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BANKING AND CURRENCY

BY

W. J. WESTON, M.A., B.Sc. LOND.

BARRISTER-AT-LAW; HEAD OF THE SCHOOL OF COMMERCE
THE POLYTECHNIC, LONDON

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PREFACE TO THE THIRD EDITION.

STUDENTS reading for examinations in Economics and Commerce such as those of the Intermediate and Degree examinations of the University of London, must have clear ideas about the nature of money. This book is designed primarily for such students, and for those preparing for specific professional examinations in Banking and Currency. It will, one hopes, be of service to others also—to the many that must be keenly anxious to understand this money business.

The problems in regard to money are nowadays, and are likely to be for some time, current topics of conversation. Well they may be. For no single cause operates so strongly towards the prosperity or the adversity of a community as its dealing with its money system does.

For the present edition the work has been thoroughly revised and brought up to date and the type has been reset: the book speaks from the end of 1932. Concerned, however, as it is with monetary problems still in process of solution, a statement here and there (particularly in reference to foreign exchanges) may need some modification in the near future.

W. J. W.

LONDON,
October, 1932.

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(b) **BANK NOTES.**—In our country these are Bank of England notes, issued under the authority of the Bank Notes and Currency Act of 1928, and since 1833 endowed with the privilege of legal tender. These two divisions comprise the hand-to-hand currency, the money issued by the State to serve as a means of cancelling debts,—endowed, that is, with the privilege of legal tender.

(c) **NEGOTIABLE INSTRUMENTS.**—Particularly (1) *Cheques* (bills of exchange drawn on a banker), constituting the major part of home business currency; (2) *Foreign bills of exchange*, the chief currency for settling international debts.

Importance of Money.—We are not to suppose that the money system of a country of itself determines the adversity or the prosperity of the country. A good money system may certainly lessen the ills of society; it cannot remove them. It is, indeed, natural nowadays to exaggerate the worth of a sound money system to the community. For most of the troubles and perplexities that harassed the business man during the post-war years were in great measure due to the fact that the money systems of the warring countries were all out of order. The measure to which the business world had grown accustomed, in which they reckoned values, had been tampered with; and trade languished. The risk that changes in the value of money would turn an anticipated profit into an actual loss benumbed business activity.

The economic importance of a good money system to a community is great enough, and greater than we sometimes think. It is said, and with truth, that the increase in the material well-being of men is owing to the Division of Labour. We might with equal truth ascribe that increase to the greater extent in which men exchange with one another. Division of Labour is possible only when men have learnt to exchange; it is limited by the extent of the market. Thus Exchange, Division of Labour, and the Development of a Money system are all results of co-operation among men.

South-east Lancashire is enabled to concentrate mainly upon the production of cottons for the nations of the world;

the whole district becomes a wonderfully efficient machine for this one purpose. It can do so because trade carries off the products in every direction, to Egypt and India, to China and tropical Africa, to the islands of the Pacific and to the Balkan States—all agreeing in their welcome of cheap cottons if in nothing else, all willing to send the products of their fields and forests in return. And this co-operation that we call trade can develop beyond its crude and unimportant beginnings only by the agency of money.

Barter, the direct exchange of commodity for commodity or service for service—"Give me that, and I will give you this"—is practicable in some slight degree. It persists even in highly civilised communities. And when, as happened in many regions during the Great War, the money system breaks down, men again have recourse to barter. In our own days of rationing owing to war conditions, the baker's wife had many a bargain with the butcher; and loaves made of good white flour (though dark adulterated flour was prescribed) obtained joints not sanctioned by the Food Controller. Again when, as in 1932, half the governments of the world were placing restrictions on the foreign exchanges, placing thereby difficulties in the paying of money, there was a rebirth of barter. (See the note on "Foreign Exchange Restriction," page 191.)

Progress is Dependent upon Money.—Industrial progress is possible, however, only in so far as a money economy replaces barter. This does not, we should note at the outset, imply that metallic money must of necessity intervene in every exchange, or even be in existence. If a man who served the community could get a credit for his service, in a banker's books for example, there need be no metallic money. The benefactor of the community could obtain for this credit those services, embodied or not in commodities, he himself wanted—to the extent of his benefaction. All we should need would be a recognised unit of value, a Money of Account.

We have, indeed, practically achieved this economy in our home trade, where our money is a hundred per cent. token money. And in international trade economising expedients are ever lessening the need for gold.

Without Money the difficulty of bringing together people with reciprocal wants would be insuperable; and Exchange, which alone makes Division of Labour possible, could have little scope. Division of Labour, Exchange, and Money have all developed together; they are all mutually cause and effect. An urgent need for a means of comparing the products of different occupations constituted the imperious demand for Money. The adopting of a system for measuring values—of a device whereby things could be arranged in an order of precedence—enabled Exchange, and with it Division of Labour, to be extended. Exchange is, we are to note, logically a part of Production; the process of Production is complete only when the commodity is in the hands of its consumer. It is money that enables the innumerable Exchanges incident to our complex society to be performed easily and speedily, and doing so helps Production. Money plays, therefore, a part, the importance of which it would not be easy to exaggerate, in the economic life of peoples.

The elaborate experiment conducted in Russia showed how vain is the attempt of a modern community to dispense with an efficient medium of exchange. It is not often that experiments in economics are possible. Here was one conducted by men keenly desirous of its success; and the impossibility for even Soviet Russia to live without money is the more striking.

The Mercantilists perhaps exaggerated the importance of money to a community; though we should note in passing that all the arguments of the economists have not convinced civilised governments of the absurdity of seeking after money, of storing up gold. We in these days are, on the other hand, probably apt to underrate the importance of money; we need such a sharp lesson as that afforded by the War of 1914-18 to make us realise how much dislocation, how much keen suffering, indeed, is brought about by tampering with the currency system. So long as currencies were based on gold, and therefore kept in a stable relation to one another, exchanges among men were easily and smoothly effected. The ordinary man had no need to trouble about the currency. The "pound sterling" he had in mind when he made his bargain, when he

undertook to serve for wages or to sell his goods, was for practical purposes the "pound sterling" in which his payment was made; it had the anticipated power over the market so that the real nature of his contract was preserved. The gold standard was relinquished; and currency questions became no longer matters of interest for the mere theorist. They became matters of urgent practical importance; for they affected men's means of making a living.

We Live under a Money-Economy.—Consider the economics of the matter for a while. We no longer satisfy our wants directly: those recurring wants of food, those constant wants of clothing and shelter are satisfied as a result of buying and selling—indirectly that is. A man may be fed in the factory, clothed in the field; he "makes his living"—to use the curious phrase—by selling his services. But we sell in order to buy. We obtain money for our services; we spend that money in procuring the necessaries sustaining life and the comforts making life pleasant.

It is by exchanging that we live. In modern times we are all specialists; we are all occupied at one tiny operation of the great production machine. Money permits our specialised effort to be turned into generalised enjoyment; we may say that each one of us is a factor in specialised production, and that the money we get entitles us to generalised consumption. Being the owner of sixpence I am able to choose among the wide range in a Woolworth's Store. We direct our efforts in one direction; by means of money our desires are satisfied in many directions. By the use of money we take our real income in our own way. Money is a "bearer of options." It enables us to specify what kind of real income we want in return for our services. It enables us to exercise power over the diverse products of men of all nations. We co-operate with hundreds and thousands of other workers, in widely separated parts of the world perhaps, and maybe belonging to times long past. With their aid we produce the food men eat or the clothes they wear or the houses they inhabit or the luxuries in which they delight.

What an enormous number of workers have united their

efforts so that this fountain pen with which I write may be at my disposal. Unconscious of the co-operation most of them were; ignorant of the ultimate outcome of their work they must necessarily have been. They don't know me, and they don't want my services. But they do know my money, and they want it. Doubtless, too, it is but the tiniest part of the payment to the ship-builder or the railroad-maker, who enabled the materials of the pen to be assembled, that I provide in the price I pay. The fact remains that this small instrument is the resultant of a vast multitude of efforts; and that the price paid is distributed in ever smaller and smaller portions among the great army of co-operators.

One current had brought me the pen from its "raw materials" through a number of strange transformations; a counter-current takes from me the remuneration of the successive producers who have made those materials more fitted for my purpose. Money enables the co-operation to take place; for it enables exchanges to be made readily and easily. It permits of the rewarding of the co-operators in proportion to the service they have performed for society. The intervention of money may possibly have drawbacks. Money may, for instance, obscure the truth that we obtain such things as we want by ourselves producing the things other people want: that we produce in order to enjoy; and that, in the long run and on the whole, the more we produce the more we are enabled to enjoy. Such a drawback to money is, however, negligible when compared with its manifold and great advantages.

Varying Power of Monetary Unit.—The course of events during recent years has revealed another possible drawback: the money unit may vary in its power over the market, and as a result, bargains made in terms of money lose their real significance. During the greater part of the nineteenth century the man with a pound had a fairly stable pull over the market; and people came, quite without warrant, to look upon the monetary unit as a thing immutable. Like the yard stick, which never lengthens to 39 inches or shortens to 33, the pound sterling was constant as the northern star.

It would ever command the same number of pints of beer or pounds of beef. History lent no support to this assumption of stability. In days of old rents were paid in the produce of the fields. As society became more complex the method gave the recipient an embarrassment of one kind of riches, and it gave the payer much trouble in getting the stipulated goods and in carrying them to the right place at the right time. To commute payments in kind into payments in money was a bargain that served both parties.

But the pound of Elizabeth was puny against the pound of Edward I. For the influx into Europe of silver from America, multiplying as it did the pounds competing for goods, had caused a startling rise of prices. The real meaning of the contract for commutation was vitiated by the violent change in the purchasing power of the pound. Indeed, wary bargainers in later days sought to preserve this real meaning by stipulating that the money rent should rise and fall in accordance with variations in the price of wheat. Our variations of wages in accordance with changes in the "cost of living" is only an elaboration of this early effort to link money with the things money buys.

A pound, we must suppose, is a portmanteau term, a summary way of expressing "the goods I want to buy." The artisan who agrees to work for five pounds a week has in mind, more or less prominently, the thought that the bits of paper he gets will enable him to satisfy the needs of himself and his family. He translates his nominal wage into the butter and bacon his wife carries home in her market basket, into boots for the boys, into dresses for the girls. His translation is faulty if prices rise; the pounds he gets are not the pounds he has a right to expect. Yet the legal attitude, as two recent cases illustrate, assumes that the bargain is fulfilled when the pounds are paid. Pounds you bargained for; pounds you get. What grounds have you for complaint? That was the attitude of the French government, too, when it stabilised the franc at about one-fifth of its former gold content. To the English lenders, who protested that they had been robbed of four-fifths of their loan, the answer was, "You have what is stipulated in your bond: we undertook to

pay francs, and we pay them." This legal attitude is probably inevitable, though from the economic point of view the bargain is not complete until the money is spent. For we should involve ourselves in a morass of unprofitable speculation if we tried to re-adjust contracts as some highly contentious "index-number" increased or decreased.

The disturbances to contracts caused by fluctuations in the power of the money unit from time to time are augmented by fluctuations from place to place. "What is a Pound?" would have one answer in 1920, another in 1932; it would also have one answer in London, another in Melbourne. On this day, 28 July, 1932, it takes $126\frac{1}{2}$ Australian pounds to buy 100 English pounds. When one contractor is in Australia and the other in England, which pounds are to be paid?

There was the question carried to the House of Lords in *King Line v. Westralian Farmers* (H.L. 1932). The parties, indeed, might have provided for the contingency in their contracts; and we may assume—now that violent changes in rates are an ordinary incident in business transactions—that future contracts will so provide. The contract being silent on the matter, the Court came to the only possible decision: the State settles what shall be legal tender; and a contract to pay pounds is a contract to pay in the currency of the country where payment must be made. The Westralian Farmers must, therefore, be content with the Australian pounds offered them for the commission earned. They could not insist on having the more potent English pounds.

The second case (*Broken Hill Proprietary Co. v. Latham*, Chancery, 1932) raised the problem in another form. London debenture holders of the company (incorporated in Victoria) had the option to require payment in London. The company claimed to pay in Australian pounds, to give sterling at the exchange value. The holders demurred, and claimed payment without deduction; and Mr. Justice Maugham allowed their claim: "I must," he said, "come to the conclusion that the contentions put forward on behalf of the company must fail, and that every debenture-holder requiring payment in London is entitled to receive payment in sterling." Yet the conclusion is not self-evident. For the debentures were issued

in 1920, and then prices were at the peak. The pound had less power over the market than ever before or since. Even the now debilitated Australian pound has greater command over goods than the English pound in 1920. The debenture-holders lent the company less real goods than the company is ready to return, though measured in Australian pounds. Pure justice would seem to indicate that a less, not a greater, number of Australian pounds should suffice to cancel the debt. But we seldom get unalloyed justice in this world; and probably we may imply into every contract, expressed in terms of money, that the payer of it and the receiver of it take their chance. If the value of a unit rises, the payer has a greater burden to bear; if the value falls, the receiver buys less. We certainly cannot read into such an option as was given a term that, if there should arise a difference in the exchange values of the "pounds," the holder asking for payment in London should be obliged to accept the English equivalent according to the rate of exchange. Violent and arbitrary changes in the world's currency systems are too recent a phenomenon to permit us to assume such a term as a matter of course.

The Breakdown of a Money System.—A negative illustration of the importance of a sound system of money was afforded by the breakdown of the currency system of Central Europe as a result of war conditions. The shattering of the economic life of Austria and Russia, the death not of thousands but of millions through famine and disease, the disorder among the bewildered peoples that had become accustomed to rely upon settled and ordered trade, may all be ascribed in large measure to the destruction of the recognised medium of exchange. As the paper currency, issued more and more lavishly by the belligerent governments, became more and more depreciated, it ceased to be a valid claim upon the goods produced. The peoples were reduced to the rude and wasteful methods of barter; and the existence of crowded industrial populations, dependent upon a ready outlet for their products, became hopeless.

One of the experts whom we sent to devise plans for helping

the harassed nations in their distress thus describes the condition of affairs: "In Austria, when the great armies came home from the war and there was nothing to do—industry was shattered—the State was confronted with millions of men who were perforce idle and without any means of livelihood. What did they do? Among other things, where there was one railway porter they put six or eight, and those men had to be paid the rate of wages of the day; there was no money to pay them, and so the printing press was brought in and turned round so many hours day and night until bits of paper were produced to pay the men who were doing nothing on the railway, but had to be kept.

"Very shortly these pieces of paper became more or less valueless, and these men said: 'We cannot buy tea, bacon, bread, and sugar, we cannot pay our rent, we cannot feed our children, we cannot clothe our wives and ourselves with these particular numbers of pieces of paper, we must strike for double that number of pieces of paper.' Very well. Then the printing press went on again, and double the number of pieces of paper were produced—not things, symbols, which did not mean things.

"I had in my bank the other day one of the very latest of those who have got away from Russia. He said: 'Before I left I paid £36, pre-war price, for a glass of milk; I gave £400, pre-war price, for a loaf of white bread; my living expenses were £8,000 per month, or £96,000 per year, pre-war price, in paper to enable me to live; and the Russian Government, seeing that it was objectionable to have every pocket in a man's suit bulging with paper, enough to pay for a loaf of bread or a cab drive, or any of the small necessities of life, are now printing pieces of paper, bank notes, of 25,000 and 50,000 denomination of roubles to save carrying more notes.'

"We had evidence of great disorganisation. You could not buy fresh milk in Austria, and American milk had to be brought over; but across the frontier, thirty miles away, farmers were feeding their pigs on fresh milk.

"We had to say something about this. It was not said openly, it was said largely in conversation. To those nations we said: 'Now look here, you have had old quarrels, old

grudges, you will not part, one with his pigs which are wanted there, and the other with his milk which is wanted there; you perforce require other nations to bring thousands of miles these commodities which you require; they are not going to do it: you will have to get busy and exchange your commodities and resolve all these ancient grudges.' The answer was: 'Well, we might exchange certain commodities for others, but we are not, in this country, going to sell our milk for a number of notes which are worth nothing to us, and with which we can buy nothing when we have them.' And so the exchanges were all demobilised."

A Depreciating Currency.—It would appear that, once the Government of a State enters upon a policy of tampering with the currency, the evil can hardly be stayed. During 1921 in Russia efforts had been made to make the value of the rouble stable. But the fatal facility of paper money was too strong a temptation to withstand. At the beginning of 1922, inflation and the resulting depreciation set in with increased violence. Up to May the rouble was actually losing half its value in a month. If, therefore, a trader wished to keep his capital intact he had to make at least a hundred per cent. profit a month.

The inevitable result was that no one sought to save. Hoarding was absurd; for no sane man would retain his money longer than the time it took to buy something with it. As soon as a man sold an article, as soon as he was paid for his services, he ran to the market in order to turn his paper into something to eat or to wear, lest if he delayed, his power to do so would be destroyed. As illustrations of the amazing rapidity in the fall of purchasing power, we have such facts as this: on April 15th a box of matches in Moscow cost ten thousand roubles; it cost sixteen thousand on April 18th. Could any sober mercantile calculations be made when a rise of sixty per cent. in three days was possible?

The committee of banking experts, anxious to find means of restoring the shattered life of Europe, was emphatic on the matter. "The industry of Europe cannot hope for a permanent return to prosperity so long as it has to bear, either

directly in the form of taxation or indirectly in the form of inflation of currencies, the most insidious and objectionable of all forms of taxation, a burden of Government expenditure which is beyond its capacity."

What exactly is meant by calling inflation of currencies "the most insidious and objectionable of all forms of taxation"? Well, the State has the sovereign right of inflation; it can decree what shall be regarded as a lawful release from debt; and what it decrees may have no relation to cost of production. It may be a credit in a bank against which the State authorises itself to draw cheques; it may be the paper nominally equivalent to so much gold.

In any event the money that has come into being by the mere decrees of the State competes with the existing money. In other words, the claims upon things offered for money are increased. And as the claims are multiplied their separate worth diminishes: if two pound notes run after the same thing as a sovereign ran after before, then the price of that thing will inevitably be doubled. The State can create money; but it cannot create the real goods, the bread and bacon and boots, that will be exchanged for the money. By inflation the various Governments confiscated, secretly and unobserved, the greater part of the money of their citizens. The claims attested by money in the hand of the citizens are the reward of services conferred; the claims that the State creates have nothing behind them except the power of taxation.

Could we Dispense with Money?—Dispensing with Money, coin or paper, we might conceive a scheme of society in which, without needing any incentive in the form of money payment, each member worked skilfully and vigorously at what he could best do, in which the chosen occupations were those conducive to the well-being of the community, in which—conscious that society is an association of mutual co-operation—each individual subordinated his own good to the good of the whole.

There would inevitably be waste, however, in such a society. The most fitting use of the limited resources of the community would be more difficult to find than where money

guides producers and consumers. The questions, what shall be produced, and in what quantities, are not, it is true, nowadays provided with the happiest answers. Some help at all events towards the answers we have. The money prices expected give guidance to the producers; the money prices they must pay indicate to the consumers a lavish or a sparing use. Money does provide an index, even though a rich man's whim may, under the money system, influence production more than a poor man's urgent need. Lacking the money guide we have nothing as our index except vague ideas of what is wanted and of what is possible.

Our industrial system is founded on purchase and sale. Each for the most part lives not on things in the production of which he himself has helped, but on things obtained by a double exchange. He sells his services (embodied it may be in commodities). In the form of money he receives a claim upon the stock of things in general. He gives *specialised* services, he receives *general* purchasing power. The amount of purchasing power is testified by the coins or the notes he obtains as the result of his services. Upon each coin or note we may therefore imagine inscribed: "The bearer has rendered this amount of good service to the community; the community is required to render him so much good service in return."

When Robert Owen instituted his National Equitable Labour Exchange he issued notes in exchange for services. These notes, addressed to the Exchange Storekeeper, authorised payment to bearer of exchange stores to the value of "so many hours," not of "so many pounds." Our own shares of the National Dividend are allocated, not by means of labour notes, but by means of money. We obtain a number of pounds, or parts of pounds, represented by bits of paper or pieces of metal. With these pounds we are enabled to divert at our choice goods from the market to our use.

In the Appendix a most interesting letter, to the Editor of *The Times*, describes a primitive currency. The letter affords a good illustration of what we have said in this chapter, that anything may be money if people are prepared to accept it in payment.

CHAPTER II.

THE FUNCTIONS OF MONEY.

The Work of Money.—How shall we analyse the work performed by money? For only by examining its functions shall we be able to obtain a clear idea of money, and to form a satisfactory definition of it. It is, no doubt, true that even in a complex society like ours, services or commodities are ultimately exchanged for services or commodities. Money is the intermediary step. It cuts the exchange in two. Each sale is the half of an exchange; we do not get money in order to keep it, but in order to spend it for the satisfaction of our needs.

Yet the seeming complication really simplifies matters. Money is the means whereby exchanges are effected; and it does this work because it measures the comparative values of the goods exchanged, and is moreover a pledge in which the recipient has confidence. It is the third commodity by comparison with which we may estimate how many yards of calico must be given for a bushel of wheat, how many pounds of potatoes must be given for an ounce of silver. (It is the common denominator of value.) And it is itself exchangeable; money is money merely because people are ready to accept it in exchange for goods. Yet it does not do all its work by being exchanged; it does part by affording a measurable rod.

As soon as exchange became part of men's lives, some way of judging the relative values of the goods exchanged must have been sought and found. Look, for example, at this interesting paragraph from the account of the Hudson Bay Company.

“For very many years after its foundation the sole concern of the Hudson Bay Company was with the fur trade. It established trading-ports on the shores of the Hudson Bay, to which the natives brought their furs, in exchange for which

they received hatchets, guns, kettles, blankets, and other goods. The trade was carried on by means of what might be called a temporary currency. The trader would determine the value of the furs and give the Indian the proper number of sticks, old coins, or other tokens, each representing one, or a specified number of skins, of 'made beaver,' which was the basis of their temporary currency. The Indian would then look round the Company's store and choose things he wanted, hand over the requisite number of tokens and, when he thus disposed of the whole value of his furs, would depart with his new possessions."

The "money of account" in this organised barter was "made beaver"; for so many units of this the Indian sold, with so many units he bought. So our "money of account" is the "pound sterling"; it is the unit in which we calculate prices and measure debts—a unit that in the long course of our economic history has been represented by many things, a weight of silver, 113 grains of fine gold with a little alloy in the form of a sovereign, now a note issued under the authority of Parliament by the Bank of England.

Money as a Measure of Value.—What then does our money help us to do? (In the first place, Money enables us to express the relative values of the things exchanged. It serves as a *common measure of values*.) At a very early stage in the progress of society, the imperative need for a commodity recognised as a means of comparing other commodities must have led to the adoption of many different "moneys." Something generally acceptable, something in constant request, served as the commodity to which others were referred.

We can well suppose the owner of a cow willing to exchange for sheep, but dimly conscious that the larger animal was worth more than the smaller. If the cow is valued at so many ounces of silver; if the sheep, too, is measured in the same unit, then comparison is easy, and interminable higgling is avoided. Different lengths are compared by means of a common language called feet and inches; different values are, among us, compared by means of a common language, pounds, shillings, and pence.

Money facilitates exchanges much as a system of numbers facilitates calculations, or as a language facilitates thought. Thinking is perhaps possible apart from language; it will certainly be hampered and crippled: exchange is possible without money; it will, however, be a lame and halting method. Even when we exchange directly, when we barter a pair of binoculars for a camera, there is a difference from the primitive barter; each party to the exchange more or less consciously measures his article in monetary units, in a money of account. Each uses money, though the money is not present.

Tylor's *Anthropology* gives an interesting illustration of the drawbacks resulting from the absence of a unit of value: "The mention of these less precious metals leads us to notice the important part which coin has had in developing civilisation, and this again belongs to the general history of trade and commerce. The modern Englishman, accustomed to shops and counting-houses, hardly realises from what rude beginnings our complex system arose. It is instructive to see trade in its lowest form among such tribes as the Australians. The rough greenstone, valuable for making hatchets, is carried hundreds of miles by natives who receive from other tribes in return the prized products of their districts, such as red ochre to paint their bodies with; they have got even so far as to let peaceful traders pass unharmed through tribes at war, so that trains of youths may be met, each lad with a slab of sandstone on his head to be carried to his distant home and shaped into a seed-crusher.

"When strangers meet a tribe, they are received at a friendly gathering or corroboree, and presents are given on both sides. No doubt there is a general sense that the gifts are to be fair exchanges, and if either side is not satisfied there will be grumbling and quarrelling. But in this roughest kind of barter we do not find that clear idea of a unit of value which is the great step in trading. This higher stage is found among the Indians of British Columbia, whose strings of *haiqua*-shells worn as ornamental borders to their dresses, serve also as currency to trade with, a string of ordinary quality being reckoned as worth one beaver skin."

We need not suppose any express selection of a medium of exchange; and, doubtless, in an early community as in one of the latest products of civilisation, more than one commodity at a time may have served. The point is, though, that the third commodity whatever it is—oxen, slaves, or skins, or women, or measures of meal, etc.—enables things to be compared.* Barter is the exchange between traders who have no common language, who are ignorant of one another's meaning; money provides the common language.

The Unit of Value.—The unit of value may be anything seen to be desirable and having some uniformity among the specimens. Hunting communities have adopted—tacitly rather than expressly—the skin of a beast; pastoral peoples a head of cattle; agricultural communities a common product of the soil (a measure of wheat in Attica, a slab of tobacco in Virginia during the seventeenth century). Adornments, pieces of clothing, rifles, hatchets, have all served—and in many parts of the world still serve—as means of comparing the relative values of services and commodities. In one dismal period in the early history of New South Wales, “rum” —a general name given to a strong drink of all kinds—became such a measure of value. It could be minutely divided; be easily recognised; and, since nearly everybody wanted it more than anything else, it was readily accepted. Land was paid for in “rum”; labour, food, and clothing were valued at so much of it.

Whatever the commodity chosen it becomes a point of reference: just as we compare two fractions like $\frac{4}{7}$ and $\frac{9}{17}$ by

* The early aspirations after common and easily recognised weights and measures are exactly analogous to the eagerness of traders for a ready means of comparing the values of commodities. The Great Charter of 1215 would have it that “woollen cloths, wherever they are made, shall be made of the same width, to wit, of two ells within the lists and of the same goodness in the middles and sides.” If that were made universal there would be less friction in exchanges. So if the “ancient right standard” of the silver penny were maintained, the friction due to disputes over values would be obviated. “Thou pale and common drudge ’Tween man and man,” Bassanio contemptuously calls silver; but no one that has considered is able to overlook the economic benefit that men have reaped from a sound monetary system.

establishing a denominator common to the two (making them $\frac{6^8}{11^9}$ and $\frac{6^3}{11^9}$) so we compare the values of two commodities by considering those values in reference to the value of a third commodity that we call money.

Standard of Value is not Necessarily Medium of Exchange.—

It is not necessary, perhaps it is not usual, for the commodity that constitutes the measure of value to pass when the exchange is made. It does not now with us. In a very early contract of buying and selling we may perhaps assume that some measure of the values of the services performed was present though the exchange was direct. Solomon measured in money the value of the cedar trees and fir trees he wanted; Hiram was satisfied that the wheat and oil he obtained reached the value:

“ ‘ I will do all thy desire concerning timber of cedar, and concerning timber of fir. My servants shall bring them down from Lebanon into the sea: and I will convey them by sea in floats unto the place that thou shalt appoint me, and will cause them to be discharged there, and thou shalt receive them: and thou shalt accomplish my desire, in giving food for my household.’ ”

Barter is Inapplicable to a Complex Community.—Exceptional bargains might thus be effected. What the ordinary business in life needs, however, is liquid purchasing power in the form of money, power that can be made to run in any direction desired. Moses in *The Vicar of Wakefield* brought back to his father and mother a gross of green spectacles in exchange for the horse, and disconsolate the father and mother were. What they wanted was “ general purchasing power ”; and Moses had returned with particular articles of problematical purchasing power.

Till 1931 our own measure was a carefully determined weight of gold. Sir Robert Peel’s famous question, when introducing the Bank Act of 1844, emphasised this: “ My first question, therefore, is, What constitutes this Measure of Value? What is the Signification of that word ‘ a Pound,’ with which we are all familiar? What is the engagement to pay a ‘ Pound ’? Unless we are agreed on the answer to these questions it

is in vain we attempt to legislate on the subject. If a 'Pound' is a mere visionary abstraction, a something which does not exist either in law or in practice, then one class of measures relating to Paper Currency may be adopted; but if the word 'Pound,' the common denomination of value, signifies something more than a mere fiction—if a 'pound' means a quantity of the precious metals of certain weight and certain fineness—if that be the definition of a 'Pound,' then another class of measures relating to Paper Currency will be requisite.

"Now, the whole foundation of the proposal I am about to make rests upon the assumption that according to practice, according to law, according to the ancient monetary policy of this country, that which is implied by the word 'Pound' is a certain definite quantity of gold with a mark upon it to determine its weight and fineness, and that the engagement to pay a 'Pound' means nothing, and can mean nothing else, than the promise to pay to the holder, when he demands it, that definite quantity of gold. We want only a certain quantity of paper, not indeed fixed and definite in nominal amount, but just such a quantity and that only, as shall be equivalent in value to the coin it represents."

He was not, you note, quite accurate in saying this. "Pound" in its long history has signified many things other than about a quarter of an ounce of gold with a little alloy. It once signified twelve Troy ounces of silver,* it nowadays is a Bank of England note giving a greater or less power over the market.

The *pound*, no longer anchored to gold or any other tangible commodity, is so much *power*,—the actual amount being dependent upon the *number* of pounds competing for the goods in the market.

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The House of Lords, by a majority of three to two, decided that it was the last question that should be answered Yes; and damages of over £600,000 were awarded to the Bank of Portugal. Yet the decision was perhaps erroneous and originated in a mistake about the nature of money. For money is merely a claim to share in the goods offered for sale in the market. Destruction of a paper claim does not destroy any of the real goods on the market. Nor does a duplication of paper claims double the goods. If I burn a pound note, I suffer a sensible loss. But if the Bank of England burns it, the Bank suffers no loss at all. It merely issues another note.

That someone loses when false money enters the market along with true is quite certain. The issuers of the false money obtain a share to which they have no right in the goods offered for sale. The false notes are gate-crashers elbowing aside legitimate claimants. If a printer issued and sold facsimiles of tickets admitting to a Cup Final, he would gain. But the losers would be those who have bought authorised and unauthorised tickets. To the extent that facsimiles had been sold, there would be two clamorous candidates for the one seat. So if a counterfeit coiner makes an illicit sixpence, your sixpence and mine will have less power over the market. A portion—a very minute portion—of its value would have vanished. So in the Waterlow case. Those who lost were the people possessed of authorised notes. They lost what the spurious notes bought. The bank officials doubtless suffered much mental stress and strain. But their only material loss was the cost of printing the new notes. Perhaps we may assume that the majority judgment sought

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So, too, in the Homeric poems we have no mention of coined money. But we have mention of a very tangible unit for measuring values, the cow (or ox); and along with it we have mention of the talent (*talenton*, a definite weight) of gold. We read of the relinquishing of "golden arms for brazen, those worth one hundred beeves for those worth nine beeves" (*Χρύσεια Χαλκείων, ἑκάτομβοι ἐννεύ βοίων*). It may be presumed, however, that, though the measurement of value was expressed in oxen, the actual medium of exchange, for the few exchanges that did take place, was a weight of gold or of silver.*

In our monetary transactions we count instead of weigh, obviously a much more convenient operation. The coins, we say, pass by *tale* not by *weight*. It is no longer as it was in the early land transaction when "Abraham weighed to Ephron the silver which he had named in the audience of the sons of Heth, four hundred shekels of silver, current money with the merchant." Currency by weight was first in point of time; and men revert to it whenever the currency becomes debased.

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ask of this medium is that it shall be acceptable when we ourselves seek to supply our wants from the market. But it is indispensable that a commercial community shall have a reasonably stable gauge for estimating values. How important it is we realise very effectively when the measure becomes uncertain and fluctuating.

The essential property of money is its acceptability. It is a pledge whereby he that parts with a commodity or renders a service is assured of a commodity or service—regarded by him as of equal value—in return. From the legal point of view the paying of a pound note closes the transaction. From the economic point of view the transaction is only closed when the pound note is exchanged for goods. If it does not go in the spending as far as the spender was entitled to expect, he is to that extent defrauded.

Money is an intermediary, a medium of exchange. The ultimate exchange is, no doubt, commodity for commodity (service for service); or, applying the statement to the facts of international trade, exports for imports. The intervention of money enables this exchange to be performed in two operations; and, most likely, the second operation between two different bargainers. Money intervenes for a longer or shorter while between the two parts of the transaction. Obviously, though, the more people are able to trust one another, the less needful is money as a medium of exchange. In our modern business world, where exists an amazing trust among men, it is hardly needed at all as a pledge. Its service as a measure of values is alone required.

Money is a visible, tangible assurance that a claim upon the community—a claim based upon services rendered—will be honoured. We take money for our services, because we are convinced that others will take it from us in return for services. And anything in regard to which we have this conviction is money. It may be a piece of metal, the weight and quality of which are guaranteed by the public authority and attested by the public stamp. Such were our gold coins. It may be a written promise to pay gold, given by one enjoying public confidence. Such are the notes of bankers. It may be a piece of paper purporting to be the equivalent of a weight of

metal. Such were the Treasury Notes issued during the War period. People do not question whether it really is equivalent. So long as they do not doubt about its ready acceptance by others, it is money. If people did begin to question whether there were real goods to be had for a note, the note would so far lose its character as money. Money is not "good" if there is any hesitation in its being accepted.

It is in fact this one property that suffices to make anything whatever into money, the property of being acceptable throughout a community. A party sitting down to a game of poker make, by express agreement, coloured pieces of bone into money; at the particular time and in the particular place—for the purposes of the game, that is—the counters circulate as money among the players. And the tiny community may place any value upon them at its will and pleasure. They say "it shall be so" much as a government issues its fiat, its decree, and the money becomes so. They are claims; the claims are satisfied at the end of the game by the player acting as banker.

But the coins or notes he exchanges for the counters are, in their turn, merely claims upon a wider community. The agreement to satisfy these claims may be a tacit one. None the less, so long as society holds together, the claims are honoured. "You cannot," it is said, "ride on a claim to a horse; but you can pay with a claim to money." The community ready to accept the "money" may be a small one, like the inhabitants of one of those towns in which, during the European War, siege money was issued for 50 centimes and 1 franc, or like the restricted circle among which a cheque signed by a person known and trusted circulates.

