other. The peculiarities of this very ancient common law conveyance or assurance were—(1) equality of estates, not in value or in subject matter, but in legal right of ownership; (2) the use of the word exchange (*excambium, e.g.*, in Domesday book, *hanc terram cambiavit Hugo*, &c.); (3) that, though formal delivery of seisin was not required, possession or entry was required to complete the transaction by making it notorious; (4) that, in the case of incorporeal hereditaments, and where the lands lay in different counties, a deed was required; (5) an implied condition of re-entry on the lands of him whose title failed (Coke on Littleton, 50 *a*; Blackstone by Sweet, ii. p. 323), the liability to re-entry affecting an alienee, but the right to re-enter being personal to the exchanger and his heirs. This condition, however, did not long survive the statute *Quia emptores*; and exchanges are now generally effected by mutual conveyances with the usual covenants for title, which the Act 8 and 9 Vict. c. 106 declares not to imply any condition, whether the word "exchange" be used in the *testatum* or not. Exchanges are also very frequently made, by order of the inclosure commissioners, under the various Acts of Parliament for the inclosure, exchange, and improvement of lands, from 8 and 9 Vict. c. 118 to 31 and 32 Vict. c. 89 (see Cooke *On Inclosures*). In these cases, the property taken is simply impressed with the title of the property given in exchange. So also statutory exchanges are made under the Acts for the Sale and Exchange of Charity Estates, the Charitable Trust Acts, from 16 and 17 Vict. c. 137 to 32 and 33 Vict. c. 110, which now apply to Roman Catholic charities, formerly under 23 and 24 Vict. c. 134. There are also statutes enabling ecclesiastical corporations to exchange, with the approval of the church estate commissioners. Powers of exchange are generally given to trustees under English settlements, and these are exercised by revocation of the original uses and appointment of new uses, all ancillary powers being given by implication under 23 and 24 Vict. c. 145 (see Davidson's *Precedents in Conveyancing*, vols. ii., iii., and v.).

In what may be called international conveyancing, the exchange of territories is accomplished by treaties, of which there is no fixed style. A well-known example is Art. XII. of the Treaty of Nimeguen, "Les terres enclavées seront exchangées contre d'autres qui se trouveront plus proches et à la bienséance," &c. The Italian duchies and islands have very frequently been exchanged. Thus, in the Quadruple Alliance of 1720, Philip V. exchanged a reversionary title to Sicily for a reversionary title to Sardinia. The exchange of prisoners in war is often regulated by documents called cartels, which specify a certain agreed on value for each rank of prisoners. The transference of prisoners is often carried out by cartel ships, which, though prohibited from carrying cargo or passengers, are entitled to certain privileges. It was in the 17th century that this practice (which seems to have been unknown to Grotius) superseded the older one of ransom at the end of the war.

See Wheaton's *Elements of International Law*, Lawrence's edition, p. 590, and App. A. in Robinson's *Adm. Rep.*, vol. iii. The early law of military exchange will be found discussed by Albericus Gentilis, *De Jure Belli*, cap. xvi., "De permutationibus et liberationibus." (W. C. S.)

EXCHANGE. The system by which commercial nations discharge their debts to each other has been termed "Exchange," or "the Exchanges." It has been subject of much study both by merchants and bankers who have to deal with its phenomena in the course of business, and by economists desirous to discover the causes of the phenomena, and to explain the laws or method of their operation. In rude times the people of neighbouring countries brought their staple or surplus produce to common fairs, where one kind of goods was valued and bartered for another; and the dealers brought a little gold and silver with them to settle the small balances. But this, though a rough type of international trade still, is a wholly different affair from modern commerce, with its transactors multiplied a millionfold, and conducting their transactions far apart in widely distant countries. Money itself does little to obviate the difficulties arising from this multiplicity of crossing and recrossing currents; and whoever, therefore, was the first introducer of the idea of "Exchange" is entitled to a high place in the commercial annals of the world—whether it was the stranger mentioned by Isocrates, who came to Athens with some cargoes of corn, and gave an order on a town on the Euxine where money was owing to him, with recourse on an Athenian merchant in the event of the order being dishonoured; or Cicero, in paying for the studies of his son at Athens by an assignment from a creditor in Rome on his debtor in the Greek city; or the pope, whose lending merchants of Siena and Florence drew upon Henry III., or rather on the prelates and abbots of England, with some English merchants as remitters, for the expenses of deposing Manfred, king of Sicily, in which act of deposition Henry was an interested and obligant party—thus avoiding in these various cases the difficulty and risk of transporting coin. The idea, wherever first exemplified, was too good to be lost. It was early developed into a system in Venice, later in Amsterdam, and is now of world-wide application.

