairs. When the chancellor of the elector had read the first part of that grand confession, which expounds the principles of the Reformation, and, in particular, the doctrine of justification by faith,—"that faith which is not the mere knowledge of a historical fact, but that which believes not only the history, but also the effect of that history upon the mind,"—there was an indescribable effect visibly produced upon the assembly. The opponents felt that there was a reality before them which they had never imagined; and others said, such a profession of faith by such princes was a more effectual preaching than that which had been stopped. "Christ," exclaimed Jonas (Melancthon's companion), "is in the diet, and he does not keep silence: the Word of God is indeed not to be bound." And forth these words have gone through a world wider than that to which the apostles preached. After a pause, the second part, the articles about the abuses of the church of Rome, was read and heard with profound silence by the mitred prelates of that church who were there assembled. As to the emperor, he slept during the whole of the reading, or seemed to sleep, like a tiger ready to espy the most convenient moment for leaping upon his prey. In the mean-time, he calculated, undoubtedly, what political capital he could make of the Protestants against the pope. Luther

Luther addressed a letter to the cardinal elector of Mainz, demanding nothing but one article, but insisting upon that unconditionally—the liberty of preaching the gospel. "Neither emperor," he says, "nor pope has the right of forcing any one to believe." With Melancthon and the other friends he insisted upon their leaving Augsburg immediately. "Home—home—home!" he exclaimed. "Might it please God that I should be immolated at this council, as John Huss was at Constance!" All the sayings of Luther during this crisis are sublime and of a truly prophetic character. He foresaw that now every effort would be made at Augsburg to destroy the principles of the Reformation by a treacherous compromise and a false peace. "The diet," he said, "is a regular dramatic piece: first, there is the prologue, then the exposition, then the action,—now comes the catastrophe; but I think it will not be a tragic, but a comic end." And, indeed, so it turned out to be, tragical as it was. The first triumphant effect of the confession soon passed away; the new converts, particularly among the prelates, withdrew; the fanatical party doubled its efforts, and Charles gave way to it, and aided its ends by all diplomatic artifices. Melancthon was caught. He entered into conferences in the vain hope they would lead to concord; he declared himself ready to maintain and obey the supreme authority of the pope, if he would, by an act of clemency, connive at, if not approve, some points which they could not change. During the treacherous conferences which now began, the emperor tried to intimidate the elector by threatening not to grant him the investiture, which the elector claimed, however, as his hereditary right as brother of his predecessor; and to frighten all the Protestant princes and the Protestant imperial city of Augsburg with measures of violence, by calling in the imperial troops, and keeping the gates closed. The landgrave escaped. This act caused dismay among the ranks of the Catholics, for a war could not be risked at this moment. The Romanists changed their tactics; they conceded, or rather feigned to concede; for, meanwhile, the pope had declared solemnly that he would not give up those very points. The Protestants acknowledged the jurisdiction of the bishops and the supremacy of the pope. A cry of indignation rose among the princes, and, above all, among the brave citizens of Augsburg. "Rather die with Jesus Christ," they declared, "than conquer without Him the favour of the whole world."

At this critical moment Luther's indignation rose to a holy wrath, like that of the prophets of old. "I understand," said he to Melancthon, "that you have begun a marvellous work, namely, to make Luther and the pope agree together; but the pope will say that he will not, and Luther begs to be excused. Should you, however, after all, succeed in your affair, I will follow your example, and make an agreement between Christ and Belial. Take care that you give not up the justification by faith; that is the heel of the seed of the woman to crush the serpent's head. Take care not to acknowledge the jurisdiction of the bishops; they will soon take all. In short, all your negotiations have no chance of success unless the pope will renounce papacy. Now, mind, if you mean to shut up that glorious eagle, the gospel, in a sack, as sure as Christ lives, Luther will come to deliver that eagle with might."

But Melancthon was changed: Luther's voice had lost its power over him. The extreme Protestant views maintained in a declaration which Zwingle had delivered to the emperor, disposed him to cling still more to Rome. All seemed for the moment lost; but Luther's faith had discerned the way in which God meant to save the Protestant cause, and had said,—"Christ lives; he who has vanquished the violence of our enemies, can also give us the power of

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