A Wide Area of Currency.—The community, ready without question to accept the "money," may be a large one, may in fact include the whole commercial world. So it is with gold, the recognised instrument even now for the transfer of wealth among nations. A Bank of England note representing a unit of units of pounds sterling has itself a narrower range than coined or uncoined gold. We may not fear in the slightest that the value of the note will be suddenly destroyed through

London bill as the means of settling international obligations, results from a definite arrangement among men.

The definition of lawful money *as that which passes freely from owner to owner throughout the community, in final discharge of debts and full payment for commodities* lays stress upon this primary function of being a readily acceptable pledge. The other functions are in truth derivative from that function. One reason why the "money," whatever it is, passes freely is that people are confident that, though they wait a while, their claims upon the community—claims vouched for in the money—will be honoured. In other words, people are confident that what they call a pound will next week, and next year, buy about as much of the necessaries and comforts of existence as it does this week. Money is a measure and a pledge for future payments: (it is a *standard for deferred payments*).

Gold Relatively Stable in Value.—*Gold prices and stable prices* used to be considered as one. Yet gold is not absolutely stable in value: an ounce of gold has not throughout the ages been valued at an unvarying amount of wheat or oil or wine. Changes great enough to be called revolutions have taken place in the value of gold relative to the value of the other commodities.

One such change came as a result of the extraordinary conditions following the outbreak of the European War in 1914. A single country, the United States, maintained an effective gold standard. Gold ceased to be the foundation of the monetary standards of the world. As such its value had been determined by circumstances other than political; and the value was stable enough for ordinary business purposes. When gold was no longer in widespread demand for monetary purposes, when it tended to gather in the United States, its purchasing power fell. In America itself the price Index Numbers of 1920 showed that gold had lost more than half of its former value. The changes have usually, however, been so gradual, so slight, that they have been perceptible only by means of careful observation and calculation.

Gold, like everything else, alters its powers to command

other things. But gold is less liable to fluctuations in value than the vast majority of the things with which it is compared (i.e. which it purchases). The reasons are plain. *Supply* cannot change rapidly. For, even with modern methods of winning the metal from the intractable substances with which it is bound, the getting of gold is a laborious and tedious process. It is, indeed, quite possible that on the whole more gold is put into mines than is taken out of them: the gold-miner—the shareholder in the gold-mine, certainly—gets less than the ordinary rate of profit, the balance being made by the exhilaration of the adventure (either the venture of money or of labour). If gold were a crop, one year bountiful, another year niggardly, we should have no steadiness of supply. But gold is a stock of such a metal as is carefully preserved by men, and does not perish through natural forces. The annual increment makes only the slightest impression upon the total amount.

Nor, until there is a complete alteration in men's minds, can *demand* change rapidly; the hunger for gold is universal, is a part of our history and literature, is as keen among half-savage races as among the highest developments of civilisation. We may, if we like, say that the value of gold is largely dependent on custom, on fashion; it is a convention. But then custom is a factor in value, and the custom of desiring gold is ingrained in men's minds. From age-long experience men *know* that gold will be readily accepted in exchange; and, since the idea is prevalent that gold has a constant purchasing power, gold is a good standard for deferred payments. Perhaps, if properly managed, the paper standard will be even more stable in purchasing power, an even better standard, that is, than gold.

Money enables "Savings" to Accumulate.—We are told that the amount of "savings" in a community, as with an individual, depends upon two factors—the *power to save* (the extent to which production exceeds necessary consumption), and the *will to save* (the readiness to abstain from the utmost possible consumption). Obviously, a person can only save what he is not obliged to spend; and, obviously, too, few are

hoarding at the outbreak of war in the August of 1914; but most of our people were still content to have their wealth attested in the bank ledgers.

And, as we shall see later, it is only in the smallest transactions that metallic money now serves as a medium of exchange. With the increase of long-term transactions the function of money as a measure of value (of value here and now, of value at a distance in place or in time) has, however, become of surpassing importance.

The Macmillan Report on Finance and Industry, issued in 1931 very shortly before we, temporarily it was hoped, departed from the gold standard, expresses this fact admirably:

“Some common unit of value in terms of which transactions can be expressed is necessary, if only as a satisfactory measure for comparing the value of one thing with that of another. With the growth of contractual obligations, involving the conception of deferred payments, a time element was imported into transactions which rendered it even more essential to have a common unit of value as the basis on which to fix the amount of payments to be made at a postponed date. When a community, in order to meet this requirement, selects a particular commodity such as gold to serve as its common denominator of value, or, in other words, as its money, that commodity is used not only for the actual settlement of debts but is also naturally adopted as the unit for the measurement of those debts. It becomes what is termed the money of account, *e.g.* the pound, the dollar, the franc. But the person entitled to a future payment fixed in terms of the money of account may find, if there is instability in the purchasing power of money due to fluctuations of prices, that the value of his contractual right has substantially changed when he comes to receive payment. The importance of stability in the value of money, that is, in its purchasing power, thus becomes at once apparent if transactions are to be entered into with any degree of confidence.

“It is important to realise the wide range of contractual obligations which are now affected by fluctuations in the value of money. The policy of modern States has greatly added to their number by the institution of social services which all

involve future payments on a predetermined scale. Old Age Pensions, Insurance Allowances and other forms of assistance are all fixed by the Legislature in terms of money which, when it comes to be paid, may represent something quite different in value from what it represented when it was originally prescribed. The growth both of joint stock enterprise and of Government debts has also in the course of the past century enormously increased the number of fixed future money payments. Rights and interests in fact all tend to become more and more divorced from the underlying substratum of real things and are not merely expressed in terms of money but are actually constituted by the right to receive money payments. It is thus obvious that changes in the value of money may give rise to important changes in the distribution of the national income."

(The extracts from the Macmillan Report are inserted with the kind permission of His Majesty's Stationery Office.)

CHAPTER III.

VARIOUS FORMS OF MONEY.

METALLIC CURRENCIES AND COINAGE.

A Coin.—A coin is either (1) a definite weight of a definite substance—both the weight and the quality being guaranteed by the public authority—made into a conveniently-handled shape and marked with a design enabling people readily to recognise it. To make such coins is a means of putting the particular substance on the market in such a form that dealings are expedited. The money is a merchandise, differing from other merchandise only in that all people seek it. Or (2) the coin may be a metal token, marked by the public authority, and serving as representative of a definite fraction of the standard coin. Our sovereign was an example of (1), our shilling of (2). The guarantee of a person or a corporation, trusted by the people, may be accepted in lieu of the guarantee of the public authority. Thus the bars of silver—*sycee*—current in China, bear the seals of banker or of assayer to attest goodness. In most countries, however, the State assumes the monopoly of coinage; the State's guarantee is the one relied upon.

Bank Credit as a Substitute for Coin.—This guarantee of the State cannot, or could not, be relied upon. Adam Smith's interesting account of the founding of the Bank of Amsterdam shows how traders were constrained to devise an alternative way of ensuring what they anxiously sought—certainty in the measure of payments: "Before 1609 the great quantity of clipt and worn foreign coin, which the extensive trade of Amsterdam brought from all parts of Europe, reduced the value of its currency about nine per cent. below that of good money fresh from the mint. Such money no sooner appeared

than it was melted down or carried away, as it always is in such circumstances. The merchants, with plenty of currency, could not always find a sufficient quantity of good money to pay their bills of exchange; and the value of those bills, in spite of several regulations which were made to prevent it, became in a great measure uncertain.

“In order to remedy these inconveniences, a bank was established in 1609 under the guarantee of the city. This bank received both foreign coin, and the light and worn coin of the country, at its real intrinsic value in the good standard money of the country, deducting only so much as was necessary for defraying the expense of coinage, and the other necessary expense of management. For the value which remained, after this small deduction was made, it gave credit in its books.

“This credit was called ‘bank money,’ which, as it represented money exactly according to the standard of the mint, was always of the same real value, and intrinsically worth more than current money. It was at the same time enacted that all bills drawn upon or negotiated at Amsterdam of the value of six hundred guilders and upwards should be paid in bank money, which at once took away all uncertainty in the value of those bills. Every merchant, in consequence of this regulation, was obliged to keep an account with the bank in order to pay his foreign bills of exchange, which necessarily occasioned a certain demand for bank money.

“Bank money, over and above its intrinsic superiority to currency, and the additional value which this demand necessarily gives it, has likewise some other advantages. It is secure from fire, robbery, and other accidents; the city of Amsterdam is bound for it; it can be paid away by a simple transfer, without the trouble of counting, or the risk of transporting it from one place to another.

“In consequence of those different advantages, it seems from the beginning to have borne an *agio* (or premium), and it is generally believed that all money originally deposited in the bank was allowed to remain there, nobody caring to demand payment of a debt which he could sell for a premium in the market. By demanding payment of the bank, the owner of a bank credit would lose this premium. As a shilling fresh

from the mint will buy no more goods in the market than one of our common worn shillings, so the good and true money which might be brought from the coffers of the banks into those of a private person, being mixed and confounded with the common currency of the country, would be of no more value than that currency from which it could no longer be readily distinguished.

“ While it remained in the coffers of the bank, its superiority was known and ascertained. When it had come into those of a private person its superiority could not well be ascertained without more trouble than perhaps the difference was worth. By being brought from the coffers of the bank, besides, it lost all the other advantages of bank money; its security, its easy and safe transferability, its use in paying foreign bills of exchange from those coffers, as it will appear by and by, without previous paying for the keeping.”

Advantages of Coinage.—It was a great step in the progress of exchange (and of the civilisation so closely bound up with it) when the precious metals were adopted as the third commodity intervening between things exchanged. A further great step was accomplished when the metals were made into uniform pieces. It obviously adds to the ease and speed with which exchanges can be made when the pieces pass by tale instead of by weight, that is, by *counting*, a process that even the earliest traders could carry out, rather than by *weighing*, for which the requisite delicate balances could rarely have been available. Very early, therefore, the device of coining must have suggested itself. The precious metal, silver or gold, may have been shaped into approximately uniform rings or bracelets. As such it paid a double debt; it served at once as an ornament—valued the more because of its costliness and rarity, and as the tangible evidence of purchasing power. The “Jewels of gold” referred to in the Old Testament may have been such. Such, certainly, was the “ring money” we see in old Egyptian sculptures and paintings.

Ornament and Money.—In our own times the transition from coin to ornament, to plate or brooch or chain, and back

again, is an easy process. We must wait the buyer when we would sell other commodities: we can have our gold turned into money at will. "For our martyred Charles I coined my plate," said the Cavalier; and even during the Great War there were some half-hearted attempts at mobilising the gold in the hands of the warring nations. The qualities, in truth, that have made gold and silver our money material are largely such as are closely connected with ornament. There is the attractive lustre; there is the possibility of manipulating the gold and silver into agreeable shapes, for gold and silver can be readily hammered and drawn into the desired forms; and there is the possibility of imprinting upon them intricate and beautiful designs. Our gold sovereign was a thing of beauty as well as a store of value.

Later, no doubt, its being evidence of wealth augmented the attraction of gold as an adornment. So to-day there are many who display articles of platinum*—not a beautiful metal though a very valuable one—for the same purpose, of showing that they have more wealth than their neighbours have.

The "precious" metals, silver and gold, are comparatively rare; so that possession of them confers a kind of distinction. Widely distributed though gold, for instance, is, the annual output is less than 400 tons a year, whereas the yearly output of iron is over 40,000,000 tons. Gold and silver are abundant enough for use as money; a very rare metal, iridium or even platinum, would clearly be unsuitable. Yet gold and silver are not so abundant as to lose value; a small bulk suffices to certify much property. The metals could be divided into portions sufficient to serve as purchasing power for the commodities sought, and the reuniting of portions restores the value of the piece.

* It is to be noted that Russia, as part of the "backing" for its new currency, has adopted platinum to supplement gold. Russia has not, however, fixed a gold-price for its platinum. Such a price would probably have soon been outstripped by the market price. For in the last fifty years platinum, mainly because of its employment in electrical and scientific apparatus, has risen in price from about £1 to about £20 an ounce.

Various Forms of Money.—Adam Smith, after detailing the various commodities that have served as the common instrument of commerce, concludes: “In all countries, however, men seem at last to have been determined by irresistible reasons to give the preference, for this employment, to metals above every other commodity. Metals can not only be kept with as little loss as any other commodity, scarce anything being less perishable than they are, but they can likewise, without any loss, be divided into any number of parts, as by fusion those parts can easily be reunited again; a quality which no other equally durable commodities possess, and which more than any other quality renders them fit to be the instruments of commerce and circulation.

“The man who wanted to buy salt, for example, and had nothing but cattle to give in exchange for it, must have been obliged to buy salt to the value of a whole ox, or a whole sheep at a time. He could seldom buy less than this, because what he was to give for it could seldom be divided without loss; and if he had a mind to buy more, he must, for the same reasons, have been obliged to buy double or triple the quantity, the value, to wit, of two or three oxen, or of two or three sheep.

“If, on the contrary, instead of sheep or oxen, he had metals to give in exchange for it, he could easily proportion the quantity of metal to the precise quantity of the commodity which he had immediate occasion for.” And, when the metals were in the form of recognised coins, the proportioning of the metal to the purchase was the easier. We need only look at the various forms of metallic money in some good museum, however, to realise that the device of coinage, enabling the pieces to be taken without hesitation and without question, was the result of a tedious process of evolution. Even now coined money is a device not familiar to all peoples.

Money seems to us so obvious a convenience, seems so much a necessary to a society based on exchanges, that we sometimes forget that it is not universal: large parts of India and the greater part of Africa have no money.

Coining and Coins.—The invention of coinage is ascribed to the Grecian Gyges (“the golden Gyges”) of Lydia at the

beginning of the seventh century B.C. For thousands of years other commodities, such as salt, skins, silver, cattle, shared with gold the function of estimating a man's wealth, and enabled him to transfer it. Those who built the pyramids and sculptured the sphinx seem to have had no coined money. The Lydian coins, *staters* (a word implying a definite weight), were of *electron*, a mixture of gold and silver. The colour of the metal, which was found in the country, suggested amber; and the name of amber was applied to it. Following this lead the other Grecian states gradually relinquished the estimating of values in heads of cattle. A silver currency, the stater of Aegina being the standard silver coin, became established.

This made trade possible and enabled capital to be accumulated. Possibly it was the priesthood who devised this method of readily reckoning values. For, since men placed their treasures for safe keeping at the shrines of the gods, the priests as custodians would need some speedy method of calculation. The early coins were dedicated to a deity, as indeed our modern coins bear some reference to our religion—our coins bear the image of George, *Dei Gratia* (by the grace of God) King, Defender of the Faith.

How greatly coining added to the ease with which men were enabled to help one another is admirably explained by Adam Smith himself: "Iron was the common instrument of commerce among the ancient Spartans; copper among the ancient Romans; and gold and silver among all rich and commercial nations.

"Those metals seem originally to have been made use of for this purpose in rude bars, without any stamp or coinage. Thus we are told by Pliny that, till the time of Servius Tullius, the Romans had no coined money, but made use of unstamped bars of copper, to purchase whatever they had occasion for. These rude bars performed at this time the function of money.

"The use of metals in this rude state was attended with two very considerable inconveniences; first, with the trouble of weighing; and, secondly, with that of assaying them. In the precious metals, where a small difference in the quantity makes a great difference in the value, even the business of

weighing, with proper exactness, requires at least very accurate weights and scales. The weighing of gold in particular is an operation of some nicety. In the coarser metals, indeed, where a small error would be of little consequence, less accuracy would, no doubt, be necessary. Yet we should find it excessively troublesome, if every time a poor man had occasion either to buy or sell a farthing's worth of goods, he was obliged to weigh the farthing.

“The operation of assaying is still more difficult, still more tedious, and, unless a part of the metal is fairly heated in the crucible, with proper dissolvents, any conclusion that can be drawn from it is extremely uncertain. Before the institution of coined money, however, unless they went through this tedious and difficult operation, people must always have been liable to the grossest frauds and impositions, and instead of a pound weight of pure silver or pure copper, might receive in exchange for their goods an adulterated composition of the coarsest and cheapest materials, which had, however, in their outward appearance, been made to resemble those metals.

“To prevent such abuses, to facilitate exchanges, and thereby to encourage all sorts of industry and commerce, it has been found necessary, in all countries that have made any considerable advances towards improvement, to affix a public stamp upon certain quantities of such particular metals as were in those countries commonly made use of to purchase goods. Hence the origin of coined money and of those public offices called mints; institutions exactly of the same nature with those of the aulnagers and stampmasters of woollen and linen cloth. All of them are equally meant to ascertain, by means of a public stamp, the quantity and uniform goodness of those different commodities when brought to market.”*

* The hall-marking of gold and silver plate in order to attest the quality of the metal is analogous to the imprint upon the coins. No plate may in our country be exhibited for sale until it has been impressed with the mark of one of the authorised assay offices. The proportionate amount of gold and of silver is placed alongside the mark, the mark of the four assay offices at present open being for London a leopard's head, for Chester a sword erect between three garbs (wheatsheafs), for

A State Monopoly.—Coinage is a public function. Kings and governments are called upon to provide a good measure for value as urgently as they are called upon to provide a good measure for lengths or for weights. Nor should the profit made from coinage be a matter greatly considered any more than that a profit should be expected from the administration of justice. The provision of a great public convenience like currency should be regarded as an essential function of government; and any expense it entails is properly borne by the public. Yet princes have at times undertaken the duty of providing currency less from a desire to promote the well-being of their subjects than because they could, by manipulating the coinage, make themselves an undetected gain.

We have these melancholy conclusions, written in 1776, but abundantly illustrated since, never more forcible than during recent years: "In every country of the world, I believe, the avarice and injustice of princes and sovereign states, abusing the confidence of their subjects, have by degrees diminished the real quantity of metal, which had been originally contained in their coins. The Roman *as*, in the latter ages of the Republic, was reduced to the twenty-fourth part of its original value, and, instead of weighing a pound, came to weigh only half an ounce. The English pound and penny contain at present about a third only; the Scots pound and penny about a thirty-sixth; and the French pound and penny about a sixty-sixth part of their original value.

"By means of those operations the princes and sovereign states which performed them were enabled, in appearance, to pay their debts and to fulfil their engagements with a smaller quantity of silver than would otherwise have been requisite. It was indeed in appearance only; for their creditors were really defrauded of a part of what was due to them. All other debtors in the State were allowed the same privilege, and

Birmingham an anchor, for Sheffield a crown for silver, a York rose for gold. The marking is carried out by qualified public officials quite disinterested—as far back as 1423 the King's assayer was spoken of as "a person indifferent betwixt the Master of the Mint and the merchant"—so that we may confidently rely upon the mark as a guarantee.

might pay with the same nominal sum of the new and debased coin whatever they had borrowed in the old. Such operations, therefore, have always proved favourable to the debtor and ruinous to the creditor, and have sometimes produced a greater and more universal revolution in the fortunes of private persons than could have been occasioned by a very great public calamity."

In 1545, for instance, Henry VIII., who had not only spent the hoard gathered by his father but had incurred great debts beyond, at a stroke reduced the number of grains of fine silver in a testoon (or shilling) from ten to four. In order that he might pay only forty per cent. of his debt, he released all other debtors from sixty per cent. of theirs.

A Convenient Currency.—Our pound sterling is the unit of measurement of value; and its importance far transcends national limits. Our metallic currency serves for the convenience of the innumerable transactions of daily life, to pay for a bus ride, a cup of coffee, a tie, a visit to a football match.

How far is our system adapted for such exchanges? The question is discussed at some length in the Appendix relating to Decimal Coinage. Here it may be pointed out merely that a good coinage system is one that enables exchanges to be made *readily* and *smoothly*. If we are, in exchange for our goods or services, to accept the coins readily we must be confident that others will readily take them from us in return for the services we seek.

The coins should therefore be difficult to counterfeit or to pillage of any of their metal. The various devices of the Mint—the indenting and raising of the edges, the beauty and fullness of the designs—are not solely, or mainly, to produce a handsome coin. They are largely so that successful imitation may be laborious and costly. The sizes, shapes, and weights of the coins, should be convenient for handling and for carrying in the pockets. The crown piece and the double-florin are probably too large, the threepenny piece too small except, to use the old phrase, "for God and works of charity."

The circular disc adopted by us seems to be the most convenient form: it is certainly better than square pieces or

cubes with their sharp corners. Nor need we raise much objection to the weights, though there seems little to be gained from the large bronze pennies and half-pence. The relative values of the coins should, in order that smoothness in exchanges may be obtained, permit of ready division and of the giving of change. It is suggested that our present system, combination as it is of the decimal and duodecimal, is in practice thoroughly satisfactory.

Stages of Development.—It has taken a long time to evolve our present system of currency. The stages in the evolution may roughly be divided into four. (1) There was a currency in which one or more metals passed by *weight*. (2) Uniform pieces were made, of one or more metals, and these pieces passed by counting, by *tale*. (3) There was a settlement, a tacit or an explicit agreement, of the relation between one metal and another. It was, for instance, decided that one ounce of gold should be regarded as the equivalent in value to $15\frac{1}{2}$ ounces of silver: there was, that is, a *tarification* of moneys. (4) As men grew more accustomed to trust one another the tangible pledge afforded by the precious metal became unnecessary. Men were content with simple promises to fulfil obligations; and money came to be very largely *paper*.

Our present internal currency is, apart from the subsidiary silver and bronze, entirely confidence (representation) money. The importance of hand-to-hand currency has diminished. The mass of purchasing power in a modern community is attested by paper claims, far removed from the material objects that once were money.

CHAPTER IV.

ENGLISH MINT REGULATIONS AND COINAGE ACTS: LEGAL TENDER.

Money of Account.—Our *money of account* is the pound sterling (£), in terms of which we measure the value of the commodities and services sold in the market. It is represented by a Bank of England Note. Even when prices are expressed in shillings or pence, the meaning attached to these prices is so many $\frac{1}{20}$ ths or $\frac{1}{40}$ ths of a pound. Not so many silver or bronze coins are to be understood.

The guinea, too, though it ceased to be real money in 1816, still persists as a money of account. It is not, of course, necessary that the money of account should be the standard coin or even that it should be any coin at all. Fees are often enough charged in guineas, yet no guineas are now coined. In France the money of account is the gold franc; but little gold was, even before 1914, in circulation, and no gold francs were coined.

In early times a shilling was the money of account for large payments. In the laws of Ine, for instance, we read: "Be sunnan-daeges weorcum: Gif theowmonn wyrchie on sunnan-daeg be his hlaforde hæse, sie he frioh, ond se hlaford geselle xxx schillinga to wite." (About Sunday work: If a slave works on the Sunday by the command of his owner, the slave shall be freed, and his owner fined thirty shillings.) But no shilling was coined before 1504.

The Pound Sterling.—The gold coins in common currency before 1914 were the sovereign and half-sovereign. During the war and for a decade following, they were replaced by Treasury Notes. It is unlikely that gold will again freely circulate. There is, in fact, no need for the provision of so expensive a currency as gold. Since the autumn of 1931

the "pound," our monetary unit, has been an abstraction, indicating a more or less constant power over the market. No actual pound's worth of goods circulated, as it did when the sovereign passed from hand to hand.

Our Silver and Bronze Coins.—The chief silver coins are the half-crown, florin, shilling, sixpence, and threepence. The florin, the historic name of which recalls the English gold coin of Edward III., is an interesting insertion into our system, and was due to the efforts of the Decimal Association. Five and four-shilling pieces are current, though, until the new silver coinage of 1927, they had not been coined since 1890. Under the King's proclamation of 1927 the crown again is issued from the Mint.

For the alms-giving ceremony performed for the King on the Thursday before Easter (Maundy Thursday) fourpenny (groat), twopenny, and penny silver coins are issued. This emission of the smaller coins may remind us of an early attempt to obviate the inconvenience of having coins of one kind only. Down to the reign of Edward III. silver was the only metal coined, and with a few doubtful exceptions, the silver penny the only coin. For small payments the coin was too valuable; for large payments the weight of silver was a drawback, and the coin was not valuable enough. A curious petition in 1379 begs the King to issue halfpennies and farthings, among the arguments used one being that since beer was selling for three gallons a penny, a pennyworth at a time was excessive, and another that the penny was too valuable "for God and for works of charity," for collections in church and for alms-giving. Token coins were issued to satisfy the demand for small change; and the gold noble, about 10 per cent. heavier than our sovereign, and valued at 80 pennies, served in big transactions.

The bronze coins are the penny, halfpenny, and farthing.

Relation between the Coins.—The subsidiary coins are not related to the sovereign or to one another on any definite scheme, decimal or other. The duodecimal relation (division by twelve) rules rather than the decimal (division by ten).

And this system is deeply rooted in the history of our people; so that any change would need serious consideration. Just as in language the best word to use is not necessarily the simplest, but is rather that which serves the most readily to convey thought from mind to mind, so the best money system is that which is best understood by the community it serves. The one idea determining the fixing of the denominations has been the convenience of trade: for practical purposes the coins are well enough, and that is all we need trouble about. The suggestion for a rigid decimal system is discussed fully in an Appendix.

The Gold Sovereign.—Till the gradual withdrawal of our gold coinage as a result of war conditions, the gold sovereign circulated as the representative of our pound sterling, our money of account. It was a definite weight of pure gold with a little alloy. Our coinage laws (1816, 1870, 1891) decree that 40 pounds troy of standard gold shall be turned into 1,869 sovereigns. The proportion of pure gold in standard gold is 22 against 2 alloy: in other words, standard gold is $\frac{11}{12}$ ths pure. Experiments seem to have shown that this proportion gives the coined gold the greatest resistance to abrasion.

It will be seen that one ounce of standard gold is equivalent to $3\frac{1}{8}\frac{4}{80}$ sovereigns. This only is what was meant by the statement that the Mint price of gold was £3 17s. 10½d. an ounce. The Mint price was simply an awkward way of defining the weight of a sovereign: a full sovereign was a little over a quarter of an ounce troy, or 123.27447 grains. And since one-twelfth of this was alloy, the weight of fine gold in a sovereign was 113.0016 grains.

The United States method of fixing the amount of gold as equivalent to the unit of account appears the more sensible. To fix the weight of a gold dollar there, it is decreed that for every 23.22 grains of fine gold delivered to the Assay office there shall be delivered one dollar or one dollar bill. The gross weight of a dollar is 25.8 grains (of which one-tenth is alloy). The sovereign thus contained 4.866 times as much fine gold as the dollar does. Under the Gold Standard Act

of 1925, though the sovereign ceased to be coined, the value of the weight of 113·0016 grains of fine gold was retained as the equivalent of our pound sterling.

Free and Gratuitous Coinage.—Before the innovations brought by the Gold Coinage Act of 1925 the coinage of gold was *free*: anyone could have standard gold turned into sovereigns, receiving $3\frac{1}{8}\frac{3}{8}$ for every ounce he tendered to the Mint; and receiving for pure (fine) gold $4\frac{1}{4}$ sovereigns for every ounce. The State in its quality of overlord took no toll (*seigniorage*) of the gold proffered for coinage.

The coinage of gold was also *gratuitous*; no charge was made for turning the bar gold into coins. The weight of sovereigns returned to the person was exactly equal to the weight of standard gold taken to the Mint, as if a cotton manufacturer should return the same weight of calico as that of yarn received. The State, that is, bore the expenses of coinage (*brassage*). This free and gratuitous coinage was, indeed, a striking point about our currency system: the gold as a commodity valued for export or for melting pot was exactly of the same value as the gold coined. The hammering of a sovereign into a shapeless piece of gold had no effect upon its value. In other words the sovereign derived no part of its value from its being *coined* gold.

The arguments urged in 1816 for establishing this parity between coined and uncoined gold appear to have been (1) if the expenses of coinage were deducted the measure of value would not be perfect—the sovereign would have one value in this country, a less value abroad; (2) traders needing to export coin would lose the cost of coinage, and to recoup themselves would raise the price of imports; (3) it would be necessary to reduce the weight of the coins, and would therefore entail a recoinage of the older coins. It was probably a very real advantage for a country like the British Isles, where foreign trade greatly affects all classes, that the public should bear the expense of coinage. Before the withdrawal of gold from circulation, the State even undertook to bear the loss of gold through wear (abrasion): light coins upon reaching the banks were retired and sent to the Mint for melting.

Price of Waiting.—The absolute parity between specie and bullion was not quite attained, for a loss of interest would be entailed through waiting for the coinage of the gold. In practice, therefore, the holder of bar gold sold it to the Bank of England or in the market. The Bank Charter Act of 1844 requires the Bank to purchase at a minimum rate of £3 17s. 9d. an ounce. The difference from the Mint price is, supposing the period of waiting to be three weeks and the rate of interest 6 per cent., less than half the interest that would be lost.

By its imprint upon the gold coins the State guaranteed their weight and their quality to be what the Coinage Laws decree. The value was left to take care of itself; the State could not, indeed, control that. The value of forty pounds' weight of sovereigns was the same as the value of forty pounds' weight of gold 22 carats fine, destined to be turned into watch-cases, or rings, or bracelets. Gold is a commodity valued for other purposes than as the money material; and as with the other commodities, its value is determined temporarily by supply or demand, permanently and in the long run by difficulty of production. The value of gold results from many causes other than the State's action.

Silver and Bronze.—It is otherwise with our silver and bronze currency. The State guarantees its *value*: the value, in other words, depends upon the decree of government. Like the Currency Note the bronze and silver coins are *Fiat* money. The State says: "This shall be money," and it is money. The weight and quality are not material; either may change without affecting the value of the coins. When in 1920 the half-nickel, half-silver coinage was issued, a florin still retained the value of a tenth of pound; but its metal contents were worth much less. In other words, our subsidiary—*token or representative*—coinage has value independent of weight and quality. It circulates as definite parts of a pound. A sovereign contained a sovereign's worth of gold; a shilling contains usually much less than a shilling's worth of silver.

Calculate this for instance. Our Coinage Laws direct that a pound troy of silver and alloy shall be turned into 66

shillings. The price of silver per ounce is about 25d.; nickel is perhaps 1d. an ounce; what roughly will be the gain to the Mint in coining a pound's weight of shillings? Evidently an ounce of the mixture costs 13d., presuming that half is silver, half nickel; and a pound therefore 13s. Turned into coins, however, it becomes worth 66s., a gain of 53s.

This great discrepancy was not contemplated in the Act of 1816, which decreed that henceforth silver should be only token money: an ounce of silver was then 5s., and it was to be coined, as still it is, into $5\frac{1}{2}$ shillings, a gain to the Mint, after deducting brassage, of 6s. as against the present 53s.

When we consider, too, that the silver coin has lost sometimes a great amount, always a little amount, of its weight by abrasion, we see clearly the merely representative character of the coin. We can only regard it as faith (fiduciary) money printed on rather expensive material.

This gain on the token coinage is an accession to the public funds (to the State). It obviously exceeds the expenses of coinage—expenses that are technically known as *brassage*; and to the extent that it exceeds these expenses it is a *seigniorage*, a perquisite of the overlord—in our case of the State.

There was no seigniorage on the gold; on the contrary, there was a loss to the public every time gold was coined. There is, however, a considerable seigniorage on the silver and bronze coinage; and the Currency Notes issued during the war period (1914-1918) and afterwards, were practically all seigniorage. Or, if you prefer this way of looking at the matter, the Currency Note was a hundred per cent. alloy.

The State reserves to itself the coinage, issuing the token coins in accordance with the demands of the bankers, who interpret the requirements of the public. These token coins are made for the convenience of the public; and they retain their value only by an artificial scarcity. Restriction therefore is inevitable.

Legal Tender.—Legal tender is such money as the law may compel a debtor to pay. In order that disputes may not arise, or having arisen may be settled, the law prescribes how a debt is to be discharged. In other words, the privilege of

being lawful money is dependent upon the *fiat* of the State: the State at its will can make and unmake legal tender. Other ways, alongside the way prescribed by law, may and do exist for discharging debts: custom as well as law may provide a means of discharging debts. A creditor may be content with a cheque drawn by his debtor. But he takes the cheque because he believes it to be transferable at his option into legal money.

The State can make what it pleases into legal tender. But its power to do this does not extend beyond its own borders. The British Government cannot constrain the Swiss hotel keeper to take in settlement my Bank Notes, any more than it can constrain him to take my cheque. Gold coin is another matter. It may be accepted because it has been made legal tender; it is more likely to be accepted, not so much because of its legal tender privilege, as for the value of the metal composing it.

Our Adoption of the Gold Standard.—Force of circumstances, rather than force of reasoning, constrained us to relegate silver to a subsidiary place in regard to gold, and to limit its legal tender; its power to release from debts. During the eighteenth century, when gold and silver were current at varied rates, now gold and now silver would drop out of circulation. If gold had a greater value when coined than it had when buying silver in the world market, the silver tended to disappear; and business was hampered through a shortage of small change. For gold could hardly be put into currency for small payment.

The Coinage Act of 1816, establishing the gold standard and giving silver coins a limited legal tender, sought to remedy the inconvenience. The only silver coins that for long had circulated were worn so that they were little more than plain metal discs. These remained simply because loss of weight had reduced their value below that of the metal contained in them. Full weight silver coins would at once have disappeared; for its value as metal was greater than its value as coin.

The new silver was kept in circulation as coin by being

given a higher value as coin than the metal contained in it warranted. A half-crown became a ticket, printed on silver to insure its more ready acceptance, entitling its holder to one-eighth of a pound's worth of goods. The Act was a recognition of what had developed of itself; for silver, being undervalued for coinage, none had been coined for almost a century. Gold had been the sole standard, and the Act was merely the statutory recognition of gold mono-metallism in our country.

The use of an over-valued silver coinage has since 1870 been widely copied. The Governments concerned issue no more than is required for the purposes of trade; and the surplus value adds to the revenue of the State.

Full and Limited Legal Tender.—In England and Wales the power to release from debt, however great, belongs to gold or to Bank of England Notes; we say that gold and notes are legal tender to any amount. Since 1833 Bank of England notes have had the privilege of being full legal tender. Silver is legal tender to the extent of forty shillings. Bronze is legal tender to the extent of a shilling.

Legal Tender.—Consider this question of legal tender. In order that there shall be certainty in the interpretation of contracts, in order that every man shall know exactly what he is to receive or to give, all civilised communities have been called upon to state clearly what is to be looked upon as lawful money. What exactly is meant by saying that Bank notes are legal tender to any amount, or the French counterpart that gold coin and silver five-franc pieces are *cours forcé* to any amount? It simply means that the offer (*tender*) of such lawful money by a debtor to his creditor is a good defence in an action for payment brought by that creditor. Whatever the law decrees may be legal tender: the debtor may legally tender such currency to his creditor in payment of his debt; and the creditor is bound to accept the same, and may be held to such obligation in the courts. One definition suggested of money is "whatever the State declares shall release from debt."