It is well to observe, first, what is exchanged—values of commodities exported and sold from one place or country to another, debts thereby owing, interest, profits of capital invested abroad, foreign loans and subsidies, freights, banking and other commissions, expenses of foreign residence or travel, and, in short, claims of payment of every kind on one part, having their relative obligations of remittance on the other, and originally denominated, as the contract or the occasion may have been, in the money either of the places from which the claims proceed or of those where they are payable. Secondly, the means must be noticed by which the exchange is effected—pieces of paper, bearing express calculation to secure what is exactly due between debtor and creditor. A bill of exchange is an order drawn for a specified and definite sum, in favour of a person who is the buyer and becomes the "remitter" of the order, upon a third person, the "drawee," who is indebted for this sum to the drawer, and on presentation of the order becomes the "acceptor." The person or company in whose favour the order is drawn may pass it into other hands, and these, by writing their names on the back, become "indorsers." On much the same model there are "inland" and "foreign" bills of exchange. The whole system of exchange has its foundation in the drawing of the creditor on the debtor; for, as in every country there are both creditors and debtors of other countries, the debtors find it to their advantage to take up the drafts of the creditors in order to avoid direct remittances in cash.

Inland exchange is simpler in character and more easily comprehended than foreign exchange, but in reality presents the same phenomena and the same sequence of cause and effect as the other, so far as the circumstances of any country allow these to come into operation.

Mr M'Culloch, in the article on "Exchange" in former editions of the present work, gave a familiar exposition of inland exchange, which it would be difficult to improve:—

"If the debts reciprocally due by London and Glasgow be equal, whether they amount to £100,000, £500,000, or any other sum, they may be discharged without the intervention of money, and the price of bills of exchange will be 'at Par;' that is, a sum of £100 or £1000 in Glasgow will purchase a bill for £100 or £1000 payable in London, and *vice versa*. But if these cities be not mutually indebted in equal sums, then the price of bills will be

increased in the city which has the greatest number of payments to make, and reduced in that which has the fewest. If Glasgow owe London £100,000, whilst the latter only owes the former £90,000, it is clear, inasmuch as Glasgow has a larger sum to remit to London than London has to remit to Glasgow, that the price of bills on London will rise in Glasgow because of the increased demand, and that the price of bills on Glasgow will fall in London because of the diminished demand. A larger sum would consequently be required to discharge a debt due by Glasgow to London, and a less sum to discharge an equal debt due by the latter to the former; or, which is the same thing, the exchange would be *in favour of* London, and *against* Glasgow. Bills on London would sell in Glasgow at a *premium*, and bills on Glasgow would sell in London at a *discount*; the premium in the one case being equal to the discount in the other.

"On the supposition that the balance of £10,000, due by Glasgow, depresses the exchange on London *one per cent.*, it appears, at first sight, that it will cost Glasgow £101,000 to discharge her debt of £100,000 due to London; and that, on the other hand, £89,100 would be sufficient to discharge the debt of London to Glasgow. But a very little consideration will serve to show that this would not be the case. Exchange transactions cannot take place between different cities until debtors and creditors of the one reside in the other. And hence, when the exchange became unfavourable to Glasgow, the premium paid by its merchants for bills on London would not go into the pockets of their creditors in the latter, but into those of their neighbours in Glasgow to whom London was indebted, and from whom the bills were purchased. The loss to Glasgow would, therefore, be limited to the *premium* paid on the balance of £10,000. Thus, supposing that A of Glasgow owes D of London £100,000, and that C of London owes B of Glasgow £90,000, A will pay to B £91,000 for a bill or order on C to pay D £90,000. In this way the £90,000 of London debt at Glasgow would be cleared off,—the premium, which is lost by the debtor to London in Glasgow, being gained by its creditor in the same place. If the business had been transacted in London, C, with £89,100, would have purchased of D a bill for £90,000, payable by A; so that, in this case, the gain would have fallen to the share of the debtor C, and the loss to that of the creditor D, both of London. The complexity of real transactions does not affect the principles on which they are founded. And whatever may be the amount of the debts reciprocally due by different places, the only disadvantage under which any of them could be placed by a fall of the exchange would be the unavoidable one of paying the expense of remitting the *balance* of debt.

"The expense of transmitting money from one place to another limits the fluctuations in the exchange between them. If 20s. sufficed to cover the expense and risk attending the transmission of £100 from Glasgow, to London, it would be indifferent to a merchant, in the event of the exchange becoming unfavourable to the former, whether he paid one per cent. *premium* for a bill on London, or remitted money direct to the latter. If the premium were less than one per cent., it would be clearly his interest to make his payments by means of bills rather than by remittances; and that it could not exceed one per cent. is obvious, for every individual would rather directly remit money than incur an unnecessary expense by purchasing bills on London at a greater *premium* than would suffice to cover the expense of a money remittance. If, owing to the badness of roads, disturbances in the country, or any other cause, the expense of remitting money from Glasgow to London were increased, the difference in the rate of exchange between them might also be proportionally increased. But in every case the extent to which this difference could attain would be limited by, and could not for any considerable period exceed, the cost of remitting cash.