The refusal of the offer of legal tender does not, indeed, discharge the debtor, nor does it cancel his obligation. The debtor is bound "to find out the creditor and pay him the debt when due." If the creditor refuses the payment tendered, still the debtor must continue ready and willing to pay the debt; and if he is sued he must pay his money into Court. If the Court decides that the payment is in legal tender and of the required amount, the debtor wins his case; the creditor obtains what is paid into Court but must bear the costs of the action (including the debtor's cost of defence). The tender must be in money, produced and accessible to the creditor. It need not be the exact sum due; it must, however, be a sum such that the creditor may take his due without being called upon to give change: offer of a five pound note with a request for change in payment of a debt of three pounds odd has, for instance, been held not a good tender.

Our Government, like most governments, decrees what shall be regarded as legal tender, and itself provides part of it. The rest, the Bank of England notes, is provided by an institution closely connected with the Government.

The Coinage Act of 1870.—The 1870 Act, "An Act to consolidate and amend the law relating to the Coinage and Her Majesty's Mint," consolidated existing law. It gathered up previous enactments. Under the 1870 Act the Mint alone was authorised to coin. The gold coinage was to be both free (people could take to the Mint as much gold as they pleased) and gratuitous (there was to be no charge for coining): "Bullion shall be assayed and coined and delivered out, without any charge for such assaying and coining, or for waste in coinage." If one should take bullion of more than the standard fineness to the Mint, he had to obtain "such additional amount of coin as is proportionate to such superior fineness."

In effect, however, the owner of bullion did not take it to the Mint; he took it to the Bank of England which, by the Act of 1844, is obliged to buy standard gold at a minimum of £3 17s. 9d. an ounce. The Bank Price of gold was, you note, less than the Mint Price; but since the money was immediately

available and the coins from the Mint would be available only after some weeks, sale to the Bank was the more profitable way of disposing of one's gold.

English Legal Tender.—Lawful money—"legal tender"—was defined by this Act. "A tender of payment of money, if made in coins which have been issued by the Mint in accordance with the provisions of this Act, and have not been called in by any proclamation made in pursuance of this Act, and have not become diminished in weight," is legal tender—

- (a) If in gold to any amount;
- (b) If in silver to 40s. but for no greater amount;
- (c) If in bronze to 1s. but for no greater amount.

The power of releasing from debt, however great the amount, is now restricted to Bank of England notes as representatives of the pound sterling.

A minute schedule showing the weights, the qualities, the least current weight, the allowance (or remedy) permitted to the Mint for possible deviation from the standard laid down, was attached as part of the Act. Contracts to pay money were to be made in the coins authorised by the Act.

The Act, you note, restricted the power of silver to release from debt. Contrast this with the French system. There silver coin circulates on a par with gold; five franc pieces are legal tender to any amount. But the parity is maintained because the State *guarantees* the parity; and because the issue of silver is restricted, and is not free. Any deficiency in value is thus offset (1) by the credit of the State, (2) by an artificial scarcity.

The section that gave rise in many instances to hardship was that which called upon the public to constitute itself the protector of its gold coinage. Any one to whom was tendered a gold coin that had become deficient in weight was to break or deface it, the person tendering bearing the resultant loss. The last holder of the coin bore therefore loss by abrasion, by the public use. One may well imagine how greatly this proviso retarded the free circulation of sovereigns and to what

contentions it must have given rise. It was this section that the Act of 1891 was passed to modify.

The schedule in the 1870 Act relating to the gold coins is still in force (see Table on opposite page).

The Act of 1891.—The Act of 1891 was to amend the Coinage Act of 1870. It imposed upon the State the duty of maintaining the currency at full weight. The chief section is:—“Coins not called in and below current weight (as laid down in the Act of 1870) shall, if not illegally dealt with, be exchanged or paid for by or on behalf of the Mint at their nominal value.” A sum is set aside from the Consolidated Fund to allow for the loss caused by the recoinage.

The Act lays down clearly what shall be regarded as fair wear and tear: “Loss of weight greater than three grains shall be *prima facie* evidence that the coin has been impaired, diminished, or lightened otherwise than by fair wear and tear.” In practice the Bank of England, therefore, took light coins (up to three grains short) at their nominal value: after three grains short it made a charge of 2d. a grain, this being about the value of a grain of gold. The banks looked after the soundness of our currency; and there was no reason why the duty imposed should be neglected. Nothing was gained by retaining the heavy coins and dispatching the light ones again into circulation.

The Act of 1914.—The monetary troubles incident upon the outbreak of war in the August of 1914 led to emergency measures for replacing the gold currency called in to strengthen the reserve against possible shocks. The French, more provident than we in this matter, had already made their emergency currency. On the 6th of August we ourselves passed the “Act to authorise the issue of Currency Notes, and to make provisions with respect to the Note Issues of Banks.” Under this Act there were issued, under the authority of the Treasury and from plates prepared by its direction, currency notes for one pound and for ten shillings. For some months, in order to supply the shortage of smaller money, Postal Orders themselves were made legal tender.

SCHEDULE—GOLD COINS.

| Denomination of Coin (Gold). | Standard Weights. | | Least Current Weight. | | Standard Fineness. | Remedy Allowance. | | |
|------------------------------------|--------------------------------|---------------------------|--------------------------|----------|--|----------------------|---------|--------|
| | Imperial Weights Grains. | Metric Weights Grm. | | | | Weight per piece. | Grains. | Grm. |
| Five Pound ... | 616.37239 | 39.94028 | 614.50000 | 39.68935 | $\left\{ \begin{array}{l} \frac{1}{2} \text{ fine gold} \\ \frac{1}{2} \text{ alloy; or} \\ \text{millesimal} \\ \text{fineness 916.66} \end{array} \right.$ | 1 | .06479 | } .002 |
| Two Pound ... | 246.54895 | 15.97611 | 245.00000 | 15.87574 | | .4 | .02592 | |
| One Pound ... | 123.27447 | 7.98805 | 122.50000 | 7.93787 | | .2 | .01296 | |
| Half-Sovereign ... | 61.63723 | 3.99402 | 61.12500 | 3.96085 | | .1 | .00648 | |

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In the 1891 Act the Remedy Allowance for the half-sovereigns was increased as regards weight to .15 and .00972. In practice the sovereign and half-sovereign were the only gold coins current, the larger denominations being coined only on special occasions.

The silver coins authorised were the *Crown*, *Half-crown*, *Florin* (as a result of the agitation of the Decimal Association), *Shilling*, *Sixpence*, *Groat* or *Fourpence*, *Threepenny-piece*, and *Penny-piece*. Of these the *Crown*, *Groat*, *Twopenny*, and *Penny-piece* hardly entered into the currency. The bronze coins were the *Penny*, *Half-penny*, and *Farthing*.

The Currency Notes were to be legal tender in Great Britain and Ireland for any amount. They were not, as is apparently sometimes thought, inconvertible notes. They were in fact made as readily convertible as a Bank of England note: "The holder of a currency note shall be entitled to obtain on demand, during office hours at the Bank of England, payment for this note at its face value in gold coin which is for the time being legal tender in the United Kingdom." Certainly we had "propaganda" asking the public not to cash the notes; and certainly there were practical difficulties in the encashment. The privilege of convertibility was therefore a worthless one. For the gold obtainable could neither be used in manufacture nor be exported.

The notes were, however, always perfectly convertible. The currency notes recall, practically are indeed, the bank notes of small denominations that were forbidden in 1826, following a series of bank failures; and they were in 1928 superseded by Bank of England pound and ten-shilling notes. The currency notes were, the Act enacted, to be regarded as *bank notes* (within the meaning of the Forgery Act of 1913) as *valuable securities* (within the meaning of the Larceny Act of 1861), and as *current coin of the realm* (within the meaning of the Truck Acts). That is, an imitation with intent to deceive is punished as forgery; they are valuable property in themselves, and therefore can be subject to theft; they can be used in the payment of wages just as coin of the realm can be used.

For obtaining an additional supply of legal money in time of need the Act supplied a machinery much simpler than the old one of obtaining an "Act of Indemnity" as it was called. The authority of the Treasury is made enough to allow the issue of notes in excess of the minimum authorised by the Bank Charter Act of 1844. "The Governor and Company of the Bank of England and any persons concerned in the management of any Scottish or Irish Bank of issue may, so far as authorised by the Treasury and subject to any conditions attached to that authority, issue notes in excess of any limit fixed by law." It is this "elasticity clause" that is contained in the 1928 Act.

The Act of 1920.—The alteration in relation to the token silver coins was due to the strange and quite unexpected course of silver prices during the war years. At times the silver tokens were actually more valuable as metal than as coins; to hammer a shilling into a shapeless mass would at one period have added to its value. After all, it does not matter a great deal what value of metal we put into a token: provided that people have confidence in the guarantee of the issuing authority, and provided that the danger of counterfeit coins is so far as can be avoided, any material will serve the purpose. The first proviso is well enough obtained among us; probably there never has been a community in which the mass of the people have been so whole-heartedly behind the Government of the day, eager to help forward any Government schemes. We are a people most amenable to reason, and therefore the most easily governed in the world. Confidence in the Government's guarantee is therefore universal.

The second proviso is more difficult to obtain. Clearly, the greater the discrepancy between the value of the coin as metal and as currency the greater the incentive to illicit coining; to make coins even of sterling metal is profitable. The problem facing the Mint is therefore so to perfect the art of coining that the imitation of good coins is rendered a matter of exceeding difficulty.

The Bank is faced with the same difficulty in regard to its pound and ten-shilling notes: the possibility of forgery is always present, and this possibility is increased as the notes in the hands of the people become dirty and crumpled. Both the counterfeiting and the forgery are criminal acts visited by severe penalties; but experience has shown how ineffective penalties are to prevent easy illicit gains. The effectual preventive is to make successful imitation costly, troublesome, and difficult, as well as dangerous. We must perhaps acknowledge that this is attained. Our coins are covered by elaborate and sometimes beautiful designs, the milled edges make clipping easy to detect, the raised edges protect the designs so that they do not become blurred and indistinct, and the efficiency of the police may be trusted to prevent the establishment of expensive and cumbrous apparatus for

counterfeiting. And the bank note, at any rate when new, hardly invites imitation.*

If we guard against counterfeiting, therefore, it is profitable to the community to make its coins of the cheapest material; in these days of heavy expenditure we can ill dispense with such savings as those from the seigniorage on tokens. Sentimental regrets at the relinquishing of the "ancient right standard" of silver had to give way before the economic reasons dictating the change.

The Act "to amend the Law in respect of the Standard Fineness of Silver Coins current in the United Kingdom and in other parts of His Majesty's Dominions" was accordingly enacted during the first part of 1920. It amends the First Section of the 1870 Act (as amended by the Coinage Act of 1891) so far as the fineness of the silver is concerned. The $\frac{37}{100}$ th of the earlier acts was to be replaced by "one-half of fine silver, and one-half alloy; or millesimal fineness, 500." For the millesimal fineness in the remedy allowance 5 was to be substituted. The standard trial plates for the trial of the pyx were to be made of pure silver; so that a plate should contain as much fine silver as double its weight of the new shillings and half-crowns.

The composition of the alloy has never been laid down by statute: it has seemed good to leave the Mint authorities free in the matter. Careful experiments in the laboratories on Tower Hill seem to have established the fact that a ternary alloy (of silver, copper, and nickel) is better than a binary one (of half silver, half copper). The binary alloy is slightly copper tinged; the addition of nickel restores the whiteness.

Silver coin is always sent out "blanched" or "pickled"; covered, that is, with a coating of pure silver. The underlying

* The character of the paper (very thin yet very strong, and with a clear watermark) is one safeguard against the successful imitation of Bank of England notes. Another is the fact that when a bank note returns to the Bank of England it is not put into circulation again. It is stored in the vaults of the Bank for at least five years and then destroyed. We are told that the system of filing and recording these notes is so good that in a very few minutes the officials can turn up any one of the notes—to the number of over 90 millions. No Bank of England note, therefore, should be so dirty as to invite imitation.

alloy must, therefore, be of the silver colour. If not, when the coins begin to wear, the raised parts would differ from the protected parts; and the public would suspect counterfeiting. The coins would then ill perform their function as mediums of exchange; for, in order fully to do this work, they must be taken readily, without suspicion and without elaborate testing, with at most such slight inspection as ordinary people choose to give. The new coins contain actually 500 parts silver, 400 copper, 100 nickel.

This Act of 1920 is, indeed, notable in that it constitutes a departure from the "ancient right standard" of silver. Except for a short period of debasement in Tudor times—a debasement rectified by Elizabeth and her able advisers in 1560—there had been a remarkable continuity in the quality (11 ounces, 2 pennyweights of fine silver to 18 pennyweights of alloy). The quality persisted from the Conquest through all the successive diminutions of weights.

Gold Standard Act of 1925.—The Gold Standard Act of 1925 made our monetary system into a *credit system based on gold*; and though we occasionally saw a sovereign, the standard coin, the sovereign was not in effective circulation. The Act, in a modified form, brought our currency again in relation to gold—to *bullion* rather than to *specie*, so that we were on the *Gold Bullion Standard*. The purchasing power of paper could not deviate appreciably from the purchasing power of the gold represented; the paper pound and 113 grains of fine gold had the same value in the world's markets. For at one point the gold and the paper were interchangeable. This point was the Bank of England, where bars of approximately four hundred ounces troy of fine gold could be obtained at the Mint price of £3 17s. 10½d. The effective clauses of the short Act follow.

THE GOLD STANDARD ACT, 1925.

An Act to facilitate the return to a gold standard and for purposes connected therewith.

1. (1) Unless and until His Majesty by Proclamation otherwise directs—

(a) The Bank of England, notwithstanding anything in any Act, shall not be bound to pay any note of the Bank (in this Act referred to as "a bank note") in legal coin within the meaning of section six of the Bank of England Act, 1833, and bank notes shall not cease to be legal tender by reason that the Banks do not continue to pay bank notes in such legal coin;

(b) Subsection (3) of section one of the Currency and Bank Notes Act, 1914 (which provides that the holder of a currency note shall be entitled to obtain payment for the note at its face value in gold coin) shall cease to have effect;

(c) Section eight of the Coinage Act, 1870 (which entitles any person bringing gold bullion to the Mint to have it assayed, coined and delivered to him) shall, except as respects gold bullion brought to the Mint by the Bank of England, cease to have effect.

(2) So long as the preceding subsection remains in force, the Bank of England shall be bound to sell to any person who makes a demand in that behalf at the head office of the Bank during the office hours of the Bank, and pays the purchase price in any legal tender, gold bullion at the price of three pounds, seventeen shillings and tenpence halfpenny per ounce troy of gold of the standard of fineness prescribed for gold coin by the Coinage Act, 1870, but only in the form of bars containing approximately four hundred ounces troy of fine gold.

CURRENCY AND BANK NOTES ACT, 1928.

In 1928 the time was ripe to transfer to the Bank of England the issue of the paper currency that was henceforth to serve as hand-to-hand money.

The text of the Act, the chief purpose of which was to replace the war currency note issue by the note issue of the Bank of England, is as follows:—

1. (1) Notwithstanding anything in any Act—

(a) The Bank may issue bank notes for one pound and for ten shillings;

(b) Any such bank notes may be issued at any place out of London without being made payable at that place, and

wherever issued shall be payable only at the head office of the bank;

(c) Any such bank notes may be put into circulation in Scotland and Northern Ireland, and shall be current and legal tender in Scotland and Northern Ireland as in England.

(2) Section six of the Bank of England Act, 1833 (which provides that bank notes shall be legal tender), shall have effect as if for the words " shall be a legal tender to the amount expressed in such note or notes and shall be taken to be valid as a tender to such amount for all sums above five pounds on all occasions on which any tender of money may be legally made " there were substituted the words " shall be legal tender for the payment of any amount."

(3) The following provisions shall have effect so long as subsection (1) of section one of the Gold Standard Act, 1925, remains in force—

(a) Notwithstanding anything in the proviso to section six of the Bank of England Act, 1833, bank notes for one pound or ten shillings shall be deemed a legal tender of payment by the Bank or any branch of the Bank, including payment of bank notes;

(b) The holders of bank notes for five pounds and upwards shall be entitled, on a demand made at any time during office hours at the head office of the Bank or, in the case of notes payable at a branch of the Bank, either at the head office or at that branch, to require in exchange for the said bank notes for five pounds and upwards bank notes for one pound or ten shillings.

(4) The Bank shall have power, on giving not less than three months' notice in the London, Edinburgh, and Belfast Gazettes, to call in the bank notes for one pound or ten shillings of any series on exchanging them for bank notes of the same value of a new series.

(5) Notwithstanding anything in section eight of the Truck Act, 1831, the payment of wages in bank notes of one pound or ten shillings shall be valid, whether the workman does or does not consent thereto.

FIDUCIARY ISSUE.

2. (1) Subject to the provisions of this Act the Bank shall issue bank notes up to the amount representing the gold coin and gold bullion for the time being in the issue department, and shall in addition issue bank notes to the amount of two hundred and sixty million pounds in excess of the amount first mentioned in this section, and the issue of notes which the Banks are by or under this Act required or authorised to make in excess of the said first mentioned amount is in this Act referred to as "the fiduciary note issue."

(2) The Treasury may at any time on being requested by the Bank, direct that the amount of the fiduciary note issue shall for such period as may be determined by the Treasury, after consultation with the Bank, be reduced by such amount as may be so determined. [During 1931 in the efforts to remain on the Gold Standard this fiduciary issue was increased to £275,000,000.]

AMOUNT OF SILVER.

3. (1) In addition to the gold coin and bullion for the time being in the issue department, the Bank shall from time to time appropriate to and hold in the issue department securities of an amount in value sufficient to cover the fiduciary note issue for the time being.

(2) The securities to be held as aforesaid may include silver coin to an amount not exceeding five and one-half million pounds.

(3) The Bank shall from time to time give to the Treasury such information as the Treasury may require with respect to the securities held in the issue department.

4. (1) As from the appointed day* all currency notes issued under the Currency and Bank Notes Act, 1914, certified by the Treasury to be outstanding on that date (including currency notes covered by certificates issued to any persons under

* 22nd November, 1928.

section two of the Currency and Bank Notes (Amendment) Act, 1914, but not including currency notes called in but not cancelled) shall, for the purpose of the enactments relating to bank notes and the issue thereof (including this Act) be deemed to be bank notes, and the Bank shall be liable in respect thereof accordingly.

(2) The currency notes to which subsection (1) of this section applies are in this Act referred to as "the transferred currency notes."

(3) At any time after the appointed day, the Bank shall have power, on giving not less than three months' notice in the London, Edinburgh, and Belfast Gazettes, to call in the transferred currency notes on exchanging them for bank notes of the same value.

(4) Any currency notes called in but not cancelled before the appointed day may be exchanged for bank notes of the same value.

5. (1) On the appointed day, in consideration of the Bank undertaking liability in respect of the transferred currency notes, all the assets of the Currency Note Redemption Account other than Government securities shall be transferred to the issue department, and there shall also be transferred to the issue department out of the said assets Government securities of such an amount in value as will together with the other assets to be transferred as aforesaid represent in the aggregate the amount of the transferred currency notes.

For the purpose of this subsection the value of any marketable Government securities shall be taken to be their market price as on the appointed day less the accrued interest, if any, included in that price.

(2) Any bank notes transferred to the Bank under this section shall be cancelled.

PROFITS FOR THE TREASURY.

6. (1) The Bank shall, at such times and in such manner as may be agreed between the Treasury and the Bank, pay to the Treasury an amount equal to the profits arising in respect

of each year in the issue department, including the amount of any bank notes written off under section six of the Bank Act, 1892, as amended by this Act, but less the amount of any bank notes so written off which have been presented, for payment during the year and the amount of any currency notes called in but not cancelled before the appointed day which have been so presented.

(2) For the purposes of this section the amount of the profits arising in any year in the issue department shall, subject as aforesaid, be ascertained in such manner as may be agreed between the Bank and Treasury.

(3) For the purposes of the Income Tax Acts, any income of, or attributable to, the issue department shall be deemed to be income of the Exchequer, and any expenses of, or attributable to, the issue department shall be deemed not to be expenses of the Bank.

(4) The Bank shall cease to be liable to make any payment in consideration of their exemption from stamp duty on bank notes.

7. Section six of the Bank Act, 1892 (which authorises the writing off of bank notes which are not presented for payment within 40 years of the date of issue), shall have effect as if, in the case of notes for one pound or ten shillings 20 years were substituted for 40 years, and as if, in the case of any such notes being transferred currency notes, they had been issued on the appointed day and, in the case of any such notes not being transferred currency notes, they had been issued on the last day on which notes of the particular series of which they formed part were issued by the Bank.

EMERGENCY CURRENCY.

8. (1) If the Bank at any time represent to the Treasury that it is expedient that the amount of the fiduciary note issue shall be increased to some specified amount above two hundred and sixty million pounds the Treasury may authorise the Bank to issue bank notes to such an increased amount, not

exceeding the amount specified as aforesaid, and for such period, not exceeding six months, as the Treasury think proper.

(2) Any authority so given may be renewed or varied from time to time on the like representation and in like manner:

Provided that, notwithstanding the foregoing provision, no such authority shall be renewed so as to remain in force (whether with or without variation) after the expiration of a period of two years from the date on which it was originally given, unless Parliament otherwise determines.

(3) Any minute of the Treasury authorising an increase of the fiduciary note issue under this section shall be laid forthwith before both Houses of Parliament.

9. For the purpose of any enactment which in the case of a bank in Scotland or Northern Ireland limits by reference to the amount of gold and silver coin held by any such bank the amount of the notes which that bank may have in circulation, bank notes held by that bank or by the Bank on account of that bank, shall be treated as being gold coin held by that bank.

10. The form prescribed by Schedule A to the Bank Charter Act, 1844, for the account to be issued weekly by the Bank under section six of that Act may be modified to such an extent as the Treasury, with the concurrence of the Bank, consider necessary, having regard to the provisions of this Act.

11. (1) With a view to the concentration of the gold reserves and to the securing of economy in the use of gold, the following provisions of this section shall have effect so long as subsection (1) of section one of the Gold Standard Act, 1925, remains in force.

(2) Any person owning any gold coin or bullion to an amount exceeding ten thousand pounds in value shall, on being required so to do by notice in writing from the Bank, forthwith furnish to the Bank in writing particulars of the gold coin and bullion owned by that person, and shall, if so required by the Bank, sell to the Bank the whole or any part of the said coin or bullion, other than any part thereof which is *bonâ fide* held for immediate export or which is *bonâ fide*

required for industrial purposes, on payment therefore by the Bank, in the case of coin, of the nominal value thereof, and in the case of bullion, at the rate fixed in section four of the Bank Charter Act, 1844.

12. If any person prints, or stamps, or by any like means impresses on any bank note any words, letters, or figures, he shall, in respect of each offence, be liable on summary conviction to a penalty not exceeding one pound.

Departure from the Gold Standard.—During the summer of 1931 there were heavy withdrawals of gold from the Bank of England.* The Federal Reserve Bank of New York and the Bank of France anxiously co-operated with the Bank of England in its attempt to maintain the gold standard—to maintain in other words the power of selling gold to all comers at the stipulated rate. A credit of £200,000,000 was opened for the Bank in New York and a credit of 5,000,000,000 francs in Paris. But these borrowings were quite inadequate to stay the outflow of gold. There was no lack of confidence in the pound sterling. It was nervousness of foreigners about their own domestic system, and their eagerness to strengthen their position at home, that prompted the sale of securities on the London Stock Exchange, the proceeds being taken abroad in the form of gold. The Bank was obliged to take speedy action. In view of the fact that London had some £70,000,000 frozen in Germany, that the credits of £200,000,000 in New York and of Frs. 5,000,000,000 in Paris were practically exhausted and that further assistance on a sufficiently large scale would have been inadvisable even if granted by France and the United States, the Bank of England wrote on Saturday

* We may perhaps regard the Gold Standard as a fair weather standard; we were obliged to give it up during the European War; we were obliged to give it up in 1931 when the nations of the world, instead of co-operating heartily with one another, were striving to injure one another's trade rather than to promote their own. The Macmillan Report says: "Systems which in periods of prosperity have worked satisfactorily enough may in times of economic depression be found incapable of sustaining the stresses and strains of adversity and may disclose defects hitherto unsuspected."

the 19th, to the Government asking that the Bank might be relieved of its obligation to sell gold under the provisions of the Gold Standard Act of 1925. It was decided by the Cabinet to suspend for a period of six months that section of the Gold Standard Act of 1925 which requires the Bank to sell gold at a fixed price. An official statement was issued on the night of Sunday, 20th September, in the course of which it was announced that "A Bill for this purpose will be introduced immediately and it is the intention of His Majesty's Government to ask Parliament to pass it through all its stages on Monday, September 21st." The Act, called the Gold Standard (Amendment) Act 1931 was duly passed on that day. Sub-section (2) of Section 1 of the 1925 Act (page 58) is, therefore, no longer operative. We are no longer on a Gold Standard: the pound note buys not a fixed amount of gold but such an amount as is determined by the ever changing conditions of supply and demand.

The 3rd sub-section of the Act reads as follows:—

"It shall be lawful for the Treasury to make and from time to time vary orders authorising the taking of such measures in relation to the exchanges and otherwise as they may consider expedient for meeting difficulties arising from passing of the Act."

At the same time the Bank of England raised its minimum rate of discount to 6 per cent. and it was arranged that the Stock Exchange should not be opened on Monday, the 21st instant, and it remained closed on the Tuesday. On Wednesday the Stock Exchange opened, and dealings were unrestricted. Naturally, fixed interest bearing securities were affected for the worse by the rise in the Bank Rate. But home railway stocks and industrial shares rose sharply in price in the anticipation that the depreciation in sterling would act as a bonus to exporters and that trade would improve.

The fact that the United Kingdom had temporarily abandoned the gold standard had its re-percussions all over the world. For many years the pound sterling had been the foundation on which the finance and commerce of the world had been built. Pounds sterling in London served as reserves for some Central Banks, confident that they would always be

able to turn their pounds into gold at a fixed rate. The action forced upon our Government had therefore most serious consequences in many foreign financial centres. The following Stock Exchanges were closed for a while as the result:—Alexandria, Antwerp, Athens, Batavia, Berlin, Bombay, Budapest, Cairo, Calcutta, Cologne, Copenhagen, Frankfort, Osaka, Oslo, Stockholm, Tokyo, and Vienna. And our going off the Gold Standard was the prelude to like action in most countries.

The meaning of going off the gold standard is simply this. The Bank of England is relieved of the duty, placed upon it by the Act of 1925, of selling bar gold to all comers at a fixed price. With the removal of this obligation the former parity between paper and gold no longer exists. The amount of gold now obtainable for a pound has become less. How much less depends upon market conditions; for the gold has become relegated to the position of other metals bought and sold. This is why the pound in relation to the dollar, in relation to any monetary unit that still retains its former power over gold, has depreciated. The pound now buys less than 113·0016 grains of fine gold. The dollar still buys 23·22 grains. The pound, therefore, buys fewer dollars, but it is not a necessary result that the pound should buy fewer yards of calico or fewer pounds of bacon.

Return to Gold Desirable.—Most authorities believe and hope that the Act will be, as its form suggests, a temporary one, and that a fairly speedy return to the Gold Standard may be possible. It may be that on that return the pound may be devalued: the fixed amount of pure gold exchangeable for it may be less than the 113·0016 grains prescribed in the 1870 Coinage Act. A devaluation is, however, regarded as less of a calamity than a permanent departure. In the peculiar circumstances of this country a standard commanding world-wide confidence is specially desirable. Here is a part of the evidence of the Governor of the Bank:—

Lord Macmillan: Have you in view, when you raise or lower the Bank Rate, what are or may be the consequences to the industrial position of the country?

Mr. Norman: We have them in view, but the main consideration in connection with movements of the Bank Rate is the international consideration, and that especially over the last few years, so far as the international position is concerned we have been continuously under the harrow.

Lord Macmillan: It would be interesting for you to tell us how far you are a free agent in this matter.

Mr. Norman: I should say, so far as the legislative position goes, we are a free agent, but so far as the international position goes, we are not at all a free agent, but that the whole of the international machinery is bound together and that however much or little it may be recognised, it necessarily works as a whole, as, indeed, it should do, and that in point of fact what is called the gold standard is the cement by which it is bound together.

Lord Macmillan: Is it because international movements are depleting the stock of gold in this country that you find it necessary to arrest that course by increasing the Bank Rate?

Mr. Norman: It may come down to that ultimate question of the stock of gold, or it may come down to the general question of rates of interest and confidence.

Lord Macmillan inquired whether the power which resides in the Bank of England for raising or lowering the Bank Rate was an instrument, if used for the purpose of preserving the stock of gold, effective for that purpose?

Mr. Norman: It is effective.

Lord Macmillan: Your instrument may be doing good in one direction and harm in another. Externally you say it achieves its purpose of arresting the flow of gold if you raise the Bank Rate. Internally, how do you conceive that it operates?

Mr. Norman: Well, I should think its internal effect was as a rule greatly exaggerated—that its actual ill-effects were greatly exaggerated and that they are much more psychological than real.

Lord Macmillan: You take the large view. In your opinion I gather the advantages of maintaining the international position outweigh in the public interest the internal dis-

advantages which may accrue from the use of the means at your disposal?

Mr. Norman: Yes, I think that the disadvantages to the internal position are relatively small compared with the advantages to the external position.

Lord Macmillan: What is the benefit to industry of the maintenance of the international position?

Mr. Norman: This is a very technical question which is not easy to explain, but the whole international position has preserved for us in this country the wonderful position which we have inherited, which was for a while thought perhaps to be in jeopardy, which to a large extent, though not to the full extent, has been re-established. We are still to a large extent international bankers. We have great international trade and commerce out of which, I believe, considerable profit accrues to the country; we do maintain huge international markets, a free gold market, a free exchange market—perhaps the freest almost in the world—and all of those things and the confidence and credit which go with them are, in the long run, greatly to the interest of industry as well as to the interest of finance and commerce.

The Balfour Committee, which reported in 1929 during the period when the Gold Bullion Standard was in operation, also strongly advocated a currency anchored to a concrete metal rather than one based upon index-numbers:—

“We have received a certain amount of evidence from representative trade associations with reference to the restoration of the gold standard. This evidence was unanimously in favour of the re-introduction of a gold basis for the British currency, though in some cases doubt was expressed whether the right moment had arrived for the change. Such a return by the chief commercial countries was declared by the Economic Conference at Genoa in 1922 to be an essential pre-requisite of the economic restoration of the world after the catastrophe of the Great War. In the three years following that Conference great steps were taken by a number of important countries towards rehabilitating their currency either on a gold or a gold exchange basis. There never was a real chance of the acceptance by the business world of any of

the alternative currency systems, not based on gold, which were advocated by some theoretical economists. These systems, while varying in detail, have the common feature that they reject any single commodity such as gold as the standard of value, on the ground that the selected commodity is necessarily subject to changes in the conditions of its own supply and demand, which are reflected in fluctuations of its general purchasing power, or, in other words, in instability of prices. It has accordingly been proposed to substitute some composite standard, *e.g.* a general price index number, or a 'variable dollar,' or else to attain the same object by means of a 'managed' currency, the guiding principle being to aim at the stabilisation of internal prices.

"The governing idea of all these schemes, namely, the diminution of the present instability of prices, is worthy of all commendation, and so far as their authors criticise the weak points of a gold currency system, and remind us of the importance of taking all practicable steps to counteract these weaknesses, they achieve a useful purpose. Regarded, however, as serious practical proposals for an alternative basis of the British currency, all these schemes seem to us open to fatal objections on grounds both of principle and of practice. Any kind of composite standard of value could only be based on rough approximations, derived from records of past transactions. An index number constructed on such a basis would be unlikely to be sufficiently sensitive for the purpose for which it was intended. Moreover, even if it were fairly representative at the outset, its basis would, over a long period, need periodical revision in order to conform to changed conditions. Nothing would convince the business world that in making such periodic revisions the Government of the day would always be free from political pressure. Nor would there be any confidence that the controllers of a 'managed' currency would always possess sufficient capacity, integrity and firmness, and would enjoy sufficient powers and independence, to enable them to carry out their delicate task, free from aberrations due either to political or economic influence, or to imperfect appreciation of the economic situation. The whole superstructure of modern credit depends

ultimately on the confidence of the commercial community in the basis on which it rests, and we do not think that in the present condition of the world this confidence could possibly be ensured by any system of currency management independent of a gold basis."

CHAPTER V.

THE GOLD STANDARD.

Adoption of the Gold Standard.—By a “standard” we mean a “thing with which to compare.” Our standard of length is a yard, and where we wish to express lengths we compare them with this fixed length. We can make this standard of length an invariable one; and, when men began seriously to consider what standard of value should be adopted, it seemed to be axiomatic that the selected standard should, in measuring values also, be invariable. This would imply that the monetary unit should always have the same power over the market. And to our legislators in 1816 it appeared that the desired invariability in the standard could be attained by making the monetary unit equal in value to the value of a specified weight of fine gold. Fix the exact amount of gold that should go into a sovereign and you thereby fix the purchasing power of a sovereign. In spite of the teachings of history it was assumed that gold prices meant stable prices.

What the Gold Standard Implied.—First, though, let us make certain that we understand when a country has its money system on the gold basis, when it is that a gold standard is operative. For the question may well arise, “How can we say that a gold standard exists when no gold circulates?” How can we test whether or not a gold standard is effectively maintained? The one test is this: the market price of gold is kept down to the coinage (the Mint) price of gold. This must be so if the paper representative of gold can really be converted into gold. In our system (the Mint or coinage) price of gold used to be £3 17s. 10½d. per standard ounce (*i.e.* 22 carats fine), which made the price of an ounce of fine gold £4 4s. 11⅕d. The price of gold could rise only minutely above

this; for the Bank of England was by law compelled to sell at this price. So long as we found the price of gold in the open market quoted day after day within a farthing or so of 84s. 11½d. per fine ounce, we knew that our Gold Standard was effective.

Where we can turn paper into gold at any time at a fixed rate, there is parity between the gold and its token. The currency may be entirely paper or coins having much greater value as coins than as metal. Yet the money system is on a gold standard.

Variations of the Gold Standard.—The country may have a gold standard though it has no gold in circulation and no great stock of gold. In fact the economising of the world's stock made it necessary to distinguish three systems to which the term Gold Standard is in greater or less degree applicable:

(1) The *Full Gold Standard*, where gold is in free circulation; where there is parity between paper and gold, both for internal and external trade; and where no obstacles are placed upon the purchase or use of gold at the fixed price. Pre-war England was an example.