"Exchange transactions become more complex when one place, as is often the case, discharges its debts to another by means of bills drawn on a third place. Thus, though London should owe nothing to Glasgow, yet if Glasgow be indebted to London, London to Manchester, and Manchester to Glasgow, the latter may wholly or partially discharge her debt to London by remitting bills on Manchester. She may wholly discharge it, provided the debt due to her by Manchester exceed or is equal to the debt due by her to London. If, however, it be not equal to the latter, Glasgow will either have to remit money to London to pay the balance of debt, or bills on some other place indebted to her.

"Transactions in inland bills of exchange are almost entirely conducted by bankers, who charge a certain rate per cent. for their trouble, and who, by means of their credit and connexions, are able, on all occasions, to supply the demands of their customers. Bills on London drawn in Edinburgh and Glasgow were formerly made payable at forty days' date, which was equivalent to a *premium* of about ½ per cent.; but, owing to the greater facility of communication, this *premium* is now reduced to twenty days' interest, or to about ¼ per cent. Bills for remitting the revenue from Scotland are now drawn at thirty days; previously to 1819 they were drawn at sixty days."

The cost of remittance from Scotland to London has continued to fall during the last thirty years. Bills on revenue account are now drawn at eleven days, free of stamp, and bankers' drafts at seven days, or at a charge of 2s. per £100 up to £300, 6s. for all sums between £300 and £600, and 1s. additional for every £100 above £600. On the other hand, the London bankers remit money, paid over their counters to-day, to Scotland and other parts of the kingdom, payable at par to-morrow. To this extent the rate of exchange is still adverse to Edinburgh and Glasgow, and in favour of London. In like manner the holder of a bill of exchange in Edinburgh or Glasgow upon London finds himself in a somewhat better position than the holder of a bill in London upon either of the two Scotch centres. Yet it would be an error to suppose that the balance of trade is against Scotland and in favour of England. The balance of value of commodities exchanged between the two countries is in favour of Scotland, and might be greatly in her favour, and yet the rate of exchange be adverse; so that we are thus early admonished that the imports and exports of goods, though an important, are not, as was long supposed, a decisive element in the rate of exchange. The transmission of the revenue of Scotland (seven or eight millions annually), the rental of owners of land having their chief domicile in the metropolis, and the amount of obligations of Scotch merchants made payable in London under the increasing concentration of monetary business, would be sufficient to counteract the effect of a large balance of trade on the rate of exchange. Hence London bankers in taking money even in small sums payable at par next day in Edinburgh or Glasgow, are simply taking beforehand what is already under course of remittance, and reducing *pro tanto* the balances to be remitted from Scotland.

The relations of inland exchange just stated are those of a country where the money is uniform; where the bank notes of Ireland and Scotland are payable on demand in the common imperial standard of value, as the country bank notes of England are similarly exchangeable for gold or for Bank of England notes, which latter are orders for the delivery of so much gold in the issue department; and where consequently, all inland bills are drawn in precisely the same money. The circumstances are thus highly favourable to an even exchange; and it may be conclusively held that the nearer the monetary system, whether in separate countries within themselves, or in nations closely related by commercial and financial transactions one with another, approaches to these conditions, the difficulties and oscillations of exchange, inland and foreign, will be reduced within narrower limits.

The history of inland exchange in the three kingdoms presents abundant proofs of the immediate effect of money of differing values in disordering the exchanges, or, in other words, the uniform payment of their debts one to another. In the early days of Scotch banking, when the natural limit of a free legal issue of notes was less understood than it soon became, and a structure of bills of exchange was reared upon this basis, it was found that bullion had to be raised by constant re-discounts in London, and that exchange, in short, became impracticable. Even within the same town, given two kinds of money or currency, one of superior value to another, a premium will be immediately established in favour of the money of superior value, and will affect every transaction, however small, by calculations of rate of exchange, as was long illustrated by the *banco* of Hamburg, a strict metallic money of given weight and fineness, in its contact with the worn or degraded coins of various mints in prevailing circulation. In 1689, when, by a proclamation of James II., one penny was added to the nominal value of the Irish shilling, £108, 6s. 8d. Irish money became equal