(2) The *Gold Bullion Standard*, the term applicable to a system, where, though gold is the measure of value, it is not the medium of exchange, but where there is at one point a free market for gold bullion at the fixed price. Such was our system between 1925 and 1931.

(3) The *Gold Exchange Standard*, widely adopted by countries that had no strong financial position. For the central banks of such countries kept themselves able to sell credits that might be turned into gold at the Bank of England, or other central bank of a country keeping a stock of gold. That was all that was needed. The money of account could not in this arrangement get far from the gold unit.

The Relinquishing of the Gold Standard.—How was it that the gold standard came to be given up? What constrained the peoples of Europe to quit the basis of gold, on which trade and industry had long proceeded smoothly, and to adopt a system altogether unintelligible to the ordinary man?

Before the fateful August of 1914 the currencies of the world had been securely based on gold. So based, they were in stable relation to one another; and trade transactions among the nations were smoothly settled. The war came, and with it an almost universal relinquishing of the gold standard. Inconvertible paper, of uncertain and rapidly altering purchasing power replaced the gold; and there was no fixity in the rate of exchange between any of the nations. For, with every exigency of the Governments concerned, the volume of this paper money was swollen.

One cause was the very reason that makes gold in ordinary times the best basis of currency—the fact that the supply of gold is inelastic. “Gold is a stock, not a crop.” It is not consumed year by year as a crop of wheat is. Rather, it is a great reservoir fed by a number of tiny streams. The supply of gold varies only slightly from year to year; and in any event the yearly output makes little alteration to the amount in the hands of men.

The steadiness in the amount is one factor in the stability of value at ordinary times. But the supply cannot speedily be altered, however great the need. Besides, much of the credit money that in peaceful times enables the exchanges of the world to be effected is destroyed by the breaking out of hostilities. And in time of war, the nations find it necessary to spend money without stint. They have little gold; they can make as much paper money as they please. So all great modern wars have involved the suspension of the gold standard by the warring nations and by those nations closely connected with the war. A gold circulation is one of the first luxuries to be relinquished when war breaks out.*

* It was, we may note, different when coin, not credit, was the main means of purchase. The financing of the Hundred Years' War, for instance, was what impelled Edward III. to coin our first gold pieces. Before 1344 our coin was the silver penny. A more powerful means of commanding supplies was wanted. The “gold florin” of Florence had—like the English sovereign before 1914, and the Maria Theresa dollar to-day—acquired widespread international acceptance. Edward III. imitated this coin of international repute. In 1344 he had the gold Noble struck, worth two florins (or 6s. 8d.). He, by doing so, introduced bimetalism into our monetary system.

The free flow of gold was prevented by the belligerent European nations, including ourselves. For so great a volume of obligations had been contracted, with America particularly, and so small was the volume of counter benefits conferred, that the gold would have disappeared, not from circulation merely, but from the country. In Europe there was an enormous demand for dollars because of (1) immense purchase of foodstuffs, munitions, and war materials; (2) large remittance to America by frightened capitalists and by speculators; (3) the freights earned by the young American Merchant Service.

There was a far less supply of dollars than usual because (1) Europe was producing far less, and found increasing difficulty in transporting the little she produced; (2) America used less for "invisible items" like insurance and freights and the expenditure of Americans abroad.

A great and increasing debit balance rose against Europe. This debit balance was represented by an excess of bills payable over bills receivable. The banks no longer could absorb the excess: for the restriction on the sale and export of gold prevented the former machinery from working. Gold was not available: and the depreciated paper became worth ever fewer and fewer dollars.*

Stability is Desirable.—The eager longing to get back to the gold standard even at a sacrifice can be easily understood. In a world of incessant fluctuations stability seemed eminently desirable; and, to the minds of most men, stability of prices and gold prices are synonymous.

Practical men were, very early in our history, convinced of the need to make the yard, the pint, and the pound stable. The arguments that convinced them apply just as forcibly to the unit for measuring value. Short weight cheats the buyer: long weight cheats the seller. In like manner a unit

* It is curious to note that Sweden and Norway, during the War, were constrained to place an embargo, not upon the export, but upon the import of gold; and Spain bought gold at a discount. There was so great a danger of an extraordinary and unsettling rise of prices through the flooding of the country with gold from the belligerent countries that it seemed desirable to discourage the import.

of money changing in its power to buy upsets contracts: if general prices rise, then creditors and the recipients of fixed incomes are penalised; if general prices fall, the debtors—who must now transfer more of real stuff to cancel their obligation—are penalised.

If only the pound sterling could be trusted to command in the world's market the same amount of goods—taking one price with another—men would be able to look forward to the future with confidence. Their justly founded expectations would be fulfilled. True, those entitled to incomes fixed in terms of money would lose some share in economic progress. It would not matter to them whether the scientists solved the problem of power, nor whether discoverers made two blades of corn grow where one grew before. Others' incomes, measured in real goods, might rise. To them the sufficient solace would be that they could count upon having what they had expected to get.

It is impossible not to admit the cogency of the argument for stability of prices. The drawbacks attendant upon violent and capricious changes in the purchasing power of our money are evident. The greatest drawback of all perhaps is the encouragement of waste, the discouragement of saving: when the Austrian krone was momentarily tumbling down in value, one who bought a bock of beer would order (so the jesters said) a second at the same time, dreading lest the imminent rise in price might carry it beyond his means; the man who sold goods for kronen would speed to the market to turn the kronen again into goods. Far better return to the solid basis of gold, repugnant to reason as it may be, than to be subject to a currency inflation or deflation at the whim and caprice of governments. To communities harassed and bewildered by incessant changes in the purchasing power of their money unit, it might well seem that stability is the quality most desirable in a standard.*

* Here is what Sir H. Strakosch, a member of the Financial Committee of the League of Nations, said (12 March, 1931) upon this point:—

“Gold has thus become the measuring-rod of values over a wide area of the globe. To serve that purpose adequately it ought to be as constant and reliable an instrument as an engineer's foot-rule. This,

International Transactions.—There can be no restoration of international confidence, and with it stability in foreign exchange, while a government may at its fiat depreciate its currency. A British investor having, before 1914, invested in obligations payable in French currency obtains to-day interest in francs depreciated in value. He has less income; and in the event of his selling he suffers a loss of capital.

It is asserted, indeed, that the more a country increases its foreign loans, the more it is tempted to inflate its currency. In regard to the one loan this may be true. A British investor lends 10,000 francs in France when francs are at 25 to the sovereign. It is an advantage to the Frenchman if payment is made when francs are 124 to the sovereign. He pays to the Englishman only a fifth of the amount of goods he received. It is quite true that the lender gets back the number of francs he lent. But the franc of 1932 contains only about a fifth of the gold contained by the franc of 1914.

unhappily, is not the case. A stable standard of measurement in monetary affairs is not a whit less important than in engineering.

“During the last eighteen months the purchasing power of money has risen rapidly, and it is the redistribution of wealth consequent on this rise which is causing the untold trouble and hardship all over the world. It should be borne in mind that the creditor class, which is benefited by the fall in prices, is not confined to those who, by contract or law, have a claim to fixed money amounts. It also comprises the vast number of wage-earners (including the salaried classes) whose claims, though not fixed by contract for any length of time, are nevertheless so fixed by custom that they are exceedingly difficult to alter. Both these classes benefit by a fall in prices, and the burden of finding this benefit falls with full force on the section of the community commonly called the *entrepreneur* class—those whose livelihood depends on the profits they make in their trading or manufacturing enterprises. That includes all holders of Ordinary or Deferred shares in companies. The share in the national income of the *entrepreneur* class in 1924 has been calculated to amount to a matter of 17 per cent. of the national income. The share of those who, either by contract or law, have claims to fixed money amounts, *i.e.* holders of fixed interest-bearing securities of a public or private character, those entitled to rent on land and house property, pensions of various kinds, and the recipients of the dole, amounts to a matter of 26 per cent., while the wage-earners' share amounts to some 50 per cent. If prices fall, therefore, the recipients of 76 per cent. of the national income benefit, pending an adjustment of wages, at the expense of the recipients of 17 per cent. of the national income. It is not difficult to imagine how disastrous for the *entre-*

The process reminds us of Mill's indignant comment. Speaking of the Government monopoly of coining, he declares: "Governments found it to their interest to take the operation into their own hands, and to interdict all coining by private persons; indeed their guarantee was often the only one which would have been relied on, a reliance, however, which very often it ill-deserved; profligate governments, having until a very modern period, seldom scrupled, for the sake of robbing their creditors, to confer on all other debtors a licence to rob theirs, by the shallow and impudent artifice of lowering the standard; that least covert of all modes of knavery which consists in calling a shilling a pound, in order that a debt of a hundred pounds may be cancelled by the payment of a hundred shillings.

"It would have been as simple a plan, and would have answered the purpose as well, to have enacted that a hundred should always be interpreted to mean five, which would have effected the same reduction in all pecuniary contracts, and would not have been at all more shameless. Such strokes of

preneur class is the fall in prices of 28 per cent. during the last year. Need you be surprised to see the profits of even those who were among the most prosperous industrial and commercial enterprises dwindling to practically nothing, and in many cases replaced by heavy losses? Need you be surprised to see many go out of existence, and those who manage to struggle along curtailing production and reducing even the most necessary replacements to the utmost limits? And need you, in the circumstances, be surprised at the rising tide of unemployment the world over?

"With such disastrous consequences of instability before them, it requires little acumen to appreciate how vitally important it is that the purchasing power of gold as the standard of value throughout practically the whole of the civilised world, should, within reasonable limits, be maintained stable. In view of the international nature of the monetary standard, this involves co-operative action of an international character. It involves co-ordination of credit policies in the principal gold standard countries, directed towards maintaining the purchasing power of gold stable within reasonable limits. It is fair to say that a large and influential section of economic opinion believe that intelligent co-operation among the principal central banks can achieve this. I should like to add, to avoid any misunderstanding, that the stock of gold available for monetary purposes is amply sufficient to sustain a price level considerably higher than the present one, provided only a reasonable amount of economy is exercised in its use for that purpose."

policy have not wholly ceased to be recommended, but they have ceased to be practised; except occasionally through the medium of paper money, in which case the character of the transaction, from the greater obscurity of the subject, is a little less barefaced."

The partial repudiation by the artificial blowing up of the currency brings, however, its natural result—the loss of credit by the repudiator—and with it the drying up of the sources of fresh loans.

The Process of Repudiation.—During the war, and for some time after it, government printing presses were hard at work to provide the "money" which taxes or loans failed to provide; and in some countries the flood of government paper drove up nominal prices and nominal wages to grotesque levels. Austrian wages, reckoned in thousands where they used to be reckoned in tens, have been of no benefit to the worker, because prices have come to be reckoned in their thousands too. By issuing paper, the Government in fact levied a forced loan on the community. It bought the goods it wanted with paper; these goods were dissipated in war, so that everybody was so much worse off; and the extra paper in circulation drove up the prices of the remaining goods. The country was poorer with more money to spend.

One of the little pamphlets published by the Ministry of Reconstruction is genially frank about the matter: "You can pay for a war either by increased productive activity or by rigid economy in consumption. You can throw a burden of interest on posterity; but you cannot make posterity provide the shot and shell, the corn and cotton that you want. If you cannot increase your production or diminish your civilian consumption sufficiently to meet your war needs, posterity cannot see you through. Now, of course, in this country production has been increased enormously. And economy in consumption has been practised to some extent. But no one believes that the whole military requirements of the country have been met by the added exertion of the munition workers plus the voluntary self-denial of the general public, denying itself that it may buy war loan.

“ A great deal of the self-denial of the public has been involuntary, not deliberate; due to high prices, not to patriotic enthusiasm for the buying of war loan. In fact, there has been something rather like a forced loan because there was not enough real saving. The Government, it is true, has not flooded us with paper. The currency notes at first merely replaced the sovereigns. There are now far more of them in circulation than ever there were sovereigns; but the excess is not really outrageous.

“ What the Government did was to connive at the creation of additional bank credits, which have much the same effect as note issues. People found that their banks would help to take up war loan when they had not really enough money saved for the purpose. They bought war loan and the Government secured purchasing power, just as if it had made more notes. With its purchasing power it came into the market to buy goods and labour, and it was prepared to pay for them. Up went prices and wages, and when the private person wanted labour or the goods, they were not to be had at the old rates. He paid the new rates against his will. If people had been prepared to deny themselves enough, or if the Government had pushed taxes high enough in the early days of the war, it might not have been necessary. But this is how things have worked out.” Currency anchored to gold can hardly be manipulated to supply the exigencies of the Government. As the Deputy Governor of the Bank said to the Macmillan Committee: “ A good deal has been said from time to time about the Bank’s alleged policy of deflation. I know of no such policy, and I think it is sometimes forgotten that whatever policy the Bank might adopt, whether inflationary or deflationary, they are without the power to enforce it, except to a definitely limited extent, now that we are working again under the gold standard. The gold standard does place a most definite limit on the power either to inflate or to deflate.”

Is Gold the Ideal Standard ?—But what is the ideal standard ? Is the ideal one that keeps prices stable ? Or is the ideal one that makes prices fall with economic progress, and rise with

economic retrogression? When invention is devising easier ways of doing things, when research is showing better ways of satisfying human needs, the real cost of goods—the sum of effort and sacrifice needed to obtain them—diminishes. On the other hand, the dislocation and distrust caused by wars and rumours of wars and the pressure of population on food-producing areas of the world may enhance these real costs. Should not the diminished costs be mirrored in falling prices, the enhanced ones in rising prices? The money unit would still have a kind of stability. It would, however, be a stability not in terms of goods but in terms of productive power. By establishing such a standard we should do for incomes in general what adjustment of wages in accord with the Ministry of Labour's Index Number does for wages in particular.

Or—a third ideal—would it not be well to have a system of gently rising prices? Rising prices mean greater profits to those who initiate and control; and the greater profits would stimulate the business community to greater activity and enterprise.

Since the great crisis of 1921, indeed, there has been a pronounced tendency to think that prosperity can be achieved (or destroyed) by the manipulation of credit, whether or not based on gold. The idea is that the fat years resulted from the free granting of credit; that the lean years following were due to credit restriction. In short, the "liberal money" advocates would have us think that inflation is good and deflation evil. To live in an atmosphere of falling prices, they point out, has a depressing effect upon trade and industry; to substitute the exhilarating effect of rising prices is, therefore, a worthy object. Provided that the rise is not so evident as to shake confidence, the "cheaper money" advocates are justified; for the growing volume of goods prevents the rise from becoming inordinate, unemployment diminishes, and cheerfulness pervades the business world. And, in order to suggest that the ultimate aim is stability at a given level of prices, the term "reflation" became a fashionable substitute for the "inflation" that bore such disagreeable associations.

Chance and the Gold Standard.—The Gold Standard reaches none of these three suggested aims. It is probably nearest to the second, providing us with a standard tending to vary in harmony with the productive power of men; for gold mining itself shares in industrial progress, and languishes with industrial retrogression. Comparatively stable in value it is; absolutely stable it cannot be, since so many circumstances influence the supply and the demand both of itself and of the goods of which it measures the value. The annoyance that many feel about the uncertainty and the irrelevance of the gold standard is, therefore, easy to understand.

Chance doubtless plays a part, may be a great part, in the power of gold to command things. Times change, and the minds of men too. Just as we to-day find it hard to believe that the divine right of kings was a doctrine accepted among us, so our posterity may marvel that we base our monetary system upon gold—that we of the twentieth century share with the earliest savages faith in its magical power.

Gold may fall in value. A new superstition may dispel from the Indian peasant and potentate their avidity for gold, make them lose their tenacious hold upon it, and cause the immemorial hoards of the East to swamp the world's markets. New mining regions may beat Johannesburg for the easy winning of gold; new processes may halve the labour needed to separate the gold from the dross; more effective means of economising may make an ounce of gold do much more monetary work than it does now. Gold may rise in value. A scramble for gold may occur among nations distressed by the vagaries of paper expedients; or now prolific mining areas may be exhausted. Chance rules; though certainty is sought.

CHAPTER VI.

EXCHANGE STANDARD CURRENCIES.

Rates of Exchange.—A person in London having pounds sterling to his credit at his bankers may have a debt reckoned in dollars to pay in New York. He will be concerned in knowing how many dollars his pound sterling will buy. For the greater the number of dollars his pound can buy, the fewer are the pounds that will cancel his debt. In other words he is pleased, as debtor, with a high rate of exchange; better pleased with 4.86 than with 4.85. On the other hand, a person in New York having dollars to his credit may have a debt reckoned in pounds sterling to pay in London. He will be interested in knowing how many dollars he must spend in order to buy a pound sterling. The lower the quotation of dollars to the pound, the fewer dollars he needs to expend.

Mint Par of Exchange.—When the currencies of the world were established upon a gold basis, it was easy to establish a relation between them. This point is admirably put in the Macmillan Report. In its discussion of "The International Gold Standard," which it advocated whole-heartedly, but which unluckily disappeared almost at the moment of publication of the Report, it says: "By an international gold standard is to be understood not identity of the currency arrangements of all the countries comprising the gold standard group but the possession by all of them of one attribute in common, namely, that the monetary unit (*i.e.* pound sterling, dollar, franc, mark, and so on) should possess a gold value prescribed by law, or, rather, a gold value within the limits of the buying and selling price of gold of the local Central Bank. In almost all countries gold coin has now been withdrawn from circulation and its place taken by paper representatives of the gold. The gold price of the paper

representatives of gold is determined by the limits at which the Central Banks will give gold for paper, or paper for gold. Thus in Great Britain an ounce of standard gold, containing eleven parts of gold to one part of alloy, is legally equivalent to £3 17s. 10½d. This is the price at which the Bank of England must sell gold in exchange for its own notes: the minimum price at which it must give its own notes in exchange for gold is £3 17s. 9d.

“The legal determination by each of a group of countries of the gold equivalent of the monetary unit, though an essential, is not the only condition of an effective international gold standard. Something more is necessary; namely, the right freely to import gold and to tender it in unlimited quantities to the Central Bank; and the converse right, freely and in unlimited quantities to draw gold from the Central Bank and to export the gold so obtained. During and immediately after the War there were countries which, though nominally, were not actually, on the gold standard because the rights in question did not exist. Thus in Great Britain, although the holder of Bank of England or of Currency notes was legally entitled to obtain gold in exchange for notes, he was, under war conditions, unable in practice to export gold and was later by statute prohibited from exporting it except under licence. Again, in Sweden, gold importers were not free to tender gold in unlimited quantities to the Central Bank: the Swedish krona therefore possessed a value superior to the weight of gold which it nominally represented.

“The right to demand gold in exchange for local purchasing power, or local purchasing power in exchange for gold, is not, however, the only guarantee of the effective working of the gold standard. It is sufficient if the local currency is exchangeable for another currency which is itself convertible into gold. It is possible indeed to classify currency systems based upon the gold standard by the extent to which the relationship between the local monetary unit and gold is proximate or remote. First there are the systems in which the monetary unit is itself a gold coin; then come currency systems in which conversion takes the form of the exchange by the Central Bank of gold bars into local currency or vice

versa; more remote still is the connection when the conversion right takes the form of an exchange of local purchasing power into foreign currency which is itself convertible into gold bars or gold coin. Nor is it absolutely necessary that the right to convert should be conferred by statute; it suffices if the currency authority never refuses to give gold or the equivalent at a fixed rate for the local currency, and vice versa.

“The primary object of the international gold standard is to maintain a parity of the foreign exchanges within narrow limits; this has the effect of securing a certain measure of correspondence in the levels of prices ruling all over the gold standard area. Incidentally it provides an objective test of the correspondence of local currency policy with that of the rest of the world, whilst under it the currency mechanism itself provides the resources by which, in the event of temporary disequilibrium in the relation of one currency to another, equilibrium can be restored. But although so long as an international gold standard exists, the currency authority of any gold standard country has always a simple test of the effect of its policy constantly before it, the disequilibrium between the local currency in relation to the rest of the world leading to a loss of gold may be due to deep-seated causes which, if not corrected by measures involving a definite change in values in the country in question, would result in a permanent drain of gold, or alternatively it may be due to a merely temporary deficiency in the balance of payments, not in itself due to deep-seated currency derangements. A sudden check to exports due to the failure of a crop in an exporting country, or a sudden weakening of markets in an importing country, or pressure on the foreign exchange market due to a demand for remittance in consequence of a rush of new long-term issues in the capital market, or the withdrawal of short-term balances from a money market in consequence of political unrest in the borrowing or lending country, or indeed, in any part of the world, are instances in point. What is necessary is the possession of some one exportable commodity, the value of which will not fall, *i.e.* for which the short-period price is not subject to change. Gold is such a commodity; so also is the exchange represented by a draft on a bank of the creditor

country. Gold and foreign exchange reserves are easily mobilisable assets which are available at moments of emergency, when perhaps nothing else is available. Thus, under the international gold standard, the currency system itself provides the resources by means of which equilibrium can be restored, so long as the causes by which disequilibrium has been brought about are only temporary in character, and so long as the international gold standard is itself maintained.

“The fact that a state of temporary disequilibrium can be adjusted by flows of gold or foreign exchange does not remove from the currency authority the necessity of caution and of interpreting the situation in the light of its fundamental duty of safeguarding the international standard. What appears at first sight to be a case of purely temporary disequilibrium may prove to be a symptom of a more deep-seated lack of adjustment. Whilst gold exports need not be followed by more drastic remedial measures if the disequilibrium is temporary, they are always a warning both to the money market and to the Central Bank itself that further action may later be necessary. Thus, whenever gold is lost, the Central Bank is provided with an ‘automatic’ signal of the emergence of conditions which may make positive action necessary. The ultimate aim—the restoration of the international value of the currency—is clear, but the action to be taken, and the precise moment at which it should be taken, remain in the sphere of discretion and judgment, in a word with ‘management.’ That the sphere of ‘management’ in this sense is wide and responsible is beyond doubt. For if the wrong action is taken, the state of disequilibrium which the monetary authority designs to correct may be accentuated or perpetuated. If, in a state of temporary disequilibrium, the monetary authority takes action resulting in a change in the level of values here, a new state of disequilibrium may be unnecessarily created. The sense in which the gold standard can be said to be automatic is thus very limited: it is automatic only as an indicator of the need for action and of the end achieved.”

Coinage Laws Determine Mint Par.—The Coinage Laws gave us what is called the *Mint Par of Exchange*. Consider the

Mint Par of typical currencies—our own, that of the United States, and that of France—the pound sterling, the dollar, the franc; and let us suppose for a moment that the gold standard adopted in these currencies is effective. That is to say, in all the currencies the circulating medium, whether paper or coin, may at a definite point be freely convertible into the commodity gold. There is, in other words, a point at which parity exists between the paper that circulates and the gold that measures value.

The point is this: weights are specified in each currency; the sovereign is a definite weight of fine gold, the dollar a definite weight of fine gold, and so on. We in our country speak about the "Mint Price of Gold." This is simply an awkward and roundabout way of defining the amount of gold represented by a pound sterling. This Mint Price is £3 17s. 10½d. But all that this means is that one ounce of standard gold (consisting of $\frac{1}{2}$ fine gold and $\frac{1}{2}$ alloy) becomes when turned into coins at the Mint $3\frac{1}{8}\frac{4}{8}\frac{3}{8}$ sovereigns—coins, that is, embodying the value of a pound sterling. Or to take the old rule, twenty pounds Troy weight of gold is turned into 934 sovereigns and one half sovereign. We can therefore, when we choose, calculate the number of grains in a sovereign. It is one ounce Troy of Gold divided by $3\frac{1}{8}\frac{4}{8}\frac{3}{8}$, that is, 123·27447 grains—see the table on page 53, from the first schedule of the Coinage Act, 1870, where metric weights are given. Of the 123·27447 grains, 113·0016 grains are fine gold. It is the last number that matters.

The United States method of fixing weight is more direct. The gross weight of a dollar is 25·8 grains, of which $\frac{1}{10}$ or 2·58 grains is alloy. This leaves 23·22 as the weight of fine gold in a dollar. For every 23·22 grains of fine gold taken to the Assay Office a dollar must be credited. A five dollar piece, a half eagle, contains therefore 116·10 grains of fine gold, about 3 per cent. more than our sovereign.

A simple calculation, a mere deduction from the Coinage Laws of the two countries, gives the Mint Par between the sovereign and dollar. It is as 113 is to 23·22, or as 4·866 is to 1. This theoretical equivalent, the Mint Par, is, you note, fixed till one or other country alters its Coinage Law; 4·866

dollars is the Mint Par of a pound sterling. For though the exchanges are sometimes above, sometimes below this figure, 4866 dollars in New York contain the same amount of gold as 1,000 sovereigns in London do.*

Nor can the rates of exchange differ greatly—not more than $\frac{1}{2}$ per cent. one way or another—from this Mint Par of 4·866 to 1. For consider: if a debtor in London knows that a pound sterling will buy fewer dollars than formerly, he will begin to wonder whether it will pay him to get gold with his paper, and send gold to New York for conversion into dollars. Certainly, the bankers and others who deal greatly in Exchanges will often have this thought in mind.

Now, since the cost incidental to the transporting of fine gold from London is about half of one per cent., then the point at which it pays to transfer gold rather than to buy dollar credits is about 4·84.† The point at which it begins to pay to send gold from New York rather than buy pound sterling credits is about 4·89. The former is for London, the *Outgoing Specie Point*, the latter the *Incoming Specie Point*.

Look now at the French Coinage Law. On the 25th June, 1928, the gold contents of a franc was, after many and bitter quarrels, stabilised at 65·5 milligrammes, nine-tenths fine. We know that our sovereign should contain 7·3223 grammes of fine gold. We can, therefore, calculate that the Mint Par between the franc and the sovereign is 124·21 to 1. It makes no difference to this Mint Par that a gold franc is not now coined, nor that it was not coined when gold did circulate in France. The unit of exchange value is still in France a twentieth part of a gold Napoleon of twenty francs.

* Whether this Mint Par of 4·866 will persist when, as many anticipate, we again anchor our currency to gold depends upon whether or not the pound sterling is devalued in terms of gold. Thus if the pound sterling should be fixed as the equivalent of only 100 grains of fine gold (instead of 113·0016) the Mint Par would be changed to $100 \div 23·22$ or 4·30 $\frac{1}{2}$.

† The exact point depends, you note, upon varying costs of freights, insurance rates, and other factors bearing upon the actual obtaining and transfer of the gold. During the Great War, when war-risks insurance was very high, the American outgoing specie point was actually below 4·76 $\frac{1}{2}$, the point at which the American exchange was "pegged."

Throughout the world new money laws are coming with bewildering rapidity. The new laws are often merely polite ways of repudiating a portion of debts incurred; for they usually take the form of increasing the quantity of money and thereby lessening its buying power. As debtor the business man gains. He will need to sell fewer articles in order to get the means of cancelling his indebtedness.* Yet we may suppose that he would gladly relinquish the chance of a haphazard gain of this sort if he could only enjoy the benefit of something like stability in the power of the monetary unit over the market. He would prefer to profit through his sober well-founded calculations rather than through blind chance.

The Mint Par is no longer of any practical importance; its consideration is only a matter of historical and academical interest. Still, it gives a point of departure, showing how far existing currencies have departed from the gold standard. It is, therefore, usually quoted in tables of exchange rates. Here is a typical table from *The Times*. The second column indicates the Bank Rate subsisting at the time.

The full name of the currency units of which abbreviations appear in the table opposite are: \$, dollar; Fr., franc; Bel., Belga; Dr., drachma; M., mark; Pts., pesetas; Escu., escudo; Fl., florin; Sch., schilling; Pen., pengo; Kr., kroner; Pst., piastres; Din., dinar; Lev., leva; Kc., crowns; Lit., lita; E.Kr., Esthonian kroon.

* In this case, *King Line, Ltd. v. Westralian Farmers, Ltd.*, decided by the House of Lords in 1932, the fortuitous gain from a depreciation of currency was more direct. The shipowners owed commission for the shipping of Australian grain. The commission was payable in "pounds sterling." But were these British pounds, as the Australian company contended, or the less potent Australian pounds, as the British company contended. The answer to the question meant the difference between £872 6s. 1d. and £671 0s. 1d. The currency intended, said the House of Lords, was that of the country where the sum payable was due: "The currency of both countries alike consisted of pounds, shillings, and pence; and any sum to be paid in Australia was to be paid in Australian pounds, shillings, and pence. If the parties intended payments to be made in British sterling, or the equivalent of British sterling at current rates of exchange, they could expressly say so."

EXCHANGE RATES.

| Place. | % | Method of Quoting. | Par of Exchange. | July 7th. |
|-----------------|--------|--------------------|------------------|-------------|
| New York ... | (2½) | \$ to £ | 4·86½ | 3·56¼-57½ |
| Montreal ... | — | \$ " £ | 4·86½ | 4·05-4·07 |
| Paris ... | (2½) | Fr. " £ | 124·21 | 90½-91½ |
| Brussels ... | (3½) | Bel. " £ | 35·00 | 25½-25½ |
| Milan ... | (5) | Lire " £ | 92·46 | 69¼-70½ |
| Switzerland ... | (2) | Fr. " £ | 25·22 | 18¼-18½ |
| Athens ... | (11) | Dr. " £ | 375·00 | 550-570 |
| Helsingfors ... | (6½) | M. " £ | 193·23 | 230-240 |
| Madrid ... | (6½) | Pts. " £ | 25·22 | 43¾-44½ |
| Lisbon ... | (6½) | Escu. " £ | 110·00 | 109¼-110½ |
| Amsterdam ... | (2½) | Fl. " £ | 12·11 | 8½-8½ |
| Berlin ... | (5) | M. " £ | 20·43 | 15-15½ |
| Vienna ... | (7) | Sch. " £ | 34·59 | 31-34 |
| Budapest ... | (5) | Pen. " £ | 27·82 | 20-21 |
| Prague ... | (5) | Kc. " £ | 164·25 | 120-121 |
| Warsaw ... | (7½) | Zloty " £ | 43·38 | 31-32 |
| Riga ... | (6) | Lats " £ | 25·22 | 17-19 |
| Bucharest ... | (7) | Lei " £ | 813·60 | 590-610 |
| Constantinople | — | Pst. " £ | 110·00 | 740 |
| Belgrade ... | (7½) | Din. " £ | 276·32 | 210-230 |
| Kovno ... | (7) | Lit. " £ | 48·66 | 34-38 |
| Sofia ... | (8½) | Lev. " £ | 673·66 | 480-530 |
| Reval ... | (5½) | E.Kr. " £ | 18·16 | 12-14 |
| Oslo ... | (4½) | Kr. " £ | 18·16 | 20¼-20¾ |
| Stockholm ... | (4) | Kr. " £ | 18·16 | 19½-19¾ |
| Copenhagen ... | (4) | Kr. " £ | 18·16 | 18¾-18½ |
| Alexandria ... | — | Pst. " £ | 97·50 | 97¾-97¾ |
| Bombay ... | (4) | Per rup. | 1s. 6d. | 1/6-1/6½ |
| Calcutta ... | (4) | Per rup. | 1s. 6d. | 1/6-1/6½ |
| Madras ... | (4) | Per rup. | 1s. 6d. | 1/6-1/6½ |
| Hong-kong ... | — | Per dol. | — | 1/3-1/3½ |
| Kobe ... | (5-11) | Per Yen | 24·58d. | 1/6-1/6½ |
| Shanghai ... | — | Per tael | — | 1/7¼-1/8 |
| Singapore ... | — | Per dol. | 2/4 | 2/3½-2/3¾ |
| Batavia ... | (4½) | Fl. to £ | 12·11 | 8·88-8·95 |
| Rio de Janeiro | — | Per Reis | 5·90d. | 4½d.-5¾d. |
| Buenos Aires | — | Per dol. | 47·62d. | Nominal |
| Valparaiso ... | — | \$ to £ | 40·00 | Nominal |
| Montevideo ... | — | Per dol. | 4s. 3d. | 29d.-31d. |
| Lima ... | (6) | Soles to £ | 17·38 | 16-80 |
| Mexico ... | — | Pesos " £ | 9·76 | 13-10-13-60 |
| Manilla ... | — | Per peso | 24·66d. | Nominal |

EMPIRE EXCHANGE RATES.

BUYING RATES PER £100.

| | Demand. | 30 days sight. | 60 days sight. | 90 days sight. |
|----------------|----------|----------------|----------------|----------------|
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Australia* ... | 126 10 0 | 127 2 6 | 127 15 0 | 128 7 6 |
| New Zealand* | 111 2 6 | 111 15 0 | 112 7 6 | 113 0 0 |

SELLING RATES.

| | Cable Transfers. | Demand. |
|---------------------|------------------|----------|
| Australia* | £125 0 0 | £125 5 0 |
| New Zealand* | £109 12 6 | 109 17 6 |

| | Buying rate. | Selling rate. |
|------------------------------------|----------------------|-----------------------|
| | £ s. d. | £ s. d. |
| S.A. Union Territory (T.T.'s)* ... | 74 15 0 | 75 15 0 |
| Do. (Sight drafts)* | 75 5 0 | 73 16 3 |
| Rhodesia (T.T.'s) | $\frac{1}{4}$ % dis. | $\frac{1}{4}$ % prem. |
| Do. (Sight drafts) | $\frac{3}{8}$ % dis. | $\frac{3}{8}$ % prem. |

* Per 100 London pounds.

CHAPTER VII.

THE VALUE OF MONEY:

METHOD OF MEASURING VARIATIONS.

Ambiguity of the Term "Value of Money."—Before we consider the causes affecting the value of money, we had better define our terms. To the economist the *value of money* is what money will exchange for. It is the purchasing power of money; if the value of four eggs is a shilling, then the value of a shilling is four eggs. The value of money is high when it will buy much of other things (*i.e.* when prices on the average are low); the value of money is low when it will buy little of other things (*i.e.* when prices on the average are high). To put the matter formally: the value of money varies inversely as general prices—falling as these rise, rising as these fall.)

In the language of the money market the "value of money" has, however, another sense; it is the price paid for the transfer of the control of capital, in other words, it is the interest on money. Some have capital available for investment on loan; others seek capital for productive or unproductive consumption. The latter are very willing to pay for this control of capital. The rate of interest paid for the transfer is commonly called the value of money; money is "dear" (its value is high) when much must be paid in order to have control over it: money is "cheap" (its value is low) when little need be paid to obtain control over it. How, for example, does one interpret this statement: "Money was so dear that some borrowers were forced into the bank"? Well, the rate of interest ruling in the Money Market—the rate at which holders could discount approved bills—was high. It was in fact not greatly different from the published

rate of the Bank of England, to which some sellers of bills were obliged to have recourse.