to only £100 of British money in the nominal par of exchange. between Great Britain and Ireland, or a difference of $8\frac{1}{2}$ per cent. against the latter. In the course of another century the monetary system of Ireland and Great Britain had so far become uniform that the bank-notes of both countries were payable on demand in gold, but the dilution of standard proclaimed by James II. was still in force. In the eight years previous to 1797, the date of the Bank Restriction Act suspending specie payments, the rate of exchange between London and Dublin had ranged from $7\frac{1}{2}$ to 9 per cent., being from $\frac{5}{8}$ below to $\frac{3}{8}$ per cent. above the par of exchange, as determined by the actual value of the British and Irish money. The banks of England and Ireland were now alike free to issue notes without legal liability to pay them in gold on demand; and in 1803 the Bank of Ireland had increased its issues from £621,917 to £2,707,956, being in the proportion of 1 to 4·3; while the Bank of England had increased its issues in the same period from £9,181,843 to £16,505,272, or in the proportion only of 1 to 1·8. The rate of exchange was then 17 per cent. against Dublin, being $8\frac{3}{8}$ per cent. more than the normal par. But in the seven subsequent years the issues of the Bank of Ireland increased at the rate of $2\frac{6}{7}$ per cent., and the issues of the Bank of England at the rate of 5 per cent., while the country bank issues of Ireland were much diminished in amount, and those of England were largely increased. During this period the current rates of exchange became more favourable to Dublin. The inconvertible paper currency of Ireland had increased, but it had not increased in nearly the same proportion as the same kind of money in England. The manufacturers of Ulster, at once disaffected against the Government and annoyed at the uncertain value of the bank notes, clung to a gold currency; and while Dublin was under a discount of 8 per cent. in its exchange with London, Belfast was commanding a premium of 3 per cent. against London, and 10 per cent. against Dublin.[1]

Apart, however, from this element of the differing standards and values of money, which comes more fully into view under the head of "foreign exchange," it is impossible to follow closely the description of inland exchange above quoted from Mr M'Culloch without apprehending many of the principal characteristics of the operation, which, as they are sure to arise in exchange transactions under all circumstances, cannot be too soon brought into formal notice; such as (1) that the rate of exchange is ruled by the supply and demand of bills for the time being; (2) when in any market the demand for bills on a given centre is greater than the supply, the deficiency may be supplemented by bills on other centres having a favourable exchange with the given centre—a resource which, though indirect, receives much extension in the wide theatre of the commercial world under the watchful study of experts in bills; (3) the profit of a premium and the loss of a discount on bills fall within the market where the bill is drawn or sold, the drawee or acceptor having the definite sum on the bill to pay in either case; (4) exchange between one country or one centre and another is never a completed or perfectly adjusted process, but a constant series of transactions, reflecting the varying phases of claims and debts as they mature; and (5) the fluctuation of rates of exchange is effectually limited by the

[1] The *Bullion Inquiry and Report* of 1819 is full of information and discussion as to the effects on exchange of the long breach in our monetary system during the French Revolutionary wars, which will always be highly instructive, but on which it would here be out of date to dwell. The Scotch banks do not appear, during that trying period, to have departed from the rule of paying their notes in gold on demand. The contrary lesson may have been so well impressed on them by the experience of the previous century, and so well explained by the intermediate instructions of Adam Smith, whom, of course, they were the first to read, as to raise them above temptation.

expense of transmitting money, that is, coin or bullion,—a principle which, though subject to partial exceptions in foreign exchange, is an underlying and potential law of the whole system.

In the study of foreign exchange some embarrassment arises from the twofold character of the action and its results, and the necessity of realizing in one conception the drawers and buyers of the bills, and the two countries to which their transactions apply. It tends to simplify the matter to remember that what is transacted either in London or Paris expends the whole effect, for purposes of comprehension at least, of the course of exchange between the two cities; and so in other cases. If the debts, the time of settlement of which has come, of London to Paris be greater than the debts of Paris to London, the supply of bills on Paris in London will be less, and the supply of bills on London in Paris will be greater than the demand, which are only different forms of expressing the same relation. There may be a momentary variation in the rate of exchange in the two cities, but as soon as the relation of supply is discovered the variation will disappear. On both fields the same two classes of people, drawers and remitters, are at work, only the party in stronger force on the one is in weaker force on the other, and at both ends there is the same though converse result. In any one market, therefore, there is a complete representation of the action of exchange.

To a circle of exchange four persons, as is explained by Mr Mill, are always necessary: A, say of England, has exported English goods to B, say in France; and in order that B may be saved the expense and risk of sending money to A, A draws a bill on B for the sum due, and sells it to his neighbour D in England, in order that he may send it instead of money to C in France, from whom D has imported French goods of exactly equivalent value, and who, on the expiry of days the bill has to run, takes it to his neighbour B, and gets his payment, while in possession of the bill B has his discharge from A. The debt on both sides is thus paid without the transmission of a single ounce of gold or silver.