There is no connection between the "values." Prices may be low, so that value in the economic sense, or the purchasing power of money, is high, while rate of interest is high; that is value in the mercantile sense, or the interest on loans, is also high. This was so in the tenth century, as compared with the twentieth. Interest was high (money was dear to borrow) and prices were low (money was dear to buy). With us now interest is low. In other words, money is cheap to borrow; a trader able to furnish good security can obtain the control of capital by a small payment: on the contrary, as compared with a century ago, prices are high. In other words, a monetary income of a fixed amount commands less of real income than it did.

Moreover, when we realise clearly that interest on money is reckoned as so much per cent., it is clear that interest is independent of general prices. If yield on an investment in Consols is 5 per cent. this year, and was also 5 per cent. in 1913, then the rate of interest (value in the mercantile sense) is exactly the same, though purchasing power (value in the economic sense) has been lessened. The £100 of the loan buys less of things in general than the £100 in 1913; but then, so does the £5 of interest in 1928, compared with the £5 in 1913.

Meaning of "Value of Money."—To the economist "value of money" is simply an instance of the general theory of value. All "goods" possess properties that enable them to satisfy a human desire; and these properties are independent of other goods—are, if you like, intrinsic in the goods themselves. Bread in itself possesses the property of ability to satisfy hunger; a pair of kid gloves possesses the property of ability to provide an attractive covering for the hands; the light of the sun possesses the property of ability to afford a genial and exhilarating warmth. All three are goods. Value arises, however, when we *compare* goods. Some "goods" are available for us in less quantity than we wish: they can only be obtained by labour and sacrifice, only by giving up a

portion of our time and energy. They are not free goods. But they satisfy a more or less intense desire; and the strength of this desire helps to decide what we are prepared to exchange for them. It helps, that is, to decide their value—which is their *relation* towards other “goods.”

“Value” is an Accidental Property.—Value is an accidental not an essential property of things; it arises simply because there is not enough to go round. Value disappears in the presence of superfluity. If, by some revolution of human affairs, good wheat bread became as plentiful as the air of heaven, bread would cease to have value: it would lose this accidental property due to a relative scarcity. Value always implies a comparison. It is a relation between a commodity and what must be given up for that commodity, between a commodity and the command of that commodity over others. So with gold and with the “money” that in the modern world acts as the representative of gold. The “value of gold” is its purchasing power. That value is high when an ounce of gold exchanges for a great amount of the necessaries and comforts of existence; that value is low when the ounce exchanges for a small amount.

Value, we say, is an expression of the comparison of one thing with others; it is an arrangement in an order of precedence. And in our monetary economy what determines the order is the *amount of money* commanded. That is, *price* measures *value*; price is value expressed in money. We arrange things in order of value when we state the market price of those things; a pound of silver is more valuable than a pound of iron, not because men can make more use of it, but because, the state of things being as it is, it costs more. The value is ascertainable from the price; if a cow costs £20 and a sheep £2, then we are justified in saying that a cow is ten times as valuable as a sheep.

Value is the market expression of the preferences of men; and as we measure those preferences by the amount of money men are prepared to pay to gratify them, we may say that value expresses the relative *prices* of things. Price is the value of a thing in terms of money.

Ordinary observation, however, and a reference to price lists of varying times tell us that prices are not invariable, and that at particular times they change rapidly. Now, upon what does the value of money depend? What causes make that value rise? What causes make it fall? And what is the best way of measuring the variation in value? We have here, you note, a combination of hotly debated practical questions and questions into which mere speculative curiosity probes.

“Standard of Value.”—We have spoken of money as providing a *standard of value*. The ideal standard is, perhaps, one that does not vary with time or place. If, now, we are asked whether gold or silver constitutes such a standard, we shall be obliged to say “no.” There have been great variations in that value. On occasions, indeed, the variations have been startling and upsetting. We are told, for instance, that the discovery in 1546 of the mines of Potosi, whence silver could be obtained with surprising ease, increased the yearly supply of new silver to Europe from about £150,000 to £2,100,000—fourteen times as much. The result was an embarrassing rise of prices.

During the latter part of Elizabeth’s reign the money coming to the Crown failed to pay the household expenses of the queen. For then “dues of the Crown,” not grants by Parliament, constituted the bulk of the revenue. What would have amply satisfied her father, Henry VIII., though he had expensive tastes, seemed to go but a little way; and Elizabeth was constrained to make use of the hospitality of her nobles. When James came to the throne this device was not available for him: the nobles did not want him, and he had a family dependent. His reign was accordingly filled with dissensions between him and his Parliaments; they charged him with secret extravagances; he grumbled about their niggardliness. The confusion wrought in men’s minds by changes in the value of money caused most of the trouble.

We have during recent years experienced so startling changes in prices—both prices in general and prices in relation to one another—that all men nowadays take an interest

in the Index Numbers denoting such changes. Prices change in relation to one another: there is apparent, for example, a constant tendency for a bushel of wheat to exchange for a greater and greater length of calico. Prices also change in general: that is, a given weight of gold will purchase now more, now less, of commodities in general.

The causes of the changes in relative prices are infinite: an ingenious device, cheapening production greatly, will diminish the value of a commodity in relation to others unaffected by the improvement; the discovery of a new use to which a commodity may be applied, so that the desire of men for the commodity becomes more intense, will increase the value. With these relative changes we are not concerned. We are studying changes of prices in general.

General Prices.—A general change in prices is certainly something of an abstraction. The term “commodities in general” needs some effort of mind to grasp; it is more of an abstraction to grasp the relation between “commodities in general” and money. To make this abstraction concrete the economist brings forward his Index Number.

Index Numbers were once of little more than academic interest. For prices moved slowly and, by the ordinary processes of bargaining, it was easy to effect necessary adjustments. The Index Numbers are now of practical necessity; they are called for, owing to rapid changes in the level of prices, in order to adjust long-term contracts (made on a money basis) to the movement of prices. When money wages are fixed over a period during which the cost of living rises, the wages buy less of real goods at the end of the period than at the beginning. Wage disputes arise, and, when no satisfactory way of measuring the rise in prices exists, these disputes are difficult to settle. When a system of measuring changes exists that commands general confidence wage agreements are attained with little friction. In the United Kingdom agreements between organisations of employers and of work-people provide for the regular and automatic adjustment of the wage rates of about three million workers by sliding scales, in accordance with variations in the “cost of living.”

Averages are Necessary.—The problem is, you see, how to estimate the changes in general prices, or, looked at from another point of view, in the command that money has over commodities—in the purchasing power of money. Index Numbers seek to make the abstraction “General level of prices” into something concrete. From our very definition itself of *value*, that of money is reflected in the prices of all other commodities. “A general rise in prices” is another way of saying “a fall in the value of money”; a general fall in prices is tantamount to a rise in the value of money. Those having a right to money are affected for the worse by a fall in the value of money, for the better by a rise.

In order to replace the irregularity of an individual price by the regularity of prices in general, dealers in statistics proceed as follows. A number of the most important commodities are selected; their prices month by month are ascertained as precisely as is practicable; a particular year is chosen as the basis of comparison, prices for that year are reduced to 100, prices for other years may then be exhibited as a percentage of those for the basic year.

Take for illustration three prices only: suppose in 1913 a 4-lb. loaf cost 6d., but that in 1932 it costs 8d.; in 1913 a train journey from London to Liverpool cost 15s., in 1932 it costs 30s.; in 1913 a quart of milk cost 4d., in 1932 it costs 6d. Now 8d. is $133\frac{1}{2}$ per cent. of 6d.; 30s. is 200 per cent. of 15s.; 6d. is 156 per cent. of 4d. The average per centage is thus 161, and this would serve as an Index Number, a very rough one, for 1932, as compared with 1913. It shows how many pounds must be spent in 1932 to buy what £100 would have bought in 1913. In practice, you will readily suppose, a far greater number of commodities is taken, and special care is given that the price records are reliable.

✓ The *higher* the Index Number, the *lower* is the value of the money; the *lower* the Index Number, the *higher* the value of the money. The larger the number of commodities and of services taken the more accurate will the Index Number be; and if some attention is paid to the relative importance of the commodities selected—if, for instance, a variation in the price of bread is regarded as three times as important as a variation

in the price of milk—there is a nearer approach to the real state of affairs. I should, for instance, give a distorted view of the real change if I attached as much importance to a change in the price of rice as I do to a change in the price of wheat. The fluctuation in the price of beer is a matter of no concern to a teetotaler; it may be very material to another man.

Recent investigations have, therefore, been inclined to give to each commodity a coefficient corresponding to the business done in that commodity. There seems, however, to be little gained by the added complication. Provided that some wisdom is shown in the selection of the articles for comparison, the "weighted average" does not differ materially from the simple average: either gives a result accurate enough for practical purposes. Prices have a remarkable tendency to move in sympathy with one another. Nor is this strange. For all are influenced by transport improvements, by improvements in methods of production, by all we call progress; and by the feelings of the business world.

Standard of Comfort.—A method seeking to be more scientific than this arbitrary method is that of taking as the basis of comparison the expenditure of a family in a definite station of life, to estimate what the food (bread, meat, groceries, and so on), clothing, lodging, heating, would cost at varying periods. The resulting figures, representing the cost at different epochs of an identical mode of life (standard of living), give information on the movement of general prices. This is the Ministry of Labour's method, described in detail below. You will admit, however, that one can hardly be certain that he is really selecting identical modes of life. Besides, even for the same person the mode of life will vary; if butter becomes dearer one may buy the cheaper margarine. Nor can he place implicit reliance on the figures he receives from those whom he questions: which of us can tell with much certainty how we spent our income last year?

You will have anticipated the statement that in regard to the construction of Index Numbers there is a great diversity of opinions. Almost every self-respecting economist feels

constrained to adopt a new method, or to criticise at length existing methods. Once only papers like the *Economist* and the *Statist* had their system. Of late *The Times* itself has its system. All commercial communities have this means of estimating the course of general prices; Japan and Sweden and Italy have more or less happy solutions of the problem.

Principle of Index Numbers.—All the systems, however, are based on the one big principle: they seek to set aside the irregularity of the individual instance and replace it by the regularity of the big number. The particular is eliminated and replaced by the general. The Index Number is a kind of average. We may well leave to the mathematicians the interminable discussions of the relative merits of the various methods of obtaining that average. Here we shall be content to describe some of the best known methods, and to point out some of the difficulties that arise.

The Point at Issue.—The practical question underlying the effort to measure changes in value is this: how far is our money a good standard for deferred payments? In order that there may be certainty in contracts, I should be tolerably confident that I shall get what I bargain for, that I shall be constrained to pay no more than I covenanted for.

If in 1900 I begin to pay a yearly premium to an Insurance Company on the understanding that in 1920 I should receive £100, I am naturally aggrieved when the £100 in 1920 "goes only half as far"—obtains for me only half of the necessaries and comforts of existence—as it would have done in 1900. The letter of the contract has been performed; I have obtained a right to call for a specified number of pounds. The spirit, however, is wanting: this specified number of pounds will not do the work I expected it to do. Is it possible, in order to avoid unfairness on one side or the other, in order neither to defraud the creditor nor unduly burden the debtor, to stabilise money? Can we make its purchasing power constant?

Some economists say that it is practicable as well as desirable to arrange that the amounts paid to satisfy claims

need not vary. They would have contracts made, not in terms of gold, but in such weights of gold as have a fixed purchasing power. If the value of gold went up they would take from the weight of a dollar—or sovereign, or whatever the unit was called; if the value of gold went down, so that an ounce could purchase less of commodities in general, they would add to the weight.

The sovereign would, therefore, always buy the same amount of composite commodity—made up of lengths of cloth, weights of food, measures of oil and wine. The material sovereign itself would vary, not its immaterial purchasing power: there would, say the advocates of this scheme, be a par not with a fixed weight of gold but with such as should have a fixed purchasing power. The Money Market would be machinery by which one could buy and sell future *Board of Trade Statist* or *Times* or other units of price. We can but faintly imagine how the disputes over the various systems of Index Numbers would be intensified.

The Ministry of Labour's Index Number.—The Ministry of Labour's Index Number is an attempt to make definite the amount of rise and fall in the "cost of living." And since the wages of more than three million of our workers are affected by the figures, it has practical bearing. Adopted as an emergency measure—when prices were fluctuating in an altogether inexplicable way—the method of fixing wages still persists.

The Board of Trade's Index Number has a different purpose. It is meant to show the course of wholesale prices.

The memorandum furnished to Lord Balfour's Committee on Industry and Trade gives an admirable account of these Index Numbers.

Official Statistics of the Cost of Living.—No official statistics of the general cost of living were collected before 1914, but a Weighted Index Number in respect of retail prices of food in London was issued by the Board of Trade. This showed a fall from 1892 to 1896, followed by a steady rise up to and including 1913. There was a slight decline in the early part

FOOD PRICES.

| Articles. | Average Percentage Increase as compared with July 1914. |
|--|---|
| Beef, British— | |
| Ribs | 80 |
| Thin Flank | 51 |
| Beef, Chilled or Frozen— | |
| Ribs | 45 |
| Thin Flank | 16 |
| Mutton, British— | |
| Legs | 97 |
| Breast | 77 |
| Mutton, Frozen— | |
| Legs | 85 |
| Breast | 33 |
| Bacon | 65 |
| Fish | 113 |
| Flour | 80 |
| Bread | 81 |
| Tea | 59 |
| Sugar... .. | 80 |
| Milk | 59 |
| Butter— | |
| Fresh | 63 |
| Salt | 61 |
| Cheese | 58 |
| Margarine | 4 |
| Eggs (fresh) | 45 |
| Potatoes | 126 |
| Weighted Percentage Increase of above articles | 67 |

The results under the various main headings for the same date were as follows:—

PRICES—VARIOUS ITEMS.

| | |
|-----------------------------------|-----|
| Food (see previous Table) | 67 |
| Rent | 47 |
| Clothing | 130 |
| Fuel and Light | 80 |
| Other items | 80 |
| Weighted General Average Increase | 73 |

of 1914, and just before the war the figures indicated that the cost of food in London was approximately 7 per cent. higher in 1914 than in 1892.

It was not until 1915 that the present system of compilation was inaugurated. This is designed to produce an index showing the average percentage increase in the cost of maintaining unchanged the pre-war (*i.e.* July 1914) standard of living of working-class families, entirely irrespective of whether that standard was adequate or not. The figure is based upon returns received regularly by the Ministry of Labour from the various parts of the country, in respect of the cost of (i) food, (ii) rent, (iii) clothing, (iv) fuel and light, and (v) certain other articles of domestic necessity, *i.e.* soap, soda, domestic ironmongery, brushware and pottery, tobacco, fares, and newspapers. These particulars are related to information which is available as to corresponding prices in 1914.

The average increase in the cost of all items are combined in accordance with their relative proportions in the average pre-war working-class family expenditure. A list of articles of food and the proportions in which they were consumed had been worked out some years before the war by examining the budgets of about two thousand working-class families from areas all over the country. This list was extended during the war to include other articles than food and brought up to date for use as a basis of the present index number. The resultant figure is issued monthly by the Ministry of Labour as the general average increase for the month. The results for July 1st, 1925, may be given as an example. The table on page 100 gives the details as regards food for that date, and shows the articles taken into account.

If allowance is made for the changes in taxation since July 1914, on the commodities included in these statistics, the average increase is about 2 per cent. less.

It should be borne in mind that this figure is calculated solely upon the basis of *retail* prices, and it should consequently not be confused with the index number of *wholesale* prices issued monthly by the Board of Trade. The phrase "cost of living" should be read as referring to the index figure reached by the method just described.

The manner in which the fall in general prices contributed to the world trade depression during 1928-1932 is effectively shown in the extract from the Macmillan Report (Appendix IV.).

Wholesale Prices and Retail Prices.—For the Bank of England's summary of returns for July 1932, see facing Table.

Demand and Supply of Money.—By the moving upwards or downwards in the price of a thing, the Supply is adjusted to the Demand; the amount that is put upon the market at that price equals the amount that will be bought in the market at that price. So it is with money. But what is the "Demand" for money, and what the "Supply"? Obviously demand is not co-extensive with desire; if it were so, we should be troubled to put limits to it. There must be some power of satisfying desire; and that power is something that can be sold—the services we can perform, the goods at our disposal, constitute our demand for money. The present demand for money is made up of all the goods on the market including all services proffered for wages: they make up the *price offered* for money. If that price becomes greater—if more goods are placed on the market, if more services are proffered, then the value of money rises. Its purchasing power becomes higher. A piece of gold, or its accredited representative, has a greater command; it buys more wheat, it hires more labour.

The Supply of money consists of the money available for purchase, seeking goods or services as the goods or services are seeking money. It is not, of course, money lying idle. But what is this money? Gold, certainly, and the representatives of gold—token coins and bank notes. The overwhelmingly greater part, however, is not tangible and material; it is intangible and immaterial. The "money" of the money market is credit, banker's credit; and the violent fluctuations in the supply result from this fact. A mass of such "money" may be annihilated in a moment: a bank failure, for instance, giving a severe shock to public confidence, would do this; political upheavals, disasters to

COMMODITY PRICE INDEXES.

1—WHOLESALE.

Board of Trade Journal.

July 1932.

2—RETAIL.

Ministry of Labour Gazette.

BOARD OF TRADE INDEX 1913 = 100.

MINISTRY OF LABOUR
JULY 1914 = 100
(1st of following month)

| | Cereals. | Meat and Fish. | Other Foods. | TOTAL FOOD. | Iron and Steel. | Coal. | Other Metals and Minerals. | Cotton. | Wool. | Other Textiles. | Miscellaneous. | TOTAL NOT FOOD. | ALL ARTICLES. | MINISTRY OF LABOUR | |
|-------|----------|----------------|--------------|-------------|-----------------|-------|----------------------------|---------|-------|-----------------|----------------|-----------------|---------------|--------------------|--------------|
| | | | | | | | | | | | | | | Cost of Living. | Retail Food. |
| 1925 | 163.5 | 161.7 | 173.2 | 166.5 | 126.0 | 146.0 | 121.6 | 209.8 | 196.9 | 171.9 | 157.4 | 154.9 | 159.1 | 175 | 171 |
| 1926 | 150.2 | 153.8 | 159.7 | 154.8 | 123.6 | 184.6 | 120.1 | 158.3 | 169.5 | 147.5 | 145.0 | 144.3 | 148.1 | 172 | 163 |
| 1927 | 152.7 | 137.5 | 165.4 | 152.0 | 119.9 | 133.6 | 111.9 | 154.7 | 170.2 | 138.5 | 142.5 | 136.0 | 141.6 | 167 | 159 |
| 1928 | 149.1 | 140.9 | 166.7 | 152.3 | 112.3 | 117.9 | 107.1 | 164.2 | 185.9 | 137.8 | 142.3 | 133.9 | 140.3 | 166 | 157 |
| 1929 | 137.8 | 146.2 | 151.9 | 145.3 | 114.2 | 124.5 | 116.0 | 154.4 | 165.6 | 131.6 | 135.5 | 131.7 | 136.5 | 164 | 154 |
| 1930 | 109.0 | 140.2 | 132.4 | 126.6 | 112.7 | 121.4 | 95.0 | 121.2 | 122.4 | 101.7 | 123.7 | 115.5 | 119.5 | 157 | 143 |
| 1931 | 89.8 | 116.5 | 131.1 | 111.7 | 104.9 | 122.4 | 78.2 | 96.8 | 99.9 | 80.5 | 105.6 | 100.1 | 104.1 | 147 | 130 |
| 1929 | | | | | | | | | | | | | | | |
| Oct. | 137.4 | 148.1 | 149.7 | 145.0 | 115.3 | 128.4 | 114.4 | 151.7 | 154.2 | 130.1 | 137.1 | 131.2 | 136.1 | 167 | 159 |
| 1931 | | | | | | | | | | | | | | | |
| June | 87.4 | 114.6 | 141.3 | 113.3 | 103.9 | 118.8 | 73.6 | 95.4 | 96.8 | 77.0 | 105.3 | 98.0 | 103.2 | 147 | 130 |
| July | 85.0 | 114.7 | 132.0 | 109.5 | 103.0 | 118.5 | 74.8 | 96.4 | 95.9 | 76.7 | 106.3 | 98.2 | 102.2 | 145 | 128 |
| Aug. | 84.8 | 117.4 | 124.1 | 107.8 | 102.6 | 118.5 | 72.8 | 86.3 | 94.9 | 75.7 | 102.2 | 95.1 | 99.5 | 145 | 128 |
| Sept. | 85.1 | 115.9 | 125.5 | 107.9 | 101.8 | 124.1 | 73.3 | 87.1 | 91.1 | 78.4 | 98.7 | 94.6 | 99.2 | 145 | 128 |
| Oct. | 94.0 | 115.0 | 130.8 | 112.8 | 103.6 | 127.8 | 81.6 | 94.5 | 100.0 | 84.1 | 102.9 | 99.9 | 104.4 | 146 | 130 |
| Nov. | 102.5 | 111.5 | 130.6 | 114.7 | 103.8 | 128.8 | 82.9 | 97.7 | 104.0 | 90.5 | 104.5 | 102.0 | 106.4 | 148 | 132 |
| Dec. | 100.5 | 109.0 | 129.1 | 112.7 | 103.9 | 128.6 | 86.1 | 97.2 | 102.8 | 89.5 | 104.4 | 102.1 | 105.8 | 147 | 131 |
| 1932 | | | | | | | | | | | | | | | |
| Jan. | 99.4 | 109.4 | 135.3 | 114.3 | 104.2 | 130.4 | 87.0 | 97.4 | 100.1 | 86.8 | 101.3 | 101.3 | 105.8 | 147 | 131 |
| Feb. | 100.3 | 105.1 | 137.1 | 114.2 | 104.3 | 128.5 | 85.0 | 98.4 | 98.1 | 86.5 | 100.7 | 100.7 | 105.3 | 146 | 129 |
| Mar. | 101.6 | 104.8 | 140.5 | 115.6 | 104.3 | 126.7 | 79.2 | 98.2 | 94.1 | 83.5 | 99.2 | 98.9 | 104.6 | 144 | 126 |
| Apr. | 98.6 | 108.5 | 138.3 | 115.1 | 104.0 | 126.1 | 76.1 | 93.0 | 90.4 | 79.8 | 94.6 | 95.8 | 102.4 | 143 | 125 |
| May | 97.3 | 109.4 | 136.6 | 114.4 | 103.4 | 118.5 | 76.7 | 89.5 | 88.0 | 76.5 | 93.5 | 93.8 | 100.7 | 142 | 123 |
| June | 92.6 | 105.7 | 137.5 | 111.6 | 102.9 | 118.7 | 74.4 | 85.9 | 81.8 | 74.6 | 90.3 | 91.3 | 98.1 | 143 | 125 |

the naval and military forces, anything tending to depression in a nation destroys "money."

On the other hand, anything that raises the public confidence, that tends to a buoyant feeling in the business world, whatever makes manufacturers and traders convinced that all will come right, increases the "money," the credit, of a country. The quantity of wheat is dependent upon the amount of labour exerted in the fields and upon the genial help of Nature: wheat has a very real cost of production. Only in a very restricted sense can we speak of the cost of production of money.

Efficiency of Money.—We should note, too, that a coin rapidly transferred, effecting many purchases, is of more importance in the "supply" of money than a coin clinging to its owner. A shilling stored away is no part of the supply of money. We need, that is, to take into account the effectiveness of money—its efficiency, or power of doing work. "The nimble sixpence does the work of the slow shilling," the proverb tells us. The old illustration of the effectiveness of money was provided by the pair of enterprising people who prepared against the Derby a barrel of home-made beer. They would sell at sixpence a pint and halve the proceeds. On the road to the Downs John suggests handing over to Tom the one coin between them, a three-penny piece, and of drinking a pint. Tom agrees; but shortly retransfers the coin and drinks his pint. The road being long and the day hot, the barrel was empty when the course was reached; the one small coin in its many passages had caused the whole amount of beer—valued at many shillings—to be bought and sold.

Applying these terms we can restate the value of money.

Value of Money Restated.—An increasing *Demand* for money (an eagerness to sell goods) raises the value of money or, in other words, makes prices fall.

An increasing *Supply* of money (an increase in the coin or notes circulating, and especially in the amount of credit available) lowers the value of money or, in other words, makes prices rise.

You will recognise that, as a rule, when business is brisk,

when goods are being bought and sold rapidly (*i.e.* when there is a great *Demand* for money) there is also a readiness among traders to trust one another (credit is good, so there is a great *Supply* of money). Whether prices in general rise or fall will then be dependent upon the relative increase. At times, however, Demand and Supply will move in opposite directions.

During the war years, production of the ordinary commodities of trade slackened; men were diverted from the work of production to the work of destruction; the rapid interchange of commodities was prevented through lack of means of transport, for these means were largely occupied in the transference of men and munitions of war; the holders of stocks were reluctant to part with them, since prices were perceptibly soaring. There was little *Demand* for money. At the same time there was, throughout Europe, an astonishing increase in the Supply of money; it grew with a speed not exceeded by Jack's beanstalk. Not only was the ordinary currency supplemented or replaced by paper substitutes, but the various governments—our own included—"manufactured" credit to an enormous extent.

The method of manufacture is clearly explained in the Report of the Committee on Currency and Foreign Exchanges after the war (1918): "Suppose, for example, that in a given week the Government require £10,000,000 over and above the receipts from taxation and loans from the public. They apply for an advance from the Bank of England, which by a book entry places the amount required to the credit of Public Deposits in the same way as any other banker credits the account of a customer when he grants him temporary accommodation.

"The amount is then paid out to the contractors and other Government creditors, and passes, when the cheques are cleared, to the credit of their bankers in the books of the Bank of England—in other words, is transferred from the Public to 'Other' Deposits, the effect of the whole transaction thus being to increase by £10,000,000 the purchasing power in the hands of the public in the form of deposits in the Joint-Stock Banks and the bankers' cash at the Bank of England by the same amount.

“The bankers’ liabilities to depositors being thus increased by £10,000,000 and their cash reserves by an equal amount, their proportion of cash to liabilities (which was normally before the war something under 20 per cent.) is improved, with the result that they are in a position to make advances to their customers to an amount equal to four or five times the sum added to their cash reserves, or, in the absence of demand for such accommodation, to increase their investments by the difference between the cash received and the proportion they require to hold against the increase of their deposit liabilities.

“Since the outbreak of war it was the second procedure which in the main was followed, the surplus cash having been used to subscribe for Treasury Bills and other Government securities. The money so subscribed was again spent by the Government and returned in manner above described to the bankers’ cash balances, the process being repeated again and again until each £10,000,000 originally advanced by the Bank of England created new deposits representing new purchasing power to several times that amount.”

The State, in order to pay its current expenses, had inflated the currency. And the process went on for some years after the War. One of the resolutions at the Genoa conference of economic experts in 1922 was: “The industry of Europe cannot hope for a permanent return to prosperity so long as it has to bear, either directly in the form of taxation or indirectly in the form of inflation of currencies, the most insidious and objectionable of all forms of taxation, a burden of Government expenditure which is beyond its capacity.”

What exactly is meant by calling inflation of currencies “the most insidious and objectionable of all forms of taxation”? The State has the sovereign right of inflation; it can decree what shall be regarded as a lawful release from debt, and what it decrees may have no relation to cost or production. It may be a credit in a bank against which the State authorises itself to draw cheques, it may be the paper nominally equivalent to so much gold. In any event the money that has come into being by the mere decree of the State competes with the existing money; in other words, the claims upon things offered for money are increased.

And as the claims are multiplied their separate worth diminishes: if two pound notes run after the same thing as a sovereign ran after before, then the price of that thing will inevitably be doubled. The State can create money; but it cannot create the real goods, the bread and bacon and boots, that will be exchanged for the money. By a continuing process of inflation the various Governments confiscated, secretly and unobserved, the major part of the money of their citizens. The claims attested by money, in the hand of the citizens are the reward of services conferred; the claims that the State creates have nothing behind them except the power of taxation.

When the quantity of money increases, other things remaining practically the same, prices go up. When in the beginning of 1915 the Australian troops, their pockets well lined by a munificent government, came to a town—to Alexandria, perhaps, where the ill-paid French troops had formerly dictated prices—up went prices. The British soldiers' pay fell in purchasing power as it came into contact with the bigger colonial pay. Or rather, as more money came into the town and as the supply of things bought and sold could not be as rapidly increased, even though the enterprising peoples of that cosmopolitan town did their best to provide means of spending, prices went up with astonishing rapidity.

The problem in regard to value is not, we should note, the same as the problem in regard to properties like length and weight. These latter are physical properties, and at a very early date certainty in the units of measurement was assured. The great ceremony at St. Bartholomew's Fair was the procession of the Merchant Taylors of London. Having dined and drunk well, they carried their silver yard-stick in stately pomp so that the yard-sticks of the country clothiers might be tested. The meticulous care taken nowadays to assume certainty is illustrated by a similar ceremony. Thus we read in *The Times*:—

THE STANDARD YARD AND POUND.

HOUSE OF COMMONS COPIES RE-INTERNEED.

In the presence of the Speaker, various officials of Government Departments and members of Parliament, the copies of the Imperial

Standards of the British Yard and the British Pound were re-immured in the wall on the public staircase leading to the Committee Rooms of the House of Commons yesterday, after removal for verification.

Report was made that comparisons with the Imperial Standards showed that these copies had slight variations. The yard measure was one-tenthousandth of an inch shorter than the Imperial Standard, while the pound weight was 0.00286 grain heavier than the Standard.

The copies were displayed on a table in the lower waiting hall of the House, and were inspected with great interest. The measure consists of a bar of bronze, with the exact yard marked upon it; while the pound weight "copy" is made of platinum.

Mr. Percy Ashley, Assistant Secretary to the Board of Trade, stated that the old Imperial Standards having been lost in the fire which destroyed the Houses of Parliament of 1834, new Standards were constructed in 1844 (for the pound) and 1845 (for the yard); at the same time four sets of copies were ordered by Parliament to be made, of which two were to be deposited at the Royal Mint and the Royal Observatory, and the fourth was to be immured at the Houses of Parliament.

After inspection the copies were replaced in their original boxes, which were hermetically sealed in a lead sheathing and placed in an outer box, which was then re-interred in the staircase wall, together with an account of the proceedings signed by the Speaker and others present.

The value of a thing may alter, however, not from what happens to the thing itself, but from what has happened to the things taken for comparison. We must have a unit for the measurement of debt. It seems to have been assumed that by making this unit an invariable weight of an invariable substance—or of a *right* to it—we could assure ourselves of its stability. That is not so, however. Certainly, so long as the Coinage Laws were obeyed, the sovereign as a substance could not alter. The Coinage Laws settle how much fine gold shall be regarded as a unit for measuring value. The law cannot, though, settle what the value, the purchasing power, of the sovereign shall be. It cannot in ordinary times decree how many loaves or yards of calico it shall buy. And this is what matters. The trader is not seeking many monetary units; he is seeking many commodities in exchange for what he sells. The worker whose services create a debt due from the employer, is anxious not that his debt shall be big numerically, but that it shall enable him to obtain much food and clothing, many of the amenities of civilised life.

Quantity Theory of Money.—This idea, that the power of a monetary unit over the market varies inversely with the number of units competing with it in the same market, is only a special case of the theory of value. A community will be accustomed to keep in hand money enough to carry on its current business, to pay for its train fares and lunches and other incidental expenses. Suppose we call a selection of the goods bought a *unit of consumption*. Suppose, too, that the habits of the people concerned in regard to money is to keep in hand enough money to exercise command over a of such units. Now if n is the number of monetary units in circulation; and if p stands for the price, it follows that

$$n = pa.$$

In other words n and p vary as one another. So long as a remains constant (so long as the monetary habit of the community does not change), to increase n by 10 per cent. is to increase p by 10 per cent. The elasticity of the demand for money is measured by unity. Even if we introduce the added idea that part of the n will serve as a basis for credit, we have exactly the same result. If a' represents bank deposits and r represents the ratio of bank cash that the banker deems it advisable to maintain against possible demands, then

$$n = p(a + ra').$$

There is a *direct* proportion between the quantity of money and the price level.

CHAPTER VIII.

CREDIT.

The Nature of Credit.—We spoke in Chapter I. of the manner in which the device of Money enables men more readily to co-operate with one another. Usually without any formal agreement, men have concurred in adopting a medium of exchange; and the medium of exchange has become the measure of value. This concurrence, tacit or declared, has enabled trade and division of labour—with all its economic advantages—to develop.

When the primitive trader parted with his goods for a portion of metal—or for anything else eagerly sought after—he obtained tangible security. He obtained what gave him the comforting assurance that others would supply his wants at the time and in the manner he desired. If he could get this assurance without the transfer of something material, so much the better. There would be a saving in time and in material. Credit, the belief in another's promises, does do this. Indeed, nowadays, when we speak of money, we do not think merely of coin, or even of coin and bank notes. We include all instruments and tokens that serve readily to effect the transfer of property from one owner to another. We include, that is, paper promises, or credit instruments.

A merchant relinquishes his goods, a landowner gives up the evidence of his ownership, in return for a slip of paper. Are these the acts of reasonable men? Why are we perfectly contented, in return for the services we have rendered, to take the more or less bulky parcel of bank or of Treasury notes proffered to us, or the cheque enabling us to make good our claims on a person other than the one we have benefited? Our ever-so-many-times-great-grandfather in Queen Elizabeth's day would have wanted something more substantial

than pieces of paper, even though bearing the mark of the State. He had not become habituated to the economising expedients.

We take the notes not at all because we want to keep them—to paper our houses, to light our fires with them. We take them because we are perfectly sure that, when we wish to obtain food or clothing, when we wish to repay another for services rendered to us, we shall be able to do so by their means. Others will be willing to accept them from us at about the same valuation at which we accepted them; and the one property required of money is that it shall be readily acceptable. Whatever is readily acceptable in exchange for goods is money.

Growth of Credit.—In our times, confidence between man and man, the conviction that men will fulfil their obligations, has so grown that we take a promise for the performance. The promise of a dinner to-morrow will not satisfy my hunger to-day; the promise of a new suit next Spring will not enable me to go gaily clad next Sunday. But the promise of gold will do as good service in facilitating exchanges as the gold itself does. The promise is an undertaking and a certificate. But then the gold piece itself may, as money, be looked upon as no other than such an undertaking and certificate.