This is a genuine circle of foreign exchange; but in the great commerce and diversified creditorship and debtorship of the world the process is frequently of a very complex kind. Not only all the exports and imports, freights, and transit dues round the globe, but nearly all the public and private outlays which one country expends upon another, are paid by means of foreign bills of exchange. Mr Goschen, in a practical treatise which may be said to bring up the science of exchange to the present time,[2] examines the various classes of foreign bills, and specifies some movements of exchange which could hardly be dreamed of save by professional men. For instance, teas shipped from China to New York are generally paid for by a draft of the exporter on a London merchant for account of the American importer. The exporter in China is paid by the price which is given him for his bill on London; and the London acceptor looks for payment to the importer in New York. In the East Indies those who ship produce to America draw on London and not on New York; and the New Orleans cotton exporter to Russia draws on London instead of on St Petersburg. The explanation of this may be partly that Great Britain exports more in manufactures and silver to China, for example, than she imports of Chinese tea and silk, and thus leaves a balance of trade due to her, which the Chinese pay by transferring their claims on New York to their London creditors, and partly from the greater reputation and custom of the London banking houses than

[2] *The Theory of Foreign Exchanges*, by the Right Hon. G. J. Goschen, M.P., ninth edition, London, Effingham Wilson, 1876.

those of New York or St Petersburg, though many of these may be no less wealthy than the others, or simply from the greater convenience of a bill on London. In proportion, however, as direct trade in mutual import and export of goods is established between two countries, direct exchange follows. Formerly the New York houses drew, for their shipments of tobacco and other produce to Bremen, on England for German account. But now since German manufactures and products have been making progress in the New World, bills of exchange are drawn between New York and Bremen, and Rio Janeiro and Hamburg. But the merchants of Bombay and other parts of India, finding few purchasers of bills on Bremen, still draw on London for German account. These indirect exchanges may be regarded as examples of the common expedient of utilizing both debts and credits at various distant points in redressing the inequalities of direct exchange; and, also, of the advantage of London, from the greater extent of British commerce and the greater distribution of British exports than those of any other country, as the centre for ultimate adjustments and clearings of this kind. But Mr Goschen has adduced an extensive class of foreign bills still more remarkable. These are bills "technically said to be drawn in blank," which represent no actual indebtedness at the period of drawing, and by which the acceptor does not pay his debt to the drawer, but on the contrary, the drawer incurs a debt to the acceptor. Mr Goschen admits that they approach nearly to the character of accommodation bills in the home trade, might be even worse abused, and consequently require to be discriminated. In many cases such bills have a function of public utility,—as, for example, where the imports of a country do not fall into the same period of the year as its exports, and the bills in payment of them do not meet each other in the ordinary course. In that case, the importers in seeking to buy bills on foreign countries would not find them, and would have no recourse but to remit specie in payment of their purchases abroad In like manner the exporters of grain, cotton, and other produce might draw bills for their value, but would find the bills were unsaleable, and would have to order the gold, remitted by the importers a few months before, to be sent back again. In this situation banking-houses draw "in blank" on bankers abroad, selling their drafts to importers at one period of the year and buying the bills of the exporters at another, therewith to refund the bankers abroad by whom their drafts have been honoured. The case implies a raising of capital in anticipation of the produce, but there need be nothing fictitious either in its manner or character, and it may well be believed to be the case of many large producing countries and colonies. In the dealings of foreign exchange the small as well as the large bills are embraced. With the piles of single bills for many thousands of pounds sterling, from such countries as China, India, or America, are commingled many bills of small amounts; while from all parts of Europe they are of a still more miscellaneous character—bills of retail as well as wholesale trade, bills of Swedish or Norwegian shipmasters for freights, of Dutch and Belgian farmers for parcels of eggs and butter, of Germans for toys, and French for odd *articles de Paris*, on minor agents, shopkeepers, milliners, and others, who may not have come in the course of their business within the range of inland exchange.

The developments of foreign exchange are always more or less modified in the course of a generation, and so much seems necessary as an introduction to the essential subject itself, and in particular to the explanation of the rate of exchange, how it is determined, and what in a general sense it imports.

Mr M'Culloch, in former editions of this work, treated foreign exchange under three heads:—(1) *nominal exchange*, or the rate of exchange established between two countries on a strict estimate of the respective money, or coins, or currencies, in which the value of their goods are usually denominated and exchanged; (2) *real exchange*, or the effect of the supply and demand of bills in raising the current rate above, or depressing it below, the mean point or equilibrium—nominal, inasmuch as it is an equal value from which there is constant variation by other elements acting on the rate of exchange, but yet of radical fixity and importance; and (3) *computed exchange*, or, in reality, the actual course of exchange as determined day by day from the combined consideration and effects of the other two. While this division was appropriate enough, it may be better here to consider still more in detail the various elements entering into the valuation of foreign bills or, in other words, the rate of foreign exchange. These may be conveniently embraced under the following heads:—(1) par of exchange; (2) supply and demand of bills; (3) rate of interest; (4) cost of specie remittance; to which may be added, what is always implied, (5) correct judgment of the force and duration of the cause or causes affecting the rate of exchange, or its opposite, panic.