As a certificate it gives assurance to the world at large that its holder has done good service for the community. He has helped to produce the wheat for its bread, the wool for its clothing; he has entertained his fellows by song and dance; he has written a book that the world will not willingly let die; he has painted a picture from which generations to come will draw inspiration; he has conferred benefits upon them by directing the affairs of a great empire. In one way or another he has contributed his portion to the general store; and the coins or notes bear witness to the fact.

As an undertaking, the note or coin is a promise from the community to supply its holder with whatever he requires—up to the amount of the certificate. “A simple invention it was in the old-world Grazier—sick of lugging his slow Ox about the country till he got it bartered for corn or oil—to

take a piece of leather, and thereon scratch or stamp the mere figure of an Ox (or *Pecus*); put it in his pocket, and call it *Pecunia*-Money. Yet hereby did Barter grow Sale, the leathern money is now Golden and Paper, and all miracles have been out-miracled: for there are Rothschilds and English National Debts; and whoso has sixpence is sovereign (to the length of sixpence) over all men; commands cooks to feed him, philosophers to teach him, kings to mount guard over him—to the length of sixpence.”

We could, indeed, imagine a state of things in which, even though money were not in question, men would thus contribute to a common fund of comforting things, certain that on request they could draw from that common fund. We have not yet reached such a state; but by the use of paper, representing money and taken in lieu of it, we have approached it.

Credit becomes a Claim.—Similarly, we could, giving our imagination further exercise, picture to ourselves a central warehouse, into which the nations of the world conveyed their products, receiving from the storekeeper a certificate for the value of their goods. By means of “titles,” the paper that by usage of merchants has become not alone the representative of goods but the accepted evidence of property in the goods, this is, in fact, realised. Rights to property become identified with the market value of property; and at that value pass as readily as the gold in which they are measured.

The Bill of Lading, for example, stands for a shipment of wheat on the sea from Karachi to London. During the voyage the ownership of the wheat has changed several times; the Bill of lading has been accepted in faith for the wheat; and the wheat has, we may in our optimism suppose, passed into hands that can make the most use of it.

To be sure, the coins or notes we get do not, as such an instrument does, specify the goods upon which they constitute a claim. That matters little; it simply leaves to us the option of directing our demand to those things that, at the moment, make the strongest appeal to us. Money, we may say, gives us a general authority; a Bill of Lading, a Warehouse Receipt, or a Wheat Certificate, gives us a special authority. Money,

whether in the form of coin or of paper, is an option bearer. The Bill of Lading gives no option, for it simply entitles its holder to specified goods.

The essence is the same, however. Both the Bill of Lading and the silver coin are certificates entitling the holders to claim goods—in small part of their own production, in very large part of others' production. They all—the money that is potentially anything, the "titles" that are identified with specified property—enable us, while obscuring the fact, to co-operate with one another. The more claims we have, the more we can enjoy; but the claims are not our real income; they are merely an intermediate step towards it.

Our Close Dependence upon Others.—We are told that an American plutocrat, giving a spectacular feast, proudly boasted that the uttermost corners of the earth had been ransacked to provide the luxuries that furnished the tables. Probably he was right. But is there one among us who, having enjoyed his Sunday dinner, might not complacently say the same? Australia and the Indies, America and the Isles of the Pacific have sent their products. Why? What claim had we upon the coffee grower in Java that the fragrant berries should be put at our disposal? What claim upon the New Zealand settler that his land should feed sheep to provide a chief dish? What claim upon the farmer in the next county that he should send us potatoes? These, our providers, know neither us nor the services we perform. But they do know our money, and they want it. The one claim we have upon them is that we have served others; we have a certificate to that effect—a tangible certificate in gold or silver, or one of which the visible signs are figures in a banker's book—and our transfer of the certificate is our demand for the products.

We have grown into one corporation with the world at large, and we feel the effects of the fortunes of men throughout the world. Is there a drought in New South Wales? Then our next winter's suit will cost us more. Does revolution break out in the Argentine? Then leather for our boots will be difficult to get, and Northampton will have its problem of

give the face-value of the bills, less a discount at the published rate. These "fine" bills represent commercial transactions. The real debtors in these transactions, however, have made arrangements for their acceptance by a London Bank or by an Accepting House. The bills, therefore, are drawn upon the Accepting House or upon the London Bank. When the signature of the Acceptor is upon them there is no risk regarding prompt payment at maturity. The Bank automatically collects the amounts due.

Ordinarily, however, the holder of a bill will not have recourse to the Bank. For he can sell it at a higher price upon the Discount Market. This market consists of several large companies and many private firms of bill-brokers, who make profits by discounting bills at a rate, slightly lower than the Bank Rate, slightly higher than the rate at which they can obtain money. That rate, a rapidly fluctuating one, is the Market Rate of Discount. "Trade bills," bought at a little lower rate than "Bank Bills," are such as are accepted by an ordinary business house. These bills are normally as certain to be met upon maturity as the bank bills themselves are. The fact, however, that the names upon them are not widely known makes them less readily negotiable, and so lessens their value as commercial currency.

Apart from their own capital, the bill-brokers obtain the money they use from two main sources:

(1) They take money from the public on deposit, as the banks do, paying a slightly higher rate than the banks do; the quotation above is, for money that can be withdrawn only after a stipulated notice, $2\frac{3}{4}$ per cent. as against the banks' deposit rate of $2\frac{1}{2}$ per cent. This $2\frac{3}{4}$ per cent. is the rate paid by *Discount Houses at Notice*. Even for "money at call," upon which the London banks do not make an allowance, the discount houses offer $2\frac{1}{2}$ per cent. But—

(2) The discount houses borrow largely also from the joint-stock banks. The loans are either "short" ones, or from day to day—that is "at call." The period of the "short" loan is usually seven days, corresponding to the shortest period for which the banks advertise their *deposit*

allowance. This latter is the interest paid on such deposits—"Deposit Accounts"—as the bank customer stipulates not to withdraw without a given notice. If notice is given, then the banks have time to call in their "short loans" to the discount houses.

The Treasury Bill—which during and since the War has played a part of the first importance in the Money Market—is a promissory note of the Government payable, not on demand, but after the expiration of two or of three months. Since the payment is in the future, the bill is not paid for at its face value. It is tendered for at rates that show adequately the relation between the money seeking investments and the demand for money. If £4,950 is offered for a £5,000 bill due in three months, this implies that the offerer will get $4\frac{4}{9}$ per cent. on his investment, and this may be regarded as the rate of "pure interest" at the time. The rate for Treasury Bills is only slightly below the Bank Rate. If it falls appreciably lower than that rate, the Governor of the Bank realises that his control of the market is no longer effective, and he takes energetic steps to make it effective.*

Relations between the rates can easily be understood. The "Bank Deposit Rate" is fixed at a meeting of the clearing bankers as soon as any change in the Bank of England rate of discount is announced. It is, now that Bank expenses have greatly increased, 2 per cent. below "Bank Rate." The rate at which "Advances to Customers" will be made also depends upon Bank Rate. Such rate is usually put as "one over minimum five." That is, when the Bank Rate is five, a customer who can supply adequate security can usually get accommodation at 6 per cent. This rate is not included in the list above, since uniformity can hardly be looked for. The full expression for a rate applicable to Bankers' Advances would be "one over minimum five, varying."

* In referring to the constitution of the Court of Directors of the Bank of England, the Deputy Governor explained to the Macmillan Committee that there was "the Committee of Treasury—a sort of inner cabinet of the Bank—consisting of nine members. The Governor and Deputy Governor were *ex officio* members, and the rest were elected by secret ballot of the whole Court. From that Committee would come any recommendation for a change in the Bank Rate."

When business is running smoothly the depositor, the banker, and the bill-broker share fairly evenly the profit derived from the possession of capital. The depositor gets $2\frac{1}{2}$ per cent.; the banker lends to the bill-broker at $3\frac{1}{2}$ per cent.; the bill-broker makes the money earn $4\frac{5}{16}$ per cent. It may be well to point out, though, that business does not always run smoothly. At times of money stringency, when the brokers find that funds upon which they had become accustomed to depend are not available, they are obliged to have recourse to the Bank of England for accommodation. The difficulty of getting money on loan "puts the market into the Bank." And, since the Bank makes a rule not to lend for a shorter period than seven days nor at a rate lower than "one half above bank rate," the broker may easily find his margin of profit more than eaten up. In order to carry bills that he has discounted at say $4\frac{1}{2}$ per cent., he has had to borrow at 5 per cent.

Absence of Money is not Necessarily Barter.—It is sometimes asserted that the development of credit has brought us back to barter: "The tendency is by altogether doing away with the instrument of exchange to bring us back to the direct exchange of commodity for commodity, in fine, to barter." The statement can, however, be accepted only with modification. Barter as the result of the development of money economy is very different from primitive barter. For we must remember that money is not only the actual medium of exchange; it is also the standard to which the values of all other commodities are referred.

The suppression of the first function does not involve the suppression of the second. Rather, this second function becomes of the greater importance: the material money is absent, but its now theoretical value still serves us as the measures of other values. The fact that men can trust one another does not allow us to dispense with money. We still want it as a measure.

The introduction of money, metallic or other, made commerce practicable; but men did not at a bound reach the abstract notion of money as merely measuring value. Yet,

as commerce increased and reciprocal dealings became more numerous, the device of representative money was bound spontaneously to suggest itself. Then all that changed hands to consummate exchanges was a piece of paper transferring a title to money. A man has a right to gold; by transferring this right he commands the goods and services of other men. No material money need change hands except between institutions like banks, where the traders keep their money. By means of these banks debts are cleared by being balanced against credits.

A further stage is reached when all banks keep their balances in one central bank. Then all money transactions simply mean ultimately a transfer of credit in the books of this central institution. By means of this transferring of credit we have certainly a return to barter, but with the advantages of a money economy.

We extend the idea, too, to foreign trade, where the Bill of Exchange operates as the instrument whereby claims to gold are transferred. In foreign trade, because money measures, exports and credits pay for imports and debts; the gold shipped from time to time is a commodity sent to make up for deficiencies in other directions.

Summing up the Matter.—We may sum up the matter in this way. From the primitive method of bartering goods for goods, exchanging gradually developed to the notion of a standard or measure—the accepted value of an ox, or a slave, or a woman, or a quantity of wheat, or a weight of metal.

The best measure ultimately comes to be those means of exchange that are most durable and (being most precious and so taking up least space) are the handiest. That is, gold and silver, of officially certified weight and fineness, became the coin and part of the currency of nations. And as the volume of trading transactions grew, the more precious metal became the one standard; and the silver assumed a merely subordinate place.

A further step is the acceptance of a note (certifying ownership of metal) instead of the handling of metal coins. People have faith in the Government or in the bank issuing the note;

and Credit begins. When payments are effected for the most part by means of cheques, which transfer credits, we have the modern banking system. There has been a steady diminution in the trouble, in the risk, and in the delay of transferring property.

A business man nowadays pays his way by passing on the evidence of indebtedness to him; and that is all he need do. He is able to show that money is due to him. The Banker, accepting this evidence, exchanges the bank's credit for the customer's. And the bank's credit becomes a readily accepted means of payment.

CHAPTER IX.

THE BANKER IN MODERN TRADE.

The Need for the Banker.—The Banker and the facilities he affords are indispensable to the modern business man, whether manufacturer or trader, who must usually wait long between the initiation of a transaction and its conclusion. A long interval passes before the clay and timber, the glass and iron, becomes a house habitable by man. Trading operations at all protracted would be impossible unless based upon Credit. The banker enables the trader to turn not only his credits, but his very property, into liquid purchasing power: the Bills payable in three months are discounted and present "money" provided. The banker turns present or prospective property into present purchasing power.

The Beginning of Credit.—In fact the trader, the middleman who to-day plays so great a part in the world's work, developed and could only develop as banking and credit facilities developed. Extended commerce and banking facilities were mutual cause and effect. The method of accepting matters on trust early arose among us; and among us is even now more widespread than elsewhere. We are not more credulous, more gullible than the rest of mankind. We have only had longer experience in finding out that our business men ordinarily perform their business obligations.

In Stuart times, when that man who specialised in "distributing" goods became prominent, the want of a place where money could be borrowed and where surplus cash could be put into safe keeping was keenly felt. Traders with a temporary surplus would entrust their money to an individual goldsmith, or would send it to the London offices of the Goldsmiths' Company. For in the troubled days of the seventeenth century people dealing in what had great value in small bulk were constrained to study the safe custody of their valuables. Clearly it was worth while to devolve upon others the responsi-

bility of preserving one's wealth, though no doubt hoarding was common. Pope's father, we are told, when retiring from his linen drapery in the Strand about this time, carried to his country retreat a strong box containing nearly twenty thousand pounds, and took from it what was from time to time needed for his household expenses.

To-day, however, the hoarding of valuables is resorted to only when political insecurity threatens savings. During the deplorable experience of Russia in 1918-21, men were thrust back into the practices of primitive life: money came to be regarded in its very early sense of a store of value. Credit was dead, and metal money alone served in exchanges.

The Goldsmiths' Company at first stored the money and charged a fee; but later lent a portion at interest to other traders. The Company thereby made a profit from the stored money; but no one was harmed provided that depositors were always able to get their money on demand. In order to increase the amounts deposited with them, the goldsmith after a little while actually paid the depositor, particularly if that depositor undertook not to withdraw his money without notice. He became what we know as a banker, one who holds himself out to receive other people's money in order to keep it safe and return it upon demand. He became a dealer in debts.

The Goldsmiths' Company extended their banking business in two noteworthy directions. The receipts for money deposited with them began to circulate as equivalents of the money deposited; these receipts became, that is, something like our modern banknotes. They were undertakings by the custodian to pay on demand. But, being really more convenient than coin, and being readily accepted while confidence was complete, the demand was as a rule not made.

The traders too, who had deposited their money with the Company, having payments to make, would by a simple device, avoid the trouble and delay of withdrawing their deposits. They began to give their creditors a note to the officials of the Company asking them to pay the person named. So began the system, now so overwhelmingly predominant in the English business world, of payment by cheques. There came

into being the *account current*, withdrawable on demand; and with it the cheque, an instrument for transferring the right to make such a demand.

One of the earliest "cheques" in this sense was that by which the Duke of Bolton transferred to Titus Oates, the notorious informer, a part of the money deposited with Mr. Francis Child. This gentleman was among the first of the goldsmiths that gave up dealing in jewellery and restricted himself to "banking" in the modern sense. It is an illustration of the reasonableness of our confidence in the custodians of our savings that we find the bank of Child still doing business "near Temple Bar." Child's Bank has, like other private banks of London, been absorbed by one of the "Big Five." The banking business is still, however, carried on in the same spot.* Here is the cheque:

* Messrs. Charles Hoare & Co. is said to be the oldest London Bank. It is certainly the oldest "family" bank in London, and one of the few private banks still carrying on business as a separate entity. In a London Directory of 1677 appears an early representative of the family among the "List of all the Goldsmiths that keep Running Cashes." The business was then "At the Golden Bottle" in Cheapside (now No. 37 Fleet Street). An existing receipt for money deposited is said to be the oldest banking document in England:—

Undecimo die Decembris 1633.

Received ye day and year above written of William Hale Esquire for a post fyne charged upon Rowland Hale Esquire upon ye accompt of Henry Coghill Esquire High Sheriff of ye Countie of Herts ye some of three pounds and five shillings of current English money. I say received as aforesaid

By me, LAWRENCE HOARE.

And a cheque (dated on the back July 11, 1656) shows how William Hale, Esquire, worked his account:

Mr. Hoare

Pray pay to the bearer hereof Mr. Witt Morgan fifty four pounds ten shillings and ten pence and take his receipt for the same.

Your loving friend

WILL HALE.

54. 10. 10.

for Mr. Richard Hoare
at the Golden Bottle in
Cheapside.

July 30th, 1689.

Sir,—On sight hereof pray pay unto Ye Rev.
Doctor Tytus Oates or his ord' ye sum of Fifty
Pounds and place ye same

to the account of

Y^r assured friend,
Bolton.

To Mr. ffra. Child,
Near Temple Barre
£50 These

The Cheque.—The essentials of our modern cheque are here, you note. This early cheque or “drawn note,” as it was called earlier, is an order to pay on demand a definite sum to an ascertainable person. Our orders may be couched in more peremptory fashion, but the substance is the same. Our cheques, too, are usually on specially prepared pieces of paper; though you should note that a cheque may be drawn upon any piece of paper at your disposal. And in our days the State, seeking in multitudinous ways to raise money to cope with its enormous expenses, directs that a stamp duty of twopence shall be paid upon each cheque.

The cheque is essentially “an order upon the Banker,” and, since in our country the habit and disposition to give credit is so generally diffused, payment by cheque has become the chief economising expedient for money. Obviously, if the trader making the payment and the trader receiving it keep their money with the same banker, no money need pass. A few entries in the banker’s ledger will suffice; an amount will be transferred from the credit of the payer to that of the receiver.

If all London business men keep their cash at the same banker’s and make payments by cheque, no money need intervene for transactions beginning and ending in London. And since the Clearing House arrangement makes all the City Banking houses virtually into one establishment, this ideal is pretty well attained in fact. The number of cheques presented at a bank counter for payment in cash is quite insignificant; the great majority are settled by the method of compensation

at the Clearing House, orders against one bank being balanced by orders upon another.

A cheque is a Bill of Exchange drawn on a banker. It is signed by the drawer, who requires the banker to pay on demand a definite sum of money, either to a specified person or to his order, or to the bearer. The definition according to the Bill of Exchange Act, 1882, is "A Bill of Exchange drawn on a banker, payable on demand." As examination of any of the common forms of cheques will show, the cheque is a written command: it is couched in the imperative mood, the person having a credit at the banker's is in the dignified position of being able to issue orders to that banker. And the banker will obey; for he has undertaken an obligation to honour his customer's signature up to the extent of that customer's credit.

The cheque in effect allots to a creditor part of the funds at the debtor's disposal; and its usual effect is merely to alter figures in the bankers' ledgers. The creditor's account is increased, the debtor's account is increased by the amount of the cheque. This is particularly so with crossed cheques, sometimes spoken of as "Cheques drawn so that they may not be paid." The crossing assures that the cheques will in any event be paid only through a banker; the amount is first credited to an account. In fact, they are very rarely turned into cash.

Advantages of Cheques.—The cheque system is good in this respect that it is perfectly elastic, expanding and contracting with the needs of commerce. A cheque is born at command and is extinguished by use. When trade is brisk many cheques are drawn; when trade is slack few cheques are drawn. Prices are kept steady through such self-adjusting mechanism of exchange; for as the cheque increases the quantity of money so the commodity changes hands. Redemption is speedy, and the cheque is not hampered by restrictive laws.

Cheques cannot, however, serve except between people who know and trust one another. They are not legal tender; no one is obliged to accept them in payment, and they are inapplicable for small retail transactions.

The Cheque differs from the Bank Note.—The cheque is the bank note of individuals. Both cheques and bank notes are credit instruments. The holder of a cheque is the creditor of the drawer; and he takes the cheque believing that the drawer has funds sufficient to meet it in the bank. The holder of the note is a creditor of the bank itself; and he takes the note believing that the bank will be prepared at any moment to give him cash in lieu. If, having sold my motor bicycle to John Jones for £10, I accept from him two £5 notes, I do so because I trust the Bank of England. If I accept his cheque for £10, I do so because I trust him and his bank: I believe that he has funds at the bank and that the bank is a sound one.*

Both notes and cheques form part of our currency. There are differences, however. In our country, as in all countries where banking has developed to any extent, devices are employed for giving special security to bank notes. The machinery of the Bank Charter Act is mainly for that purpose. Cheques, however, may be multiplied without restriction; they are in fact limited only by the moderation of bankers and the amount of security that their customers—to whom advances are made—are able to provide.

The United States Legislation has, indeed, framed regulations in the interests of depositors, and constrains the banks to maintain a prescribed ratio of reserves to deposits. Even there, however, depositors are far less safeguarded than note holders are. Among us, the drawers of cheques and those to whom cheques are paid are supposed to be able to look after themselves. The holder of a bank note has been obliged to take it in payment; it is (now that the Bank of England has a monopoly of note issue in this country) legal tender. Moreover, the bank note is the instrument by which small savings may be accumulated. The indefinite "circulation" of notes therefore demands safeguards.

* The cheque (or check, of which the word is a variant) was originally the counterfoil (or indent) of an exchequer bill, or any draft form of payment; on the counterfoil were registered particulars of the principal part. There was, therefore, a check on forgery or alteration. The banker, or other person to whom payment was made, retained the cheque; the customer obtained a "draft" or drawn note.

The cheque, on the other hand, is not legal tender; the creditor need not take it, and in the event of the cheque's being unpaid the debt is not cancelled. A cheque has a very limited circulation; it does not pass from hand to hand like the bank note. Its goodness is almost at once put to the test. The distinction, growth of custom as it was, has with us been crystallised into law. The taker of a bank note becomes at once the creditor of the bank, can look to it only for payment. The taker of a cheque is still the creditor of the drawer until the bank pays. If the bank refuses, for one reason or another, to pay, it is not the taker of the cheque but the drawer that has right of action against the bank. The bank is liable to the depositor, not to the cheque holder; unless, indeed, by failing to present the cheque within a reasonable time the latter substitutes himself as creditor to the bank.

If, for example, I am paid by cheque and, through negligence or carelessness, fail to present it within a reasonable time, the bank upon which it is drawn may fail before presentation. Then it is that I, not the drawer, lose on the cheque.

Our plan of looking after notes and leaving the more important instrument of credit quite unrestricted is, perhaps, not logical. Every trader is interested nowadays in the soundness of the banks. He is in practice obliged to have his bank account and to acquiesce in the cheque system; he should be able to count upon the ability of the banks to meet their obligations. Public concern for banking is not now in regard to notes, but to deposits and cheques drawn against deposits.

The Bank Note Circulates as Money.—An old case, *Miller v. Race* (1758), sums up the legal aspect of a bank note. What was then laid down still rules, and is not likely to be changed. They are “not goods, or securities, or documents for debts; but are money, cash, in the ordinary course and transactions of business.” They were declared to be “as much money as guineas themselves are, or any other current coin”; they pass by a will that bequeaths the testator's money; on payment of them a receipt is always given as for money; on bank-

ruptcies they cannot be followed as property other than money can be followed. One of the counsel had sought to establish a parallel between bank notes and lottery tickets. But the judges held that the lottery ticket is "identical and specific"; and a specific action will lie for its recovery. Land itself is not more specific than a lottery ticket; for one is a prize, another a blank.

The bank note, however, though it bears a number, is the same as another bank note of the same denomination. "No dispute ought to be made with the bearer of a cash note, in regard to commerce and for the sake of the credit of these notes; though it may be both reasonable and customary to stay the payment till inquiry can be made whether the bearer of the note came by it fairly or not."

Negotiable Instruments.—The course of trade creates a property in the note for the assignee or bearer. "Tis pity that reporters sometimes catch at quaint expressions that may happen to be dropped at the bar or bench; and mistake their meaning. It has been quaintly said, 'that the reason why money cannot be followed is, because it is not ear-marked'; but this is not true. The true reason is upon the currency of it. So in case of money stolen, the true owner cannot recover it after it has been paid away fairly and honestly upon a valuable and *bona fide* consideration; but, before money has been passed into currency, an action may be brought for the money itself."

This holds, you note, for all "negotiable instruments," including cheques. You may know who has a cheque that has been stolen from you. But if the holder can show that he obtained the cheque in the ordinary course of business, in a quite straightforward and honourable way, *i.e.* without notice that it had previously been stolen, you cannot recover it; and he is entitled to payment.

Similarly, you may know the number of the bank note that has been stolen from you. You may "stop its payment" at the Bank. To the man who has taken the note in good faith, all this matters not at all. He can obtain payment of the note. Consider the instructive case of *Raphael v. Bank of*

England. It shows that even carelessness does not deprive a man of his rights when he deals with a negotiable instrument. A parcel of Bank of England notes of large denomination had been stolen. The loser was able to give the numbers of the stolen notes to the Bank; and the Bank tried to prevent payment to the thief. "Stopping a note" has, it may be well to observe here, only this effect: the one presenting it for payment may be asked for an explanation of how he obtained it. Upon his satisfactory explanation he is entitled to payment.

The Bank, in its attempt to hinder the thief from obtaining payment, gave notice to certain money changers, among others to Raphael's principals in Paris. These, it appeared, recorded the numbers of the stolen notes, and those numbers were upon a list hanging behind the exchanger who did actually cash the note. A glance at the list would have led to enquiries; and we can hardly acquit the money changer of negligence in that he did not so glance. Yet, since it was clear that no suspicion had been in the mind of the exchanger, since he had taken the note in the ordinary course of business—cashing it at the current exchange rate—Raphael's claim to payment from the Bank was held good.

The Banker Finances Modern Trade.—To an extraordinary extent, then, the modern business man is dependent upon the banker and the banking system. One enthusiastic writer, wishing to emphasise the dominating influence exercised by the banks, declares that the cessation even for a day or two of the banker's activities would cause a complete paralysis of the economic life of the nation.

Such a cessation would produce swifter and more far-reaching effects than the strike of the most effective Labour Union. The merchant works by means of the credit facilities he enjoys, and he would have no facilities. Unable to discount the bills he held, unable to cash the cheques paid to him, he could not meet the obligations constantly falling due, and must become bankrupt. The manufacturer making for a market distant in time and place, depends upon the support of the banks; and, that support failing, he must cease work.

Whether money is scarce or plentiful, whether advances are hard or easy to obtain, is a matter of supreme importance to the trader. The stock he has bought is carried on credit; if the banker, the interpreter of the financial state of the country, restricts the credit then the trader is obliged to "unload," to sell his stocks with as little sacrifice as possible.

The Banker connects the Savers with the Spenders.—The picture drawn of the banker's work is little exaggerated. True, the banker is, in one sense, only a middleman; he connects the people who save with the people who are able to employ savings in the creation of wealth. In our country at any rate, people have a deep-rooted confidence in the security of funds entrusted to others. They are willing to deposit with the bankers, and content themselves with moderate interest upon their deposits. Unwilling or unable to use their accumulated savings themselves, they provide the means whereby the banker meets the needs of those that work and trade on borrowed capital.

"Our people," says Bagehot, "are bolder in dealing with their money than any continental nation, and even if they were not bolder, the mere fact that their money is deposited in a bank makes it far more obtainable. A million pounds in the hands of a single banker is a great power; he can at once lend it where he will, and borrowers can come to him; because they know or believe that he has it. But the same sum scattered in tens and fifties throughout a whole nation is no power at all: no one knows where to find it or whom to ask for it. Concentration of money in banks, though not the sole cause, is the principal cause which has made the money market of England so rich, so much beyond that of other countries."

A Dealer in Capital.—The banker, in this aspect, is a dealer in capital. He does not create capital: he only enables it to be transferred from the possession of those unable or unwilling to use it, into the possession of those able and anxious to use it. Even so, however, this work is of the greatest benefit to

the community. For capital is the produce of past labour employed in order to help present labour. Unless capital is employed by labour it perishes; the food the worker might have eaten decays, the clothes he might have worn nourish moths, the machinery whereby he might have exercised his skill rusts away.

In a community like ours there are numbers—professional men for example, doctors and lawyers and, sometimes teachers—who earn more than they spend. They themselves have neither the time nor the inclination to employ the surplus in setting workers to work; they deposit their claims to it at the banker's. Then the employing class, the trader or the manufacturer who can give good security or can show reasonable prospects of gain, obtains the use of it. The surplus bears fruit abundantly whereas, unemployed, it would at best remain intact. The more readily those that know how to employ capital find access to it, the better for all concerned.

The banker does not increase the productive funds of a country; he does call those funds into activity. Those who save, not only have their savings preserved for them, but receive also a present benefit; those who have industrial talent and organising power obtain means of using those capacities for the increase of public wealth. *One essential function of banking is the mobilisation of capital for use in the varied activities of industry and commerce.* The leading principle of our system is that the loans are of a purely temporary nature, that is the financing of commodities in process of manufacture and distribution up to the time they enter into consumption when the payment from the consumer liquidates all costs. Our banks, unlike those noted below, do not themselves undertake industrial and trading functions, do not themselves promote companies. They do provide a large part of working capital.

Moreover, though the banks are loath to lock up capital they lengthen the period of the loans and make them more certain. They gather numerous small amounts, most of them withdrawable on demand; they lend in amounts large enough to be effective in trade and industry and for periods that are certain.

The Long Production Process.—Why should the manufacturer or the trader need credit? One reason constantly operating is the length of time that usually elapses between the obtaining of the raw material and the payment by the consumer for the finished article, between the mining of the iron-ore at Bilbao and the selling of the Sheffield knife to the West African negro; between the gathering of the pods of the cotton tree and the exposure for sale of Manchester goods in the bazaar at Calcutta. Manufacturers are obliged to make in advance of the actual demand for their goods. These are carried in stock pending the sale to the retailers.

And even if made to order the long production processes need financing: the publisher gets under way and incurs expenses this year for next year's books. Industry is complicated. The manufacturer tries to foresee the requirements of a market distant in time, perhaps in place. Trade transactions are usually credit transactions. The merchant gives three, sometimes six, months' credit. The man who in the preparatory stage smelts the iron or spins the cotton, who has added to the value of the raw material, wishes to be paid for his work long before the consumer liquidates the whole amount due. The manufacturer who makes the knife or the spade or the flowered muslin wishes to carry on work while his product is being distributed. The manufacturer or wholesaler draws a three months' bill, so that his business may be a continuous one, not an alternation of working and waiting. Credit facilities, involving the activities of the banker, are called for at every stage of the long production process.

Provision of Money.—The banker facilitates exchanges; for he provides the faith money by means of which exchanges are for the most part effected. We know that money is not merely the gold and silver coins that in those comfortable days before the War circulated among us: money is whatever instrument, token, or expedient serves the most readily and economically to effect the transfer of property from one owner to another. In this sense of money the cheque is the result of the development since 1844 of the large joint-stock banks.

So long as credit is good, so long as the people have con-

fidence in one another, the cheque is a perfect money. In comparison with it sovereigns are cumbersome: a million sovereigns weigh something like seven tons, and transactions of any magnitude would be almost impossible if weights of gold had to pass. The cheque has well-nigh superseded bank notes in use. By its means each customer of a bank issues his own notes for the exact amount he needs; the quality of the notes is speedily tested; and the banker becomes the ledger keeper of the business community, the result of a trading operation being simply an alteration of figures in his books.

Summary.—We may thus sum up the advantages the business man derives from the banking system:—

(1) He is enabled to convert his own credit (which has a narrow currency) into the bank's credit (which has a wide currency). He obtains in his cheque book a *generally acceptable* medium of exchange.

(2) He is enabled to share in the profits from the use of capital that is for a time idle in the hands of its owners.

(3) He is enabled to make his own credit instantly and cheaply available at points distant from his place of business.

CHAPTER X.

FUNCTIONS AND ECONOMIC SIGNIFICANCE OF BANKING AND THE CHEQUE SYSTEM.

The Credit System a Peace System.—The outbreak of war in August 1914 gave a striking proof of the dependence of business upon banking. Trade is transacted nowadays not so much by means of coin as by means of bankers' credits. Now, credit is confidence; and when the abrupt disturbance of peace came, confidence for a great part disappeared, and with it the money that facilitated exchanges.

In peaceful times "money" is usually simply evidence of property. It is not property itself. When credit is shaken, however, men are ill content with any money that is not property in itself; there arises a craving for "hard money," and men seek gold or silver instead of paper. They try then to turn non-liquid resources, land or stocks or stores of commodities, into liquid resources, into the gold and silver to which people return in times of emergency. Paper bearing the guarantee of the Government might be accepted in lieu of the hard money, but little else. And, apparently, the paper was but reluctantly accepted in countries like France, where banking and the credit system were less developed than here. It was deemed necessary in our own country to organise propaganda campaigns in order that people should use the newly issued Treasury Notes as the circulating medium and not take them to be exchanged for gold.

Annihilation of Money.—While affairs are tranquil there is a steady flow of funds from debtor to creditor; the banker debits one customer in order to credit another. The credit system is dependent on this steady flow. Each business man is at once a debtor and a creditor; and he uses his credits to

cancel his debits. The manufacturer draws on the warehouseman in order to pay for his raw material; the warehouseman draws on the retailer; the retailer himself may give credit, and wait till wages are paid in factory and workshop. Interruption anywhere in the stream means the upsetting of the credit system.

The War did very effectively interrupt the stream. London debtors were unable to pay their creditors because their creditors in other countries were unable to pay. Brokers who had borrowed money from the banks in order to discount bills could not pay back their loans, though made on call; for the bills could not be met at maturity. The broker had probably deposited with the banker stock exchange securities as collateral security; and in ordinary times the banker would have sold the security, paid himself from the proceeds of the sale, and handed over such balance as remained to the defaulting broker. He could not do this in the August of 1914; for one of the extraordinary measures made necessary was the closing of the great stock exchanges of the world. There was the danger that there would be a deluge from abroad of selling orders of all manner of paper securities. The sales in London would have meant great calls upon our stock of gold already depleted through rumours of war.

The credit system had ceased to work for a while; and two other emergency devices were employed to hide the fact that, because their assets had frozen and were no longer liquid, men were unable to meet their engagements. In the first place a moratorium was decreed. In our own country and in France no attempt was made to conceal it. In America itself measures were taken to protect debtors from pressure by their creditors. The settlement of debts was delayed until measures were taken to set the stream of credit again flowing.

In the second place, there was also for us help from the Bank of England which, by its admirable conduct throughout the war, universally increased its prestige and became more and more recognised as bound up with the stability of Britain itself. The Bank rediscounted to an enormous amount bills held by the joint-stock banks and the bill-brokers, issued its notes freely on sound security and in excess of the legal

maximum, and acted as agent for the issue of the emergency currency and for the raising of loans. It dealt freely in trade paper which, in ordinary times, it does not handle at all.*

Dangers of the Credit System.—Our credit system gives us wonderful advantages: we could not as an industrial and trading community exist without it. But the strange and exciting events when war broke out shows its dangers. The system works so long as people believe that the paper promises they have will be honoured; when fear arises that the paper will not, as the tangible gold always will, command commodities, then the system tends to break down. Stock Exchange securities—evidences of part ownership, that is—felt the first brunt of the War. Even in July, when the war clouds were gathering, prices dropped in a startling manner. In France especially the losses were enormous before the moratorium was decreed. When we ourselves actually declared war, frightened sellers tried to turn their securities into available money at whatever prices they could get. The phenomenon was world wide. For no commodity has so extended a market as a good stock exchange security.

Selling in the world's stock markets was heavy and prices fell alarmingly. Vienna was the first to close its Exchange; far off Montreal and Toronto followed suit the next day; Berlin prohibited quotations next; Paris suspended sales; and on July 31st the London Stock Exchange was closed. New York was applied to by terrified sellers in all lands, and the brokers had their hands full of selling orders "At the market" (that is, at whatever price was ruling). It was certain that, if the New York Exchange opened, an unprecedented collapse was inevitable; and a few minutes before opening time, some four or five hours after the English Stock Exchange, the authorities announced that New York, too, would not open.

* In short, the Bank acted as its Deputy Governor told the Macmillan Committee it does act: "Its main duty is to conduct its operations in the interests of the community as a whole. It should be free from the control of particular groups and interests, and free from political pressure. It is not the duty of the Central Bank to enter into ordinary banking business of trade and commerce."

Paper Money versus "Hard Money."—In our own banking facilities we were not so ill served as were our French neighbours; nor did our Government adopt the panic measures apparently called for in France. True, we had a moratorium of a few days at the banks; but depositors were not unduly hampered. In France the banks, except the Banque de France, took full advantage of the moratorium; and depositors obtained funds to a limited extent only. Hence arose, on the Continent and possible to some extent among us, a distrust of bank deposits, of anything except ready money. Hence came a hoarding of gold, of silver, even, we are told, of copper coins, while bank notes and other paper money were passed on. Men came back to the almost obsolete function of coined money, its function as a store of value; they preferred something instantly convertible into whatever they sought, not something that depended for its currency on the degree of credit attached to a bank.*

The Banque de France was, too, in spite of a vast reserve of gold, required to suspend redemption of its notes in cash; and *cours forcé* (legal tender) was given to its notes, to which no date of redemption was attached. We certainly prohibited free dealings in gold, but gold has always, until the Gold Standard Act of 1925, been available at the Bank for both its own notes and the Currency Notes issued by the Treasury.

The hoarding of silver by the French is easy to understand. Silver has in France unlimited legal tender; it maintains its relative value to gold only through limitation of issue. And even before the War the gold coins did not enter into effective circulation: silver was synonymous with money. The Banque itself may at its option pay either in gold or in silver; and it uses the privilege at times to preserve its gold reserve, proffering silver and charging a small premium if gold is required

* In the Orient itself the tendency manifested itself. The news of the great European conflict might have been regarded by the millions of China as a freak of the distant barbarians. But the fact came home to their pockets. They had come to think the rouble note a safe and useful currency for trade with Siberia. The war made the note well-nigh worthless. A demand for silver was, therefore, quickened in place of the discredited paper money.

instead. The fact that at ordinary times the value of the silver coins is below their value as bullion is, therefore, hardly realised. Besides, during the War, silver bullion had greatly appreciated in value.

Legal currencies in quite small denominations were issued, having been prepared as a measure of precaution before the War; and with some slight friction they were accepted in exchanges. It was, in fact, curious how our own soldiers as they moved about from region to region rapidly became accustomed to the extraordinary varieties of currencies they encountered.

Apart from what may be regarded as quite unusual conditions, however, the machinery of credit works smoothly and effectively. It is indeed difficult to conceive of modern business apart from credit and the banking system.

The English Deposit.—The main business of an English bank is not the reception of money and its safe keeping. It is not a competitor with the Post Office Savings Bank. This function—the acting as a Safe Deposit—was once important when, for example, Mr. Pepys deposited with his goldsmith £2,000 “to be called for when I please,” and when calling for it three months later he, to his agreeable surprise, found it increased to £2,023. The goldsmiths of London had been constrained to devise means of keeping their valuables in security. The means devised were available for their customers too. At first the goldsmiths exacted payment for their custodianship. When, however, they found it profitable to attract money in order to relend it, they gave interest as an inducement to depositors.

Nor is the main business of the English joint-stock bank the lending of money. The goldsmiths indeed induced people to deposit money by offering interest; because they could lend again a great proportion of the deposit and so finance the business of the city. Our own great joint-stock banks likewise encourage deposits; for, clearly, the more people are involved in the credit system, the more effective it becomes—much as a telephone exchange is more valuable the greater the number of people we may call up.

Nowadays, however, the money transactions of a bank are comparatively small. What the bank does—what constitutes its main work—is to exchange its credit for its customer's credit. It places to its customer's account a *deposit balance* upon which cheques may be drawn; the customer promises to pay at a definite time, or hands to the banker some instrument by which the banker can pay himself, or gives up securities that the banker can, if need be, sell to cancel the debt. The bank's credit is money, and in ordinary times is as effective in its purchasing power as gold itself. The customer's credit has a limited range, the bank's a wide one. And the wide range makes the bank's credit into money—into general purchasing power. Usually there is something of value behind the created money. But there need not be; nor can the public discriminate between bank money backed by a deposit or issued against a good bill of exchange, and money that is merely the undertaking of a bank to pay.

The Creation of Money.—We are to note, however, that the money created is based upon real foundations. The banker when he grants a credit knows that he must, at the option of the receivers, meet his customer's cheques in legal money. His reserve of legal money—his store of Bank of England Notes together with his right to obtain them from the Bank—is always a factor limiting the issue of credits.

The customer, too, must provide some real foundation for the deposit placed to his account: he is required to lodge with the banker stocks or shares or bills against goods sold; and, even if he gets a personal credit (an overdraft or a cash credit), he gets this because the bank manager is convinced of his soundness, or of the soundness of his friends who enter upon a guarantee.

Looked at in one way our banking system is peculiarly delicate. One might expect that at the slightest shock it would be shattered. When we remember, however, that the money placed to the credit of a merchant or a manufacturer is not gold, and is only in the rarest instances regarded as gold, our fears diminish. Credits exchange for credits; and when a lack of confidence makes some credits shrink, others

shrink too. A merchant or a manufacturer obtains an advance, say, of £10,000 from his bank. He gets this either (1) because the banker knows him to be a man of integrity, always ready and willing and able to meet his engagements; or (2) because friends enter into bond for him, so that the banker has them to call upon in the event of his debtors failing to pay; or (3) by the deposit of securities.

As regards the first method the idea is prevalent that a trader in need of temporary financial aid can only very rarely obtain it upon his own mere personal promise, more rarely certainly than in the days of the small private banks, when banker and customer were in close touch with one another. The idea is probably erroneous. Here is a statement of the Chairman of the Westminster Bank:—

“ We have had some figures taken out, and I confess they were something of a surprise to me. They refer to the loans we made for current business purposes. They show that of the total number of borrowers no less than 28 per cent. had their loans wholly unsecured, and a further 13 per cent. gave only partial security. In other words 41 per cent. of the customers who borrowed of us received credit on that personal knowledge by our managers of their character and business, which we are accused of totally ignoring. And I should like to add, to the honour of our managers and their judgment, that this is a class of business which we most willingly undertake; for it is one in which we make very small losses.”

The peculiarity is the nature of the advance to the customer. The bank lends its credit to him so that he can draw cheques up to £10,000. Some actual money-claims upon the community there is behind the loan. The bank itself may have about £1,000 of its shareholders' money, or there may have been a real deposit of about £1,000. Having this smaller amount available the bank feels safe enough in lending the larger amount. It may place the smaller amount into the Bank of England (which keeps the reserves of the outer banks); the Bank of England takes the money and holds it always available for the depositing bank. The Bank of England is not, however, scrupulous to keep £1,000 intact ready for immediate return; it employs about half in its

own banking operations. The legal money kept against the advance of £10,000 is, therefore, a good deal less than £10,000: it is a percentage of a percentage.

The Bank's Reserve.—The credits granted must, however, be related to legal money. For they all constitute *claims on legal money*, on what the State prescribes as a means of cancelling debts; and, since the essence of a modern bank is its instant capacity to meet its engagements, the bank must be certain of having a sufficient supply of legal money. The banker will always have an eye to his reserve. He will, for instance, when he takes a security in exchange for a credit deposit, look upon the security from the point of view of the ease and certainty with which it can be sold. Is it one that is certain to find an immediate buyer on the Stock Exchange? Then it is a good banking security. Is it a document entitling one to the ownership of houses and lands? Then, because there would be delay and difficulty in disposing of the title, it is not so good for the banker.

Do the Banks Create Credit?—The amount of cheque circulation is very largely a matter for the bankers upon whom the cheques are drawn. For they result in great measure from the banker's creation of credit. In his delightful little book on *Banking* Dr. Leaf rather peremptorily denied that the joint-stock banks have much control over the creation of credit. They are neither to be applauded for their provision of cheap and abundant means of facilitating exchanges, nor vituperated for their refusal to provide. Both the one and the other are independent of their wish. "The banks," he declares, "can lend no more than they can borrow—in fact not nearly so much. If anyone in the deposit banking system can be called a 'creator of credit,' it is the depositor; for the banks are strictly limited in their lending operations by the amount which the depositor thinks fit to leave with them." Again, "Alike the creation and restriction of credit generally are in the hands of the Government—of the Treasury and the Bank of England acting as a 'Bank of Issue.'"

Perhaps, in fighting his cause, he over-emphasised his points. His views are certainly opposed to those of others—of Mr. McKenna, for instance, who contends “Every new loan or purchase by a bank creates an equivalent deposit, thus increasing the quantity of money.” And the creation of bank-money is a creation of credit.

In one sense it is true, as Dr. Leaf contended, that the banks do not create *credit*. They exchange credit with their customers. They give a far-reaching credit for a limited one. The customer's credit with his banker is changed into the banker's credit with the world at large; the customer's promise to pay his banker is bargained against the banker's promise to pay his customer. But this exchange creates money, if not credit. The customer's credit is not money; for it lacks the property of being widely acceptable. The banker's credit is money.

When the old private banks were able to embody their credit in bank notes, there could be no negation of the statement that the banks were creating credit facilities. And no limit to the creation existed, except the banker's moderation and conscience; the risk of a “run” when trade was booming seemed very remote. Things are not essentially different nowadays.

Certainly the joint-stock banks do not issue bank notes. They have no need to do so; for their permission to the customer to draw cheques answers the purpose. The individual is allowed to draw his own bank notes at his own time and for what amount he chooses—up to the limit assigned by his banker. The widening of range makes the credit into general purchasing power—into money, in short, of which the essence is wide acceptability in discharge of debts. Such a widening can hardly be regarded as other than a creation of credit. The banker, by his “advance,” has created a debt due from himself to his customer in exchange for a debt due to himself from his customer. On the “Liabilities” side of his balance sheet he has augmented the item “Deposits”; on the “Assets” side he has added an equal amount to “Advances to Customers.” He has exchanged public credit for private credit and, so doing, has increased money.

That the banks can, and do, finance trade and industry by thus creating credit facilities can hardly be doubted when we examine concrete instances. Dr. Leaf himself explains the process: "The farmer, who had to pay his workmen for their labour and keep during the harvest, would go to the man of means in his neighbourhood and borrow from him promises to pay coin on demand, which promises would be accepted by his men because they could use them with the shopkeepers. They in their turn would pass them on in exchange for goods, and so they would go from hand to hand. In course of time the farmer would have sent his wheat to market, where it would be sold; and, perhaps after some months, he would receive payment for it in notes of the banker from whom he had borrowed, or of some other banker. These he would pay back to his lending banker. The credit given him would be duly cancelled, and the notes, if issued by the lender himself, retired, or, if issued by another banker, passed on to be cancelled by him in exchange for cash."

What in effect is this? The banker pays the providers of the supplies needed by the farmer, and hands out what serves to pay wages. The services performed by the farmer in providing wheat are placing someone under an obligation. Who it is we don't know yet; for the ultimate consumers of the harvest are merged in that shadowy entity, the "general community." Meanwhile the "general community" is maintaining the farmer and his men; and, for representing the general community until the time of consumption has come, the banker draws interest. He has provided for the farmer means of getting payment in advance.

Limits to the Creation of Credit.—True, the creation of bank-money based on credit has its limits. It must have, so long as the banker holds himself out as ready to pay his immediate obligations in legal money, in what the State itself declares an adequate payment for debt. The bank-money must have some relation to this legal money. To the banker the question is a pertinent one, "Having regard to my liabilities to the public, what amount of cash have I?" He looks to his reserve, that reserve being "Cash and Balance

with the Bank of England." The percentage of this cash reserve to the banks' liabilities to the public is about ten.

As Dr. Leaf explains, the percentage is itself "purely arbitrary. It was fixed only when, after the War, the common form of monthly return was decided on." He declares further that, in fact, "It is much more than is required for the ordinary working of a bank, and it is fairly notorious that it is by no means universally adhered to day by day." You pay your Consols dividend warrant for £10 into your account at Barclays. When the warrant is cleared the amount to the credit of Barclays in the books of the Bank of England is increased by the £10. Barclays' proportion of cash to liabilities has thereby been increased and the basis for further advances, considerably over £10, has been laid.

And we may note, too, that the bank is not passive in regard to bank cash. For bank cash consists not only of coin and notes in the tills to meet customers' immediate needs, and additional notes in the vaults as a currency reserve; it includes also balances at the Bank of England. And these balances can be strengthened. The bank can call in money it has upon short loan in the money market; it puts the market in the Bank—obliging the bill-brokers to discount their fine paper at the Bank of England, or to borrow from the Bank upon "floaters" or "Treasury Bills," in order to pay the lending bank. It will make no tenders for Treasury Bills, but will allow those running off in its possession to swell its account with the Bank. The conditions under which credits may be enlarged or diminished are, that is, in great measure susceptible of control. This being so, one is justified in asserting that the power of the banks to create money, or to refuse its creation, is a real one.

CHAPTER XI.

SHORT AND LONG LOANS.

The Banker turns Solid into Liquid Wealth.—A man may have much wealth, great holdings in business undertakings that some time hence will yield him a steady stream of profits, lands that being sold would yield many thousands of pounds, ships and cargoes at sea. Yet he may lack immediate purchasing power. Our banking facilities, in conjunction with the market afforded by the Stock Exchange, provide him with this requisite. If the "Merchant of Venice" had enjoyed the benefits of our banks he need not have put his life in jeopardy; he could have had made a Bill of Lading of one of his rich freights, and on the strength of that title to property have obtained an advance from some banker on the Rialto.

The banker turns solid wealth into liquid purchasing power, fixed capital into circulating; he unlocks the capital that has been invested in enterprises that give but a tardy return, though maybe a great one. In one of his functions he is, if you like, a kind of glorified pawnbroker, who has succeeded in divesting his occupation of all sordid details. The pawnbroker takes into his possession, as security for the loans he makes, the property itself of his customers, their gold watches or their Sunday clothes. The banker takes into his possession not the land or the factories or the railways, but the paper evidences of ownership. In default of payment of the loan the pawnbroker sells the pledged article; so, too, does the banker sell the collateral security he has taken. If I have £1,000 in Consols of which the price quoted is £50, my banker will, on my depositing with him the scrip, lend me £400 for the current operations of my business.

He may even lend to me for purposes other than the temporary financing of trade and industry. As a note in *The Spectator* points out: "Undoubtedly another explanation of the growth of banking deposits is the much greater use of overdrafts on the part of the ordinary private customer as distinct from the manufacturer and trader. Just as trade depression has caused many industries to lean heavily upon the banker for assistance, so it is to be feared that onerous national and local taxation, the high cost of living, and the enforced purchase of houses to live in have driven the general public to the bankers for assistance to an extent unparalleled in our previous experience."

The banker willingly takes what the slang of the money market calls "floaters"—Stock Exchange securities of the highest character—as his additional security for repayment of his advance. He considers that, in a stock so little subject to violent fluctuations as Consols, he is perfectly safe with his 20 per cent. margin. Should the price decline, say to £45, he may ask me to deposit further security or to pay my debt; and if I am unluckily unable to do either, he may, cold-bloodedly and without compunction, sell on the Stock Exchange, paying himself and crediting me with any balance. Much banking credit is lent on collateral security; and this is possible only because there is a freely-working and wide market for securities. There is, in fact, the closest possible connection between the Stock Exchange and the banks; between, therefore, the interest payments by the banks and the yield on securities. If the Bank Rate goes down, the price of securities tends to go up. For the long-term investment rather than the short loan will attract the money available.

Long-Period Rate and Short-Period Rate.—Consider, for instance, how the yield on Consols is connected with the rate of discount. The yield on Consols is, of course, dependent upon the price, falling as the price rises, rising as it falls: with $2\frac{1}{2}$ per cent. Consols at £50 the yield on an investment of £100 is £5, at 60 the yield is £4 $\frac{1}{2}$. This yield fluctuates within very narrow limits over a long period; for people buy Consols rather as a permanent investment, than as a speculation in

hope of rising prices. The rate of discount is, however, a result of the "money" in the market (a supply that may very speedily augment or diminish) compared with the anxiety to turn future claims into present purchasing power (a demand dependent upon the flourishing or stagnation of enterprise).

The yield on Consols is a steady "long-period" rate of interest on money; the rate of discount is a violently fluctuating "short-period" rate of interest on money. Thus, during the last half of the nineteenth century, the yield on Consols hardly deviated from 3 per cent. During the same period Bank of England advances, made on the best security to borrowers of the highest financial standing, ranged between 10 and 2 per cent.

There is a close and obvious connection between the return from investments—typified by Consols—and the market rate of interest on money—typified by the rate at which bills are discounted. Should there appear a likelihood of the discount rate's remaining low, the banks increase their holdings of first-class securities; these yield a greater return, and are not materially more difficult to realise upon than the automatically maturing bills. Prices of securities therefore rise: thus in 1896 the Bank of England rate remained over a long period at 2 per cent.; money flowed towards securities, and Consols reached a record price.

Conversely, a rise in the rate of discount, by diminishing bankers' investments, lowers the price of Consols and other securities. When the demand for short loans is great, the banks meet the demand by selling Government stock; they lend more to their customers and curtail their lendings to the Government. The advantage, from the banks' point of view, of investments in stocks of high standing is that they give a steady income and are, normally, easily transferable into cash. The drawback is that, in times of monetary panic, buyers for stocks even of the highest character are hard to find. The banker likes his assets to be "liquid"; and at such times investments may be "frozen" as they were at the outbreak of the Great War, when the Stock Exchange was closed.

The common idea that the price of Consols and other Government stocks is dependent upon the credit and stability

of the State is usually an error. Consols may in fact rise because, enterprise being checked by a sense of insecurity and the eager demand for discounts being thereby abated, the money available flows towards securities. This happened to an exceptional degree in the Spring of 1922. The Bank Rate—the barometer of the money market—went down. That is to say, money on short loan obtained little return. Trade and industry were going through a severe depression, so that people were reluctant to embark on commercial and industrial ventures. As a result there was a boom in gilt-edged securities, in Government stocks especially; and Consols which had long languished below 50 speedily rose to 58.

Prospective Property becomes Present Purchasing Power.—Examine the process a little. The largest use of credit is obtained through the discounting of commercial paper. This represents a promise, by an individual or a firm, to pay on a certain date; and the theory is that the advance of the bank on this paper is a temporary one, and for a purpose temporary in nature. And as a rule the bank will purchase its commercial paper in such a manner that there is a constant stream of maturities falling in. For this purpose the bill-brokers are a convenient reservoir, gathering in the bills on the market and disposing to the banks in the volume of the kind wanted. The credit is put to work again immediately it is available; but the principle of British banking is that the credit shall return to its source at frequent intervals.

Possibly two-thirds of banking credit works for the business world as its capital in this way. Most of the remainder is lent upon security; and the bank not only has the customer's promise to pay but usually other—collateral—security as well. Moreover, since the bank does not advance to the borrower the full market value of his collateral, it still further secures itself. The borrower deposits securities to the extent of perhaps twenty per cent. over the amount of the loan; and he is required to keep up this margin during the life of the loan. In case of need the banker wishes to be certain of realising his loan even by sale of the security. And the question that matters most to the banker is, "In case of need can I sell this

security easily and speedily?" Without a ready market for the titles of property they possess, business men would not have at their disposal this bank credit. A good Stock Exchange market is indispensable if in this manner the banker is to turn locked-up capital into readily available purchasing power.

By means of the Stock Exchange unsaleable individual part-ownership (a ten-thousandth share in a railway, perhaps) is transformed into a stock or a bond having a wide market. So readily can it be sold that it is almost money itself, and being pledged it obtains an immediate supply. The Stock Exchange mobilises the wealth of a nation; the banks put the wealth into effective movement.

An interesting example of this buying of titles to part ownership occurred on an immense scale during the earlier stages of the Great War. Before 1914 a vast amount of American securities—"dollar securities"—were held in England and France; or, in other words, residents in Europe were part owners of American railways and canals and factories and mines. The Governments of Great Britain and France obtained the securities, obliged their holders to sell at rates fixed by the Treasury, and pledged these securities in New York in order to obtain loans for carrying on the War. This action was part of the operation by which the dollar exchange was kept stable—"pegged"—at the rate of 4.76½.*

Long and Short Loans.—In ordinary times the Stock Exchange serves as the connecting link between investments for a long term and loans for a short period. It provides a ready market for shares in property that, in itself, would be

* "The London Exchange on New York was pegged in the autumn of 1915, and the peg was kept in until March 1919. The mechanism by which this was brought about was the appointment by the British Government of fiscal agents in New York—J. P. Morgan and Co.—with authority to buy all exchange offered on London at 4.765. Morgan and Co. had large credits, some of which the British Government established by the negotiation of loans and the sale of American securities before the United States went into the war, and others which the United States Treasury subsequently placed at the disposal of the British Government." (*Currencies after the War*—a report compiled by the Secretariat of the League of Nations.)

saleable only at a ruinous loss. It provides also, what to a business man is even more useful, a measure of his wealth; the Stock Exchange quotations tell him what immediate purchasing power he can obtain from his banker, even though he should wish to retain his shares. Men are content, therefore, to keep their wealth in non-liquid forms, to invest in land, to embark upon undertakings that will take long to mature.

Even the production of goods in general use begins far ahead of current needs: before midsummer the chocolate manufacturer is busily making gift boxes in anticipation of the Christmas rush. But his expectations have a present value. The long-term investments with high yield and slight liquidity are, through the banks, turned into liquid assets. And if the capital invested yields the ten per cent. anticipated, while the loan is obtained at six per cent., the banker's profit clearly is not the customer's loss. The customer is enabled to enjoy the advantages of fixed capital with its high yield, and of floating capital with its present service.

English Banks Concentrate on Short Loans.—Our banks do not themselves provide industrial and commercial undertakings with fixed capital. The English banker refrains from what other bankers conceive to be part of their functions, the provision of capital that will be permanently sunk in a business. Occasionally, lest worst befall, lest what he thought to be "short loans" should be lost to him for ever, he may find it expedient to lend even to provide the brick and iron factor of the business. But he shrinks from doing so. Floating capital he is eager to supply; for a fixed capital the applicant must go elsewhere than to the English banker. He must go to the investing public. The banker supplies financial facilities; he is unwilling to supply other capital requirements.

If, like the German banks, English banks assumed responsibility for the initial capital of an undertaking, if they became company promoters or underwriters, they would find themselves burdened with a permanent responsibility. Their part ownership of the undertakings might be unsaleable, or saleable only at a heavy sacrifice, and their obligation to meet

demands in legal money might be broken. The banks do, however, lend largely to those who finance new undertakings; and the question is at times raised whether the banks could not themselves finance industry and trade.

The Board of Trade in 1916 appointed a committee to discuss whether it would be thus advisable for the banks to grant *financial facilities* (advances with a long currency), as distinct from *banking facilities* (advances by discounts on short-date bills, or on collateral security at call). It was urged that when a sudden chance for expansion came to a business—the offer of a big contract from abroad, for example—our manufacturers were handicapped because they were obliged to raise fresh capital by making a new issue of shares or debentures, a process involving time. If, however, the banks could be persuaded to abandon their traditional attitude of insuring that their advances were constantly returning, this drawback would not exist.

There would, too, it was asserted, be fewer unsound schemes, floated merely to obtain the public's money. Contrasting with our system that of the German banks, one writer pointed out: "The English banks have abstained in a *direct* way from flotation, as well as from Bourse speculation. But this very fact causes another great evil, namely, that the banks have never shown any interest in the newly-founded companies or in the securities issued by these companies, while it is a distinct advantage of the German system that the German banks, even if only in the interest of their own issue credit, have been keeping a continuous watch over the development of the companies which they founded." The German banks will finance a manufacturing industry, will have one of its officials on the board of directors, will buy its securities and hold them as regular investments. Our banks are reluctant to invest in securities other than what are, like Consols and other Government securities, always readily saleable.

It was also asserted that British traders were handicapped in foreign markets like China, where buyers looked for long credits. The Committee reported that little ground existed for such complaints. But it suggested, as affording what is perhaps a more readily available resource, an institution

able to afford help to British industries to a greater extent than the other banks can. In accordance with the suggestion the *British Trade Corporation* obtained a charter in 1917.

Bankers' Money.—The tradition of the British banks is to keep their money well under their control; they lend for a short currency only. If a manufacturer wants control of capital in order to build factories or to instal machinery, to "lock-up" capital that is, he appeals not to the banks, but to the investing public. He issues a prospectus offering shares in his undertaking. The Limited Liability Company is a means of concentrating long-term loans as the banks provide a means of concentrating short-term loans.

The United States money market imitates us in this probably useful division of labour; Germany and Italy, to a considerable extent, combine the two functions. The *British Trade Corporation* was designed to provide for our traders and manufacturers the advantages of the latter plan of providing long-term loans as well as short-term loans.

Lord Farrington's Committee reported: "There exists at the present time in this country the machinery and facilities for the finance alike of home trade and of large overseas contracts, and for carrying through much of the business which has been done by foreign banks. The British banks, we believe, afford liberal accommodation to the home producer. British bankers are not shy in making advances on the strength of their customer's known ability and integrity, and the charges for accommodation are often lower than the corresponding charges in foreign countries. Similarly, the Colonial banks and British-Foreign banks and banking houses render immense assistance to British trade abroad; and certainly in the Far East and in many parts of South America British banking facilities do not fall short of those of any other nation.

"We find also that in the case of large contract operations British contractors with the assistance of Financial Houses have in the past been ready to provide large amounts of capital and to take considerable risks in connection with the operations which they have undertaken. Our arrangements,

however, are faulty in our not co-ordinating many of the facilities mentioned.

“ We recognise also that the British manufacturer may be frequently in want of finance of a kind which a British Joint-Stock Bank could not prudently provide, whereas the German Banks in particular seem to have been able to afford special assistance at the inception of undertakings of the most varied description, and to have laid themselves out for stimulating their promotion and for carrying them through to a successful completion. We conclude, therefore, that there is ample room for an Institution which would be able to assist British interests in a manner not possible under existing conditions.”

Financial Undertakings.—The Report admirably shows how help could be given: “ The Institution might in certain cases, after careful examination, agree to make advances for the extension of existing manufacturing plant, or perhaps fix the amalgamation or co-ordination of certain works so as to reduce the cost of production. It would assist these works to obtain orders abroad, and give them reasonable financial facilities for executing these orders. It could also take a leading part in the inception of transactions and assist in connection with the machinery of overseas business.

“ In the case of German manufacturers it frequently happens that on the Board of the manufacturing company there is a representative of a bank, and there seems little doubt that the German banks have exercised an amount of control over the manufacturing concerns in which they are interested which would not be possible, even if it were desirable, in the United Kingdom. A large number of our manufacturing undertakings are wealthy concerns and would not tolerate for one moment interference by bankers in their affairs, and, indeed, would probably resent any inquiry into the nature of their business arrangements.

“ Such manufacturing concerns, however, do require assistance when they transact overseas business. Take as a single instance the case of a Midland manufacturer selling goods to Italy. The Italian buyer has been accustomed to long credit, and if long credit is refused the business will probably be im-

possible. The manufacturer sells goods for, say, £50,000, and the payment of that price would leave him with a considerable margin of profit; but the offer of the Italian buyer to pay him the equivalent of £50,000 in lire at six or twelve months is not attractive. He would much rather accept a lower figure for a clean cash transaction in sterling, and it is in connection with such business as this that an Institution of the kind contemplated would be able to act as intermediary (taking part or the whole of the financial liability) with profit to itself and satisfaction to the manufacturer.

“Or take the case of a contractor with a foreign Government, payment being made as the work proceeds, and possibly in paper in a foreign currency. The contractor in such circumstances would willingly share his profit with an Institution which would be responsible for the finance of the securities receivable by him.”*

Locking Up Capital.—Between the planning of an ocean steamer and the time when it will, from the freights it earns, bring a gratifying income to its owners, there is a great interval. Yet all the while capital is being employed; it is locked up, it is sunk so as to be no longer available. A mine, a rubber plantation, a cotton growing area, give returns only in the long run. Before a Malayan rubber plantation reaches harvesting point, we are told, for example, five years elapses and there is entailed an outlay of about £94 per acre. During the period of “waiting” for returns, men must be paid wages, materials must be bought, the working plant must be main-

* All these helps are adequately given by the finance houses and the Merchant Bankers of London; and it does not seem, after several years' experience, that there was any real need for the new body. Its early experiences were unfortunate for the shareholders. The formation took place in 1917, the undertaking being granted a Royal Charter for sixty years. As a result of the sharp contraction in trade that followed the boom of 1919-20, a heavy writing-down of assets was necessitated. The original paid-up capital of the British Trade Corporation was £2,000,000 in shares of £10, fully paid. This has been reduced to £500,000 in shares credited as £2 10s. paid, while in June 1922 the corporation obtained a further £500,000 in cash by the issue of 500,000 “A” preferential shares of £1.

tained. For all these things capital is wanted; and capital means savings.

There are two methods of disposing of one's savings, of the excess of earning over expenditure. We may place these savings whence we may obtain them at will, or almost at will, in the bank, in War Saving Certificates, in Treasury Bills. We may place them whence we cannot recover them at our wish, may invest them in a company, or by purchasing Government stock substitute ourselves for another as a creditor of the State.

If we adopt the second method in order that the return of interest may be the greater, we relinquish the idea, so gratifying it would seem, of having our funds always available. The distinction between long-term and short-term loans is not, perhaps, to be clearly drawn. An investment in a company—a part ownership by way of shares, a loan by way of bonds or debentures—can readily become the means of obtaining immediate purchasing power from the bank; and the Stock Exchange affords means of exchanging it for immediately available capital. To the investor this is almost the same as the possibility of withdrawing his investment. Similarly, it may well be a matter of indifference to a Government whether to fund its debts—to make them a part of that debt upon which it undertakes merely to pay a fixed rate of interest—or to renew floating debts as they mature.

When a business man wants money to finance the current operations of his business he goes to his banker. When he wants money to extend his business he obtains a loan from an insurance company, giving a security, a mortgage on his property perhaps. Or he decides to turn his business into a company and to invite the investing public to place their capital in the business.

In the main we may say that loans from the banks are short-term loans; loans upon the Stock Exchange are long-term loans. An order is given to a manufacturer. The manufacturer borrows from the banker in order to buy raw material and to pay his workers during the period of production. This is a short-term loan, repaid as the goods are transferred to the merchant. The latter, too, borrows on the

security of his purchase; and his temporary advance from the bank is again repaid as the goods pass to the retailer or to another merchant. If, however, a manufacturer seeks to develop his undertaking, to build further, or to instal machinery, he calls, by an attractive prospectus, for loans that will earn dividend but which cannot be withdrawn. The banker's advances are temporary ones—must be if he is to fulfil his duty to his depositors of having funds on demand at their disposal.

The banker needs to discriminate between a mortgage and a promissory note. On the first he does not care to lend; for bricks and mortar are not readily liquefied. On the second he is eager to lend provided he is content with the security offered. On the Continent, indeed, the big bank is often part owner of large commercial undertakings, and is represented on the Board of Directors. It has provided capital for the initiation or the extension of an undertaking, and finds itself with a lasting liability. Such an intimate alliance between the powers of finance and commerce is repugnant to our bankers: in the division of labour they choose to confine themselves to short loans.

Long-Term Loans.—Bankers' advances—by discounting bills, by granting credits on collateral, by loan on call—comprise roughly the fund from which short-term loans are made. Investments, in response to the invitations scattered broadcast in prospectuses, form the long-term loan fund—investments provide the capital, the yoke that will subdue natural powers and enable man to control them for his purposes. The bank mobilises capital for temporary use in discounting commercial paper. The joint-stock company mobilises capital for more extended use, to build factories or to instal plant.

It is, indeed, an extraordinary development of these days that an investor now has so wide a choice of directions in which to venture his fortunes. He is not confined to new enterprises in his own country, to the building of a railway or the initiation of a motor coach service that will diminish the takings of the railway. The whole world is before him; he may help

to finance a rubber plantation in Ceylon or a gold mine at Johannesburg; he may rely upon the faith of peoples he will never visit but who will thank him for providing present means of making the best use of their natural resources.

Certainly there is at the moment, since memories of the Great War are still with us, some reluctance to invest capital abroad. The reluctance is in part justified: there is always danger of contention when one country is heavily indebted to another. Perhaps the people of the Argentine gladly pay to British investors a part of the yearly earnings of its ranches and railways. But they do this because the tangible results of the loan are there; because the amount paid is not felt to be a burden; and maybe because they trust to borrow still more. It is different if it is a payment such as that contemplated from Germany to France and Italy; from Italy to Britain; from Britain to the United States—a payment, for “reparations” in the first case, a repayment of war loans in the other.

Degrees of Risk.—A point to be noticed, too, is that long-term loans may be of various kinds. The risk of one is great, but then there are great expectations. The risk of another is almost negligible, and the rate of returns is simply a “reward for waiting”; it is pure interest. A loan to the British Government will yield its 3 or 4 per cent.; an advance of capital for a new gold mining enterprise will yield its 50 per cent., or again it will not. The risk of no yield at all is present in the second and not in the first.

The cautious investor will buy Consols; the man who enjoys the exhilaration of risking will be tempted by the prospectus promising high profits. In a single company itself we may have degrees in risk-bearing; so that we have different kinds of shares and different kinds of debts. There are ordinary shares, to which no particular privilege is attached, that may earn nothing one year but a great deal another; there are preference shares, upon which a dividend at a fixed rate is paid before the ordinary shares participate; there are cumulative preference shares, the claims of which being unsatisfied one year are carried forward to the next. Then, too, there are debentures secured by mortgage, and others not so secured.

Investment is facilitated also, we should note, by our adoption of the principle of limited liability, so that a man ventures not his whole fortune but such a part as presumably he can afford to risk.

The value of a stock is dependent upon (1) its capacity to earn interest or dividends, (2) the length of time that such capacity may be calculated upon, (3) the possibility of its rising in price upon the Stock Exchange. The three properties will appeal to different investors, to the same investor indeed at different times. A highly speculative stock, one that experiences rapid ups and downs of prices, attracts a man who is little moved by the prospect of small yet certain gains; an undertaking that will possibly earn 30 per cent. for a few years delights a man who is less eager for permanent safety than for present profit.