Par of exchange

1. Without some common medium of value in commercial countries, bills of exchange could not be drawn between one and another. The "cash" of China has played no more part in the foreign exchanges than the cowries of Africa; but since a mint has been established in Japan, from which gold pieces are issued under public regulation as to weight and fineness, there may be no difficulty in ascertaining the monetary equivalency, at Yokohama, of any debt due by Japan to England, or *vice versa*. The nations have thus found a medium of exchange in bullion, in gold or silver, or in both. In countries of the double standard, it has been usual to modify the law by liberty of contract for payment in one of the metals, without which liberty, indeed, it would be as well to have only one standard, since it is certain that the debtor will always choose to pay in the metal that has become relatively cheaper. In countries where silver is the sole standard, the par of silver to gold may be 15 to 1, or 16 to 1, as law or custom may have established; but in foreign exchange the par of silver to gold cannot be fixed at any absolute point by the law of any one country, and in the case of a depreciation, say of silver, even though temporary, by which the market price of silver to gold became 17 to 1, a proportionate addition would be made to the figures of the mint or former customary par, and this new sum become practically the par of exchange between the gold currency of England or California and the silver dollars of Mexico or rupees of India. Thus, having gold and silver to deal with, it is always possible, whatever may be the variety and names of the coins of different countries, to estimate the equivalents of the one to the other This is a matter simply of weight and assay; and the ratio thus found is the par of exchange between one country and another.

Mr M'Culloch seems to have thought that the par of exchange should properly include, not only equivalent weight and purity of the precious metals, but their relative cheapness or dearness in given places. "Thus," he says, "if, because of the expense of carriage, the value of bullion in Great Britain be 5 per cent. greater than in San Francisco, 100 ounces of pure gold in the latter would not be worth 100 ounces of pure gold in London, but 5 per cent. less; and the exchange would be at true par when bills for 105 ounces standard bullion, payable in San Francisco, sold in London for 100 ounces." Since this has not been the practice in determining the par of exchange—the 25·30 of Paris, and the old 109 of New York, &c., with London having been based more or less exactly on equal weights of pure gold for pure gold—a question is suggested which the following considerations may help to resolve.

The 5 per cent. claimed from San Francisco is for a relative dearness of gold in London, which can only be overcome by carrying the gold from the one place to the other; but it would be illogical to charge in a bill of exchange for a transport of specie which it is the express object and effect of the bill to supersede. The merchant in London would be entitled to sell a bill on San Francisco for a sum equal to 100 ounces of gold, and to include the costs of exchange, if any; or his debtor in San Francisco might buy a bill on London for a sum sterling equal to 100 ounces of gold; and if the course of exchange were such that this bill cost him only 99 ounces, the merchant in London would yet have no reason to complain. If neither of these modes of settlement were available, the debtor in San Francisco would have to send 100 ounces of gold to London, in which case there would be no rate of exchange in question.

But, apart from the less value of bullion in some countries than in others owing to nearness to the mines or other causes, there is a cheapness of the metallic money, as well as the general currency of a country, which operates directly on the rate of exchange, and requires in one form or other the recognition of a different par from that established under other conditions. The standard may be tampered with; the alloy may be increased; the weight of the coins may be diminished and diminished, till, like the Turkish piastre, they become scarce a shadow of themselves. It is obvious that innovations of this kind compel a rectification of the estimated par of exchange. In other cases coins are legitimately changed; and these variations, in so far as they supersede or modify coins which entered into the par estimate, are bound to have a new rating. A country which allows its coinage to be much worn, defaced, and generally light in weight, is in the same position as one which has deliberately lowered its standard of value; for though its light coins, when sent abroad, which they are not apt to be, count for no more than they weigh, there is the other and more serious effect that they may have been already well weighed at home, and have so raised the prices of the goods of the country as to place all dealings in them under a delusion as to their real value. One may well believe, however, that this is a form of monetary evil which has now passed away. There will always be some more or less worn and light coins in a metallic circulation, and as long as these are limited in number, and circulate in the country of their coinage at the mint price, they do little or no harm. There is a much more convenient process by which to cheapen the money of a country than any form of debasing the coinage, namely, to dispense wholly or almost wholly with metallic money in favour of an inconvertible paper currency.

When a country is impelled to issue paper money not payable on demand in gold or silver, its monetary value slips away from all fixed reckoning. The first effects are so agreeable as naturally to lead to a larger and a still larger issue, and the agreeable effects are prolonged until the real situation begins to be disclosed, and, finally, derangement has spread so widely on all sides that extrication becomes a task of the gravest difficulty. The effects even on the foreign exchanges are for a time somewhat illusive. There being no more need for gold and silver, nearly the whole stock of bullion passes out, and like a new found capital gives ample power of purchase abroad. The importer, finding that there are increasing prices for every commodity in the paper money, goes into his business with new heart and will. The premium, which has early begun to be established on foreign bills, soon becomes so large that the exporter imagines that he can make a fair profit out of the premium on his foreign bill alone, though there may not be a margin of a fraction of one per cent. of profit in the actual trade. Supposing such a result possible to the exporter, it is clear that he makes his profit entirely out of his neighbour the importer, who has to buy his bill, and consequently to pay the premium. Both cannot be right in their views, and in point of fact both are wrong until they begin to realize that the inconvertible paper dollar, rouble, or florin is not so valuable and has not the same purchasing power as the metallic money, or as the paper notes maintained in a constant practical convertibility. This fact is demonstrated within the country itself by the more or less gradual and uniform, but inevitable, rise of prices of all commodities, and of bullion among others, in this new currency. It is discovered very early in the foreign exchanges, not only since there is likely to be an excess of imports over exports when a country is in the act of denuding itself of specie, but because the foreigner has to be careful to get the value of his goods or produce as it is known to him in his own money; and any important change in the money of a country, therefore, obtains a sharp valuation abroad. Both at home and abroad it is soon discovered that the par of exchange, as formerly established, has passed away, and that a new par has come into operation under the pure force of the natural relations of the case. The importer finds no advantage from the advancing prices of what he imports in the domestic markets, since he has to pay more of the domestic money for the foreign bill of exchange by which he discharges the debt for his imports; and the exporter finds no advantage in the premium on his foreign bill which he sells to the importer, since it only replaces what he has already paid in the increased cost of his commodities and other outlays.

This action of exchange is now so familiar as to require little illustration; but a commonplace example may be given, to render more obvious the result on both sides. A, a merchant in London, at a period when the rate of exchange between London and Hamburg is at exact par, can sell a hogshead of sugar worth £50 in London to B in Hamburg for £100, or weight for weight in gold of 100 sovereigns. He exports, draws his bill on B, which he sells for £100, and derives his profit of £50 on the sugar, less expenses of transit. At another period of equal scarcity and dearness of sugar in Hamburg as compared with London, but when the currency of England has been under suspension of specie payment, and has been so much increased in quantity that prices of sugar and other commodities have doubled in the meanwhile, the hogshead of sugar now sells in London for £100. A, however, again exports, draws on B for £100, and, the rate of exchange being now 100 per cent. in favour of Hamburg against the currency of England, sells the bill for £200 in London, and makes a profit in the English currency of £100, equal to £50 in undepreciated money—the same profit as he made before. The results to B, all things being equal as supposed save the depreciation of the English currency, are also the same in both transactions. The case of a British importer, in corresponding circumstances, would not differ from that of A, the exporter; because, however unfavourable the *nominal* exchange might be in the bills by which he paid for his imports from abroad, he would be repaid by the increased nominal prices obtained for them in the home market.

As long as a change in the par of the money of two countries is not recognized or clearly understood, there may be much miscalculation and irregular profit and loss among the merchants on both sides. On the other hand, as soon as noted and brought under generally acknowledged estimate, it does not interfere, *per se*, with the movement of produce or the fair profits of those engaged in foreign trade.

But how is the depreciation of an inconvertible paper currency to be measured? As a convertible paper currency

only maintains its par with gold by being always payable on demand in the gold it promises to pay, so an inconvertible paper currency falls just so much below the par of gold as the difference between the amount of gold it professes to be and the amount of gold it exchanges for in its own market. The price of bullion in an inconvertible paper currency rises like that of other commodities—not, indeed, in its general market value, but in its market price within the sphere of the currency; and the amount of this rise marks what may be called either a discount on the paper money or a premium on the gold, and this discount or premium becomes a measure of the depreciation of the currency. It is by no means a satisfactory standard, for it may vary from day to day, and in this respect be as unlike as possible to a par of exchange between the gold and silver moneys alike of small and great states, which may hold good without variation for any number of years. where may also be restrictions on the sale of bullion, prohibition of the export of bullion, and speculative combinations of paper-holders and gold-holders to "corner" each other, and the fluctuations may be not only constant but sometimes extreme. But, with all its disadvantages, the relation of gold to the paper money, as it happens to be revealed in the markets, is the only measure of the depreciation to be had, and the premium on gold has consequently to be reckoned as a necessary component part of the rate of exchange with other countries.

The history of the last twenty years, though years of abundant production of gold and silver and great material prosperity, has been marked by an extended resort to inconvertible paper money in many parts of the world; and the exchanges of Russia, Austria, Italy, and many other countries might be referred to for ample proofs of the effect of this monetary expedient on the nominal par, and the extraordinary fluctuations to which it gives rise. The "greenback" money of the United States, a result of the war between North and South, is probably the most familiar, while in some respects also the most instructive example. The par of the American dollar to the pound sterling was originally struck in the rough proportion of $40 equal to £9, which made the quotation at New York $4·44 to the pound, or, as stated on the British side, 54d. to the dollar. But on strict inquiry this did not correspond with the gold, weight for weight, in the dollar and the sovereign, and was in fact 9 per cent. too favourable to the dollar. It thus appeared that to correct the scales $9 had to be thrown in with every hundred, and adhering to the old par with the tenacity which has been the general commercial practice in such cases, the exchanges were held to be in equilibrium when bills on London stood at $109 for every hundred of the purchase-money, or 9 per cent. nominal premium in favour of England. The par, as more definitely stated, was then in New York $4·85 equal to the pound, or in London 49½d. equal to the dollar, and this remained the mean specie point from which all other influences acting on the exchange caused the rate either to rise or to fall, until the period of the civil war, and the issue of paper money, guaranteed by Federal security, but inconvertible. The effect of the new currency on the exchanges was neither immediate nor suddenly great in its proportions. The wide territory and large population of the Northern States were a powerful absorbent. Moreover, as the Government increased its issues the banks withdrew their notes, which had the effect *pro tanto* of staying the progress of depreciation. But gold was still absolutely necessary in the ports, and a premium on gold, inevitable from the first, increased month by mouth with the increased issue and circulation of "greenbacks." What the nominal par of exchange now was became a sort of arithmetical puzzle; for, taking the exchange of New York on London alone, without respect to other countries trading with the United States (the money of some of which was undergoing similar depreciation at the same period), the established premium of 9 per cent. in favour of London was met and supplemented by this new premium on gold, and to add the one premium to the other would not be enough, because the dollar itself was now fallen away from its value when the $9 to the hundred had been strictly ascertained and arranged as a corrective of the original rough par of $40 equal to £9. The Government, issuing the new currency that produced this disturbance in the foreign exchanges, had no theory on the subject, and only made some feeble attempts to regulate the sale of bullion. The adjustment was left in the main to the calculation of bankers and merchants on both sides, in presence of the natural causes in operation, and the solution thus attained may be all the more significant. The premium on gold in its exchange at New York with the paper currency was added to the former premium of 9 per cent. in favour of London, and the 9 per cent. itself, marked of old in $9 of bullion value, was increased *pro rata* by the same premium.[1] This rule has since regulated the nominal par of exchange between New York and London through wide ranges of fluctuation. The exchange was often as high as 180 during the war, so that the quotation must often have been—New York $8·0 = £1, London 30d. = $1·0. It is no less worthy of remark that, without the actual resumption of specie payment, the "greenback" dollar has been quoted of late in New York and other American cities at the metallic par of 4·85—a rare though not unprecedented phenomenon, to be attributed to a severe financial and commercial crisis, followed by four years of lowered prices, steady excess of exports over imports, and accumulation of bullion.

The effect of issues of inconvertible paper money, or the suspension of cash payment of paper currency already in circulation on the par of exchange, is the same as that of a change of the standard of value, a debasement of the coinage, or, where in one of two countries the money is gold, and in the other silver, a depreciation of one metal as compared with the other. When two countries par their gold coins, the object is to arrive at a common term by which value for value will be paid, in equivalent weight and purity of metal, out of the money of each other. When one of them displaces its gold coins by inconvertible paper money, the same object has to be attained, and this is reached, though not so fixedly as in the par of metallic coins, by the premium which gold commands over the paper money in the sphere of its currency. The former par in such cases may be adhered to as a landmark, and this gold premium may be treated as nominal premium on one side and nominal discount on the other, but it is substantially of the nature of par of exchange, and becomes a necessary integer of the rate of exchange. In the case of countries of one of which gold, and of the other silver, is the standard money, the nominal par is subject to variation from changes in the relative market value of the two metals. If, for example, the relation on which the par proceeded was 15 ounces of silver equal to 1 ounce of gold, and the depreciation of silver becomes such that 17 ounces

[1] Mr Goschen, in his book on *Foreign Exchanges*, gives the following definition of the process of exchange between New York and London:—"If, before the issue of paper money, the purchaser of a bill on England paid 100 dollars and 9 dollars for it, he would, if the premium on gold had risen to 50 per cent., in the first place pay 150 dollars instead of the 100, and in the second 13½ dollars instead of 9 dollars, or half as much again as what we may call the correcting premium. Thus, if the price of bills when gold stood at 150 was 163½, this price would correspond to the price of 109 at the time when there was no premium on gold. The price might rise to 165, or fall to 161, according as there was supply or demand, but the mean point would be ascertained by the process which has been described."