CHAPTER XII.

BANK OF ENGLAND AND THE MONEY MARKET.

The Bank of England as the Central Bank.—The keen interest taken in the possibility of managing the currency rather than letting it be automatic is in keeping with the tendencies of the time. Haphazard evolution, based upon the method of trial and error, has been well enough in the past. There has been little of conscious direction of national activities to definite tasks. But *laissez faire* is not now regarded as a plan unassailable. The idea is abroad that conscious and deliberate management may be better than the undirected natural evolution. In regard to money matters, at any rate, the Bank of England as a central bank is regarded as the natural and very necessary manager of the quantity of money. Indeed, some economists are not afraid to attribute the whole of our troubles at the moment to a mismanagement or non-management of money.

The Bank of England is a corporation. It is a business company with a statutory charter for banking purposes. It was incorporated in 1694 under the title it still bears: "The Governor and Company of the Bank of England." Originating in a government loan, its connection with the Government has continued close; and one might find difficulty in discriminating between the Bank and a department of State entrusted with the control of currency. Nevertheless, the Bank of England is not a State Bank. It is almost unique as a central bank, in that it is a private institution, practically independent of any form of legal control save in regard to its powers of issuing bank notes, yet it has become the instrument by means of which all the Government financial operations are performed.

The Bank came into being by Act of Parliament. Its foundation in 1694 arose out of difficulties of the Government of the day in securing a loan. Its primary purpose was to

raise and lend money to the State. In return for these services it received under its charter privileges, one of these being the privilege to issue bank notes. Conversely, its being can be ended by Act of Parliament. But it would seem that by the National Debt Act, 1870, the charter of incorporation of the Bank is of indefinite duration. For the Act enacts that the Bank shall continue a corporation for the management of the National Debt "until all stocks are duly redeemed by Parliament."*

Force of circumstances, not any deliberate planning, has made the Bank of England our central bank. The whole of the Money Market is connected, closely or remotely, with the Bank of England as its pivot. Like so many other things

* That this will coincide with the calends of Greece is suggested by the White Paper issued in September of 1932. This shows that the National Debt increased by £20,634,255 during the year ended March 31, 1932. The figures for recent years were:—

| | Deadweight Debt. | Change. |
|----------------|---------------------|--------------|
| | £ | £ |
| March 31, 1929 | 7,500,337,654 | — 27,479,234 |
| " 1930 | 7,469,038,811 | — 31,298,843 |
| " 1931 | 7,413,308,625 | — 55,730,186 |
| " 1932 | 7,433,942,880 | + 20,634,255 |

The funded internal debt (£1,467,075,541) showed an increase of £42,051,225; terminable annuities (£11,719,020) were £280,630 less; and the floating internal debt was £611,955,000—an increase of £17,630,000. Other unfunded internal debt amounted to £4,375,819,614—a decrease of £55,841,523. External debt amounted to £1,090,836,656, an increase of £24,174,293.

In 1914 the total nominal deadweight debt was £649,770,091. In 1920 it reached its highest point—£7,828,779,095. Particulars of conversions effected during the year show that stock to the amount of £141,594,905 was converted, and stock amounting to £169,736,565 was set up, including £73,028,559 Four per Cent. Consolidated Loan, and £41,671,780 Four-and-a-Half per Cent. Conversion Loan.

In the year 1931-2 the total cash raised by the creation of debt (including the net figure for floating debt) was £146,419,525, while the cash applied to debt redemption was £171,810,992. The net cash applied to debt redemption was, therefore, £25,391,467.

in our political and economical machinery, the Bank is an instance of successful adaption to practical industry; and in the newly-established central banks, the Bank of England has been taken as the model. It can apply rationalisation to the world of finance, for it can take a comprehensive view of the money system of the country, and it can control that system.

Founding of the Bank of England.—The Bank of England began when English banking was in its infancy. Here is the pompous official account of the foundation: “In 1694, by Act of Parliament and letters patent authorised thereby, the subscribers and contributors to a Government loan of £1,200,000, their heirs, successors, and assigns, were constituted a body corporate and politic by the name of the Governor and Company of the Bank of England, with perpetual succession and a common seal. The annual sum of £100,000, charged on the Government revenues, was appropriated to the benefit of such corporation, being 8 per cent. on the amount prescribed, and £4,000 a year for management.

“The notes of the Bank of England were to be exempt from all stamp duty.”

Divested of its elaborate legal dress the account comes to this: the Government was in sore straits for money; in order to get money, the Government granted a charter to a company formed to make profit in the lately discovered way of lending paper promises to pay.

There was then a natural disinclination to lend, even to the Government. For there had recently occurred a gross breach of public faith. The goldsmiths had advanced money to the Government of Charles II.; and they expected, as was the custom, to be repaid with interest as the taxes came in. About £1,300,000 had been in this way entrusted to the honour of the State; for then the King was the public tax-collector and the public paymaster. He paid his cook and his army from the one fund. On a sudden it was announced that it was not convenient to pay the principal, and that the lenders must content themselves with interest. The lenders were as a result unable to meet their own engagements; just as a business man would be now if suddenly told that his debtors

could not pay. Several great merchant houses broke; and the dismay and distress was great.

Macaulay gives a vivid account of the formation of the Bank whereby the public became assured that henceforth the State would scrupulously observe what it had undertaken to do: "Another million was wanted to bring the estimated revenue for the year 1694 up to a level with the estimated expenditure. Montague had a plan ready. He succeeded, not only in supplying the wants of the State for twelve months, but in creating a great institution, which, after the lapse of more than a century and a half, continues to flourish.

"In the reign of William, old men were still living who could remember the days when there was not a single banking house in the city of London. So late as the time of the Restoration every trader had his own strong box in his own house, and, when an acceptance was presented to him, told down the crowns and Caroluses on his own counter. But the increase of wealth had produced its natural effects, the subdivision of labour. Before the end of the reign of Charles II. a new mode of paying and receiving money had come into fashion among the merchants of the capital. A class of agents arose whose office was to keep the cash of the commercial houses. This new branch of business naturally fell into the hands of the goldsmiths, who were accustomed to traffic largely in the precious metals, and who had vaults in which great masses of bullion could lie secure from fire and from robbers. It was at the shops of the goldsmiths of Lombard Street that all the payments in coin were made. Other traders gave and received nothing but paper.

"The new system saved both labour and money. Two clerks, seated in one counting house, did what, under the old system, must have been done by twenty clerks in twenty different establishments. A goldsmith's note might be transferred ten times in a morning; and thus a hundred guineas, locked in his safe close to the Exchange, did what would formerly have required a thousand guineas, dispersed through many tills, some on Ludgate Hill, some in Austin Friars, and some in Tower Street.

"It was then at least as difficult to raise £1,000,000 at 8 per

cent. as it would now be to raise £30,000,000 at 4 per cent. It had been supposed that contributions would drop in very slowly; and a considerable time had therefore been allowed by the Act. This indulgence was not needed. So popular was the new investment that on the day on which the books were opened £300,000 were subscribed: £300,000 more were subscribed during the next forty-eight hours; and in ten days, to the delight of all the friends of the Government, it was announced that the list was full. The whole sum which the Corporation was bound to lend to the State was paid into the Exchequer before the first instalment was due. The Great Seal was put to a charter framed in conformity with the terms prescribed by Parliament; and the Bank of England commenced its operations in the house of the Company of Grocers.

“ In old times, when the Treasury was empty, when the taxes came in slowly, and when the pay of the soldiers and sailors was in arrear, it had been necessary for the Chancellor of the Exchequer to go, hat in hand, up and down Cheapside and Cornhill, attended by the Lord Mayor and by the Aldermen, and to make up a sum by borrowing £100 from this hosier, and £200 from that ironmonger. Those times were over. The Government, instead of laboriously scooping up supplies from numerous petty sources, could now draw whatever it required from an immense reservoir, which all those petty sources kept constantly replenished.”

Constituents of the Money Market.—It will help to clearness if we look for a moment at the chief constituents of the Money Market, viz. (a) the Clearing House, (b) the Clearing Banks, (c) the other banks of England and Wales that use the Clearing Banks as their agents, (d) the Bill Broker, the Discount Houses and Accepting Houses, (e) the Stock Exchange.

The Clearing House.—Thrice a day ten of the London banks—including the Big Five—meet at the *London Bankers' Clearing House* to settle accounts with the Bank of England and with one another. And through the agency of the Clearing House the rest of the banks of England and Wales

also settle their accounts. The machinery evolved for the settlement is the *Clearing House*, the visible and constantly renewed link between the outer banks and the central bank.

The Clearing House is not a bank in the ordinary sense. It is not a deposit bank competing with the Joint-Stock Banks for the public as its customers. It has in fact only three officers of its own—the Principal, Deputy, and Assistant Inspectors. The main work of the House is done by the Clearing Banks, and originated from the convenience of having a place where the banks could set off their claims against one another.

The old, tedious, and wasteful method of balancing claims upon one another must have been something like what still persists in France, where the cheque system and deposit banking are far less developed than they are here. Most traders keep their cash at home and pay their accounts by accepting Bills payable at their homes. The bankers, therefore, into whose hands the bills come are obliged, at expense and risk, to send messengers round to collect the cash due. So, in the early days of London Joint-Stock Banks, there were "walk clerks" whose main duty was to collect from the other banks what was due to their own banks. It was an obvious economy if these "walk clerks" agreed upon a meeting place; instead of journeys to a dozen different banks, a single journey to the meeting place—a convenient tavern or coffee house, maybe—was all that was necessary.

Thus, the Clearing House originated as a labour saving device introduced by the employees of the London Bankers. As a matter of fact, in essence it is still unchanged, although it has developed amazingly from such small beginnings.

The Clearing Banks.—These, ten in number, in addition to the Bank of England, balance claims upon one another directly through the Clearing House and act as agents in the rest of the banking community. Glyn Mills is the only private bank in the Clearing House. The others are joint-stock banks. Of these joint-stock banks, the Big Five are the most important. How great these giants are in comparison with the others we can judge from this table:—

THE CLEARING BANKS.

(In £ columns, 000's omitted.)

| Bank. | Deposits, etc. | Cash in hand and at Bank of England. | Per Cent. | Cheques in Transit. | Money at Call and Notice. | Per Cent. |
|-------------------------------|-------------------|--|--------------|---------------------------|---------------------------------|--------------|
| | £ | £ | | £ | £ | |
| Bank of Liver- pool | 57,756 | 5,955 | 10.3 | 1,809 | 4,619 | 7.9 |
| Barclays | 294,931 | 34,624 | 11.7 | 8,891 | 23,360 | 7.9 |
| Coutts' | 16,280 | 1,490 | 9.2 | 623 | 1,951 | 12.0 |
| Glyn Mills | 23,810 | 2,111 | 8.9 | 1,146 | 2,248 | 9.4 |
| Lloyds | 322,294 | 35,821 | 11.1 | 8,381 | 17,961 | 5.6 |
| Midland | 337,703 | 48,509 | 14.4 | 12,319 | 18,453 | 5.5 |
| National | 37,274 | 3,803 | 10.2 | 120 | 4,500 | 12.1 |
| Nat. Prov. | 246,397 | 27,096 | 11.0 | 7,534 | 20,268 | 8.2 |
| Westminster | 260,315 | 26,886 | 10.3 | 8,448 | 25,191 | 9.7 |
| Williams | 30,764 | 3,689 | 12.0 | 1054 | 2,276 | 7.4 |
| April, 1926: Totals | 1,627,524 | 189,984 | 11.7 | 50,325 | 120,827 | 7.4 |
| April, 1925: Totals | 1,644,816 | 192,985 | 11.7 | 54,518 | 115,940 | 7.0 |

(In £ columns, 000's omitted.)

| Bank. | Bills dis. | Per Cent. | Invest- ments. | Advances. | Per Cent. |
|---------------------------|------------|--------------|-------------------|-----------|--------------|
| | £ | | £ | £ | |
| Bank of Liverpool | 24,978 | 5.2 | 8,572 | 36,494 | 63.2 |
| Barclays | 31,617 | 10.7 | 57,410 | 152,778 | 51.8 |
| Coutts' | 775 | 4.8 | 4,264 | 8,431 | 51.8 |
| Glyn Mills... .. | 733 | 3.1 | 6,854 | 11,790 | 49.5 |
| Lloyds | 37,963 | 11.8 | 47,662 | 187,670 | 58.2 |
| Midland | 38,197 | 11.3 | 31,137 | 210,408 | 59.6 |
| National | 2,579 | 6.9 | 15,679 | 15,801 | 42.4 |
| National Provincial... .. | 32,157 | 13.1 | 38,554 | 132,310 | 53.7 |
| Westminster | 41,068 | 15.8 | 45,969 | 124,235 | 47.7 |
| Williams | 2,046 | 6.7 | 4,793 | 19,209 | 62.4 |
| April, 1926: Totals | 190,113 | 11.7 | 260,894 | 890,126 | 54.7 |
| April, 1925: Totals | 193,619 | 11.2 | 294,575 | 864,204 | 52.5 |

Discounters of Bills.—The Discount Houses and Accepting Houses normally deal with the outside banks, borrowing their surplus funds as short loans (for seven days usually) or on call at low rates; and they discount commercial bills at slightly higher rates. The discount brokers may have recourse to the Bank of England too, however, but only when compelled by monetary stringency. For to be “put into the Bank” means having to pay higher rates of interest for the accommodation they want; and the higher rate may more than wipe out their gain on the bills discounted.

The discount houses and brokers may indeed be looked upon as working in an implicit partnership with the banks. They employ the banks' surplus funds, yet hold these funds available. They constitute, too, a convenient sponge for gathering together the bills which the banks, from time to time, wish to buy in order to hold until maturity. Where the discount market is less developed—as in the United States—the banks have not that convenient machinery at hand. There in times of pressure they are obliged to have recourse to the central bank. One main function of the Federal Reserve Banks is, indeed, to lend member banks on commercial paper and United States Government securities.

Ordinarily the English banks do not borrow directly from the Bank. They do draw indirectly upon the Bank, however. For when they call in their loans from the bill brokers and discount houses, these are obliged to go to the Bank of England to discount bills of exchange that they have been carrying with money borrowed from the banks. In this event the reserves of the joint-stock banks—their deposits at the Bank of England—are replenished from the Bank itself by way of the discount market.

Monopoly of Note Issue.—The renewal of the Bank's charter in 1708 contained the provision: “During the continuance of the said corporation of the Governor and Company of the Bank of England, it shall not be lawful for any body politic or corporate whatsoever, created or to be created (other than the said Governor and Company of the Bank of England), or for any other persons whatsoever, united or to be united in

covenants of 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 at demand, or at a less time than six months from the borrowing thereof."

This does in reality mean that the monopoly of bank note issue—so far as regards joint-stock banks—is with the Bank of England. In times, however, when profits in banking seemed bound up with the right to issue notes, it was taken to confer upon the bank actually a monopoly of joint-stock banking in England. Since the shifting of importance from the bank note to the cheque it has been found practicable and profitable to carry on banking within the right of issue. The cheque may have a shorter life than the bank note: its goodness is more speedily tested. It is none the less a very effective way of coining the bank's credit, and making that credit available for payments of debts. The Bank has still the monopoly of note issue; it has by no means the monopoly of banking.

Bank Controls Bank Cash.—The importance of action by the Bank of England—the reason why an alteration in the "Bank Rate" is an event of great interest in the Money Market—may be deduced from what has been said. The Bank, acting as the agent of Government, is the one source from which legal tender emanates. Now, the liabilities of the joint-stock banks are for the greater part demand liabilities, payable legally in money obtained from the Bank of England. An amount of this legal money—this "bank cash"—must be in hand sufficient to cope with any demands likely to be made. The proportion need not be large where the banking system is fully developed. And it is not a rigid one: the ten per cent. at which the joint-stock banks aim is itself only a conventional proportion; and the custom may change. Some proportion of bank cash there must be, however.

The amount of bank cash determines the amount of bank money. Claims upon the Bank constitute great part of this bank cash. These claims, transferable into legal money, are therefore a matter of supreme consequence to the joint-stock banks.

The Bank of England can create bank cash, and with it the power of other banks to make loans. The reference here is not to the power given to the Bank by the "elasticity clause" (Sub-section (1) of Section 8) of the 1928 Act. (See page 62.) It applies to the ordinary working of the Bank. If the Bank makes a loan, or discounts a bill, or buys gold or securities, the amount paid by the Bank becomes bank cash. Within limits, largely in the discretion of the Bank, the Bank can, regardless of movements of gold, prompt an expansion or a contraction of credit. If it buys or lends, it gives the basis for an expansion; if it sells or calls in loans, it brings about a contraction. And, since the Bank Rate signifies the willingness or reluctance of the Bank to make the loan or discount the bill, we may say that the Bank Rate signifies the easiness or difficulty of creating bank cash. The lower the rate, the greater the volume of money in the market; the higher the rate the less the volume of money.

CHAPTER XIII.

THE CLEARING HOUSE SYSTEM.

The Clearing House.—The Clearing House is the instrument whereby credits are set against debits; and the need for legal money thereby is very largely obviated.

No money payment is made in the Bankers' Clearing House itself. Any settlements "on general balance" are made by drafts on the Bank of England. Perhaps we should examine the process a little. Barclays Bank, for instance, finds at the beginning of the day that it has a large number of cheques to collect for its customers from Lloyds Bank. The cheques are totalled, parcelled up, and at the Clearing House handed to the representative of Lloyds Bank. The totals will be agreed, and the amount will be a payment due from Lloyds to Barclays.

There will also be with Barclays a number of matured Bills of Exchange domiciled with Lloyds Bank—accepted, that is, and made payable at Lloyds. All these "articles" constitute Barclays' "charge" on Lloyds. The total amount of the cheques and bills is Barclays' *in-clearing* with Lloyds. But Lloyds will have cheques and bills payable by Barclays. The amount of these will be Barclays' *out-clearing* with Lloyds. The difference between the *in-clearing* and the *out-clearing* will in ordinary times be small; there will be an amount of £x due from B. to L. or from L. to B., an amount that may well be less than the amount of a single article that has been cleared. Certainly it will be a great deal less than the total amounts cleared. Even if B. settled at once with L. there would be a great economy.

The Clearing House goes farther, however. For Barclays have transactions with other banks than Lloyds; and if there is to-day a payment due to Lloyds there may also be a payment due from another of the clearing banks. And the credit may well cancel the debit. At all events, if accounts with all the clearing banks are made out, there will be little to pay or to

receive—little, that is, in comparison with the vast amount of “ money ” that has changed hands. The enormous amount of debts arising from the operations of trade are measured in money, and legally are payable in what the State decrees. In actual practice they are not so paid; they are—except for a nearly negligible part—set off against one another by means of cheques. Credits pay off debits. The cheques, that are the machinery for this compensating action, simply give occasion for altering the figures in the banker’s books.

If all were paid for services by cheques on a single bank, if all paid for supplies by cheques on the same bank, no currency but the cheque need exist. Nor is it otherwise when different banks settle claims upon one another through a central bank. In other words, the greater the number of banks involved in the Clearing House system the more debts are paid by credits, and the less need of coin or notes. Money is still in the background as a measure of value. It ceases to act as currency, ceases to be a medium of exchange.*

Barclays’ account with Lloyds may be represented thus:—

BARCLAYS WITH LLOYDS.

| | |
|-------------------------------|---------------------------|
| Cheques and Bills to collect: | Cheques and Bills to pay: |
| (a) £..... | (a) £..... |
| (b) £..... | (b) £..... |
| (c) £..... | (c) £..... |
| — | Balance to receive: |
| £t | £t..... |
| — | — |
| £t | £t |

* An instance of how credit can entirely supersede coin is afforded in this interesting account of the building of a market in St. Peter’s: “ An interesting issue of notes was made over a hundred years ago by Daniel le Broc, Governor of Guernsey, who determined to build a market in St. Peter’s. Not having the necessary funds, he issued, under the seal of the island, 4,000 “ Market Notes,” each for £1 with which he paid the artificers. These notes were, however, only to be paid to the merchants who had shops or stalls in the market. When the rents of these shops and stalls became due they were paid with the notes, which were then cancelled. Thus was the market built, without an ounce of gold being used, and there it still stands as a lasting memorial to the ingenuity of Daniel le Broc and to his issue of notes.”

The £x that makes the balance even is not paid by Lloyds to Barclays: it is taken to form an item in a *general balance*. The item, affecting the general balance, is paid through the Bank of England. Each clearing bank has its account; there is a separate account for the *Clearing Bankers*; transfers among these accounts settle the whole matter. Instead of drafts for several other banks, one draft for or on the Clearing Bankers' Account is called for from each bank. If as a result of three clearings Barclays has £1,000,000 to receive, it requests the Bank of England—which is also a member of the Clearing House—to transfer £1,000,000 from the Clearing Bankers' Account to the credit of Barclays.

This request, being signed by a representative of Barclays and by an Inspector of the Clearing House, is complied with; and the one result of the day's work is that "Other Deposits" in the Bank of England have been redistributed. In our supposition Barclays' account has been augmented by £1,000,000, the Clearing Bankers' Account diminished by £1,000,000. This latter account will, to be sure, have also been augmented by £1,000,000 so that at the end of the day there will be no outstanding balance of the Clearing Bankers; for what one bank has to receive another has to pay.

Lloyds may, for example, after the balancing, owe £500,000 on general balance. It then gives an authority to the Bank of England to transfer £500,000 from Lloyds' Account to the Clearing Bankers' Account. Again "Other Deposits" are so far redistributed that Lloyds' Account is depleted by £500,000, the Clearing Bankers' Account is replenished by £500,000. Barclays' general balance may be represented thus:

BARCLAYS BANK.

| | Balances for. | Balances against. |
|--------------------------------|------------------|----------------------|
| Bank | — | £y |
| Westminster | — | £z |
| Etc. | etc. | etc. |
| Balance, etc., due to Barclays | — | £1,000,000 |
| | — | — |
| | £T | £T |

The Bank of England, we should note, assumes a privileged position at the Clearing House. It presents these bills and cheques due to itself from the other banks. This is, of course, all that is wanted. For, since the Clearing Banks have their accounts with the Bank of England, claims upon the Bank go to swell the accounts of the Clearing Banks at the Threadneedle Street office. There will always, therefore, on the day's working of the Clearing House, be an item in favour of the Bank of England.

The principle of the Bankers' Clearing House—the compensating, so far as possible of debits by credits—is in operation wherever big business is being done. The Railways, for instance, settle accounts through the Railway Clearing House.

The Clearing House and the Bank of England.—All banking operations are based upon the Bank of England. In practically all domestic transactions payment from one banker is simply payment to another; and ultimately all that happens is a reshuffling of "Other Deposits." This part of the liability of the Bank of England should, at first sight, appear therefore as giving rise to no anxiety. It should be singularly stable. More than this, it would seem that in times of anxiety, in times when the outer banks are trying to make their positions more secure, these "Other Deposits" would actually augment. When the banks wish to strengthen their position they tend to call in money on short loan.

Little risk seems to attach to a deposit that tends to increase when times of pressure come. That the Clearing House system does entail a great responsibility on the Bank of England—the keeper of the one reserve—is, however, quite certain. No one could put the matter more lucidly and effectively than does Bagehot in his *Lombard Street*. His conclusions are more than ever applicable now. Banks are able to keep their deposits at the Bank of England by the aid of the Clearing House system; and if panic were to rise to any considerable height, that system, resting as it does on confidence, would be destroyed by terror. To quote Bagehot—

"The common course of banking is this: *AB* having to receive £50,000 from *CD* takes *CD*'s cheque on a banker

crossed, as it is called, and, therefore, only payable to another banker. He pays that cheque to his own credit with his own banker, who presents it to the banker on whom it is drawn, and if good it is an item between them in the general clearing or settlement of the afternoon. But this is evidently a very refined machinery, which a panic will be apt to destroy.

“ At the first stage *AB* may say to his debtor *CD*, I cannot take your cheque, I must have bank notes. If it is a debt on securities, he will be very apt to say this. The usual practice—credit being good—is for the creditor to take the debtor’s cheque and to give up the securities. But if the ‘securities’ really secure him in a time of difficulty, he will not like to give them up and take a bit of paper—a mere cheque, which may be paid or not paid. He will say to his debtor, I can only give you your securities if you will give me bank notes. And if he does say so, the debtor must go to his bank and draw out the £50,000 if he has it.

“ But if this is done on a large scale, the bank’s ‘cash in house’ would soon be gone; as the Clearing House was gradually superseded it would have to trench on its deposit at the Bank of England, and then the bankers would have to pay so much over the counter that they would be unable to keep much money at the bank, even if they wished. They would soon be obliged to draw out every shilling.

“ The diminished use of the Clearing House, in consequence of the panic, would intensify that panic. By far the greater part of the bargains of the country in moneyed securities is settled on the Stock Exchange twice a month, and the number of securities then given up for mere cheque, and the number of cheques then passing at the Clearing House are enormous. If that system were to collapse, the number of failures would be incalculable, and each failure would add to the discredit that caused the collapse.

“ The non-banking customers of the Bank of England would be discredited as well as the other people; their cheques would not be taken any more than those of others; they would have to draw out bank notes, and the Bank reserve would not be enough for a tithe of such payments.

“ The matter would come shortly to this: a great number

of brokers and dealers are under obligations to pay immense sums, and in common times they obtain these sums by the transfer of certain securities. If, as we have said just now, No. 1 has borrowed £50,000 of No. 2 on Exchequer bills, he for the most part cannot pay No. 2 till he has sold or pledged those bills to someone else. But till he has the bills he cannot pledge or sell them; and if No. 2 will not give them up till he gets his money, No. 1 will be ruined, because he cannot pay it. And if No. 2 has No. 3 to pay, as is very likely, he may be ruined because of No. 1's default, and No. 4 on account of No. 3's default, and so on without end. On settling day, without the Clearing House, there would be a mass of failures, and a bundle of securities. The effect of these failures would be a general run on all bankers, and on the Bank of England in particular."

CHAPTER XIV.

THE BANK OF ENGLAND RETURN.

The Bank Return.—Each Thursday the Bank* of England is required by the Bank Charter Act of 1844 to issue a Balance Sheet. This Bank Return, or Weekly Account, is, like the Bank itself, divided into two parts.

That of the Issue Department is simple:—

ISSUE DEPARTMENT.

| <i>Liabilities.</i> | | <i>Assets.</i> |
|------------------------------|--|---------------------------|
| £ | | £ |
| Notes issued 275,000,000+ £a | | Government debt, other |
| | | Securities and |
| | | Silver Coin ... |
| | | Gold Coin and bullion £a |
| | | 275,000,000 |

a being a varying number of pounds. The point to notice is that this number is always equal to the number in the line "Coin and Bullion." The idea of the Bank Charter Act was to take control of the issue of bank notes out of the direction of the Bank of England, and to make it automatic. Beyond a fixed fiduciary issue the Bank could issue notes only by increasing its stock of gold. This the Bank could do through its Banking Department. A substantial rise of discount rate

* The word "bank" is Italian in origin. In the days when world trade was concentrated in Italy, the money-changers counted their money on a table known as a *banco*. If the changer could not, for one reason or another, meet his obligations, his table was smashed: he was *banco rotto*; he became bankrupt. As recalling the Italian origin of our banks, it is interesting to see that on the £5 Bank of England note the word "Compa" (referring to the Governor and Company of the Bank) is a contraction of the Italian word *Compagnia*, meaning *Company*.

—not less than one per cent.—would attract gold from abroad by the prospect of investment at a higher rate of interest. There would, too, be a discouragement of speculative buying of stocks; for the terms on which money was lent would be more onerous. When on the other hand prices were falling and gold reserves in the Banking Department were high, things were made easier for borrowers, and encouragement given thereby to business by a lowering of the discount rate.

Except for the fact that the automatic working was too slow to cope with sudden great demands for legal currency, the system worked well. When in times of panic credits were frozen and legal tender eagerly sought, it became necessary to allow the Bank to exceed the limitation imposed by statute—a permission not very accurately described as “suspending the Bank Act.”

The £275,000,000 is made up of the fiduciary issue, the faith money that is unbacked by gold and authorised by the Act of 1928, together with the temporary addition of £15,000,000 made in 1931. The Assets held against this Liability include the original debt owed to the Bank by the Government. The rest consists of British Government (Stock Exchange) Securities and of Silver Coin.

The Weekly Account of the Banking Department, the real Bank of England, is more complex:—

BANKING DEPARTMENT.

| <i>Liabilities.</i> | | <i>Assets.</i> | |
|----------------------------------|------------|---------------------------|-------|
| | £ | | £ |
| Proprietors' Capital | 14,553,000 | Government Securities ... | s_1 |
| Rest | r | Other Securities: | |
| Public Deposits | d_1 | Discounts and | |
| Other Deposits: | | Advances | |
| Bankers' ... | | Securities | s_2 |
| Other Accounts | d_2 | Notes } | n |
| Seven-day and } other Bills } | b | Coin } | c |
| | <hr/> | | <hr/> |
| | x | | x |
| | <hr/> | | <hr/> |

Every note beyond this fiduciary issue is a gold certificate; for it there is either coin or bullion (standard gold an ounce of which is taken as $3\frac{1}{16}\frac{4}{3}$ sovereigns) in the custody of the Bank. It was originally contemplated that silver as well as gold coin would figure on the Assets side. Since 1928, when the Bank was made responsible for all the legal paper money issued, this item—long absent—again appeared.

The *Proprietors' Capital* has remained unchanged for nearly a hundred years. The Bank need have no anxiety regarding this. We ought to note, perhaps, that its amount—as compared with that of the other joint-stock banks—is very large.

The *Rest (r)* is a fluctuating amount of undistributed profits. It is never allowed to fall below £3,000,000 in each half year, the surplus beyond this amount sufficing for the half year's dividend. No inconvenient request for this may be anticipated, any more than for Proprietors' Capital.

The other three items on the Liabilities side—*Public Deposits (d₁)*, *Other Deposits (d₂)*, and *Bills (b)*—constitute apparently the claims that the Bank must, at any moment during banking hours, be prepared to meet if need be in legal money. The cautionary word “apparently” is called for; since interpretation of the items in the return is usually largely guess-work.

The *Public Deposits* are the payments into the Bank on behalf of the State. These deposits swell when income tax payments are pouring into the Bank at the beginning of each half-year. They dwindle as the Government makes its payments—interest on debts incurred, payments in regard to supply services, to contractors, and so on. The Treasury tries to keep this amount low. For the Bank pays no interest on deposits. To cause money to be transferred from Bankers' Deposits to Public Deposits is to make it cease from being a foundation for credit. It is immobilised when it does no good to anyone. It must be admitted though, that not a great deal of reliable deduction can be drawn from the rise and fall of this item. The relation, indeed, between the Government and the Bank that most affects the money market is not included in the Bank Return. This is the

amount of the Government overdraft, an overdraft known as "Ways and Means Advances."

The *Other Deposits* are those of the customers of the Bank, the most interesting of which customers are the "outer banks," the big joint-stock and other clearing banks, which keep balances at the Bank of England. These balances of the Clearing Banks are supposed to be about half of "Other Deposits." These are the balances that are modified as the result of the various "clearings."

The *Seven-day Bills* supply an interesting illustration of the work of a bank in transmitting money from one place to another at a distance. They are practically drafts (Bills of Exchange) drawn by the Bank upon itself. Their principal use is for travellers abroad, since they can be readily cashed. The amount is now only tiny.

On the Assets side the *Government Securities* comprise claims of all kinds upon the Government, claims like Government Stock, National War Bonds, Exchequer Bonds, and Treasury Bills.

The *Other Securities* are not the same as *Other Securities* in the Issue Department. The item in the Banking Department are claims other than those upon the British Government. The "Other Securities" are claims represented by Stocks and Bonds (other than British Government Stock and Bonds), Debentures, Shares, and claims in respect of Bills of Exchange and loans (other than loans to the Government). The Bills will invariably be the best bank paper, and will on ordinary occasions include no foreign Bills (Bills accepted to be paid abroad).

This item shows what amount of borrowing from the Bank there has been. When, for instance, the "outer banks" wish to strengthen their reserves, and when, therefore, they call in loans, they force discounters who have been doing business on short loans, to have recourse to the Bank of England. They "put the market in the Bank." The Bank discounts the bills and buys the stocks offered; the "call-money" is paid in drafts on the Bank; and the "Balances with the Bank of England" swell.

Of these Assets the only immediately available part is

$n + c$, the *Notes and Coin* in the Banking Department. Even Stock Exchange securities take a little time to be turned into legal money; and at a time of panic there would be few buyers. The securities could be sold only at a grievous loss. The *Notes and Coin* in the Banking Department of the Bank of England is, therefore, the one reserve upon which our whole banking system is based. Every credit instrument—cheque or bill or note—is, in the last analysis, a claim upon this stock of gold, a stock small enough in truth, yet the only considerable accumulation of gold in the country. It is this one reserve that the manipulation of the Bank rate decreases or increases—decreases when an uneconomical store of gold is lying idle, increases when that store appears too low for safety.

The percentage of this reserve to the Bank's liabilities to the public is known as the "Proportion." This "Proportion," $\frac{n + c}{d_1 + d_2}$, indicates the strength of the Bank's position. Since the Currency and Bank Notes Act of 1914, the "Proportion" has lost its significance. For the provision of legal money is now with the Treasury, acting through the Bank of England.

The Bank Reserve is cash, legal tender. Its size depends upon the three factors:

1. The amount of the Fiduciary issue, an amount determined by Parliament, the governing enactment being the Currency and Bank Notes Act of 1928;

2. The amount of gold held by the Bank;

3. The demand for legal tender by the outer banks and the public.

Thus at Christmas, when there is a big holiday demand for notes, the Reserve falls. Its fall at such a time has little significance. For we may expect a flow back when the immediate need for more hand-to-hand currency disappears. When the Reserve falls to a low level during ordinary times, we may expect the Bank Rate to rise so that credit may be restricted. For, no more than any other bank, can the Bank of England see its cash diminish greatly.

The Reserve and its Changes.—Consider how various operations may affect this Weekly Account. (1) Suppose that a customer, Guy's Hospital, say, or Barclays Bank, makes a deposit of £ x in coin or bank notes. Then the *Reserve* (the Notes and Coin of the Banking Department) is increased by £ x ; and Other Deposits (on the Liabilities side) are also increased by £ x . How is the relation of Deposits to Reserve affected? It has changed from—

$$\frac{n + c}{d_1 + d_2} \quad \text{to} \quad \frac{n + c + x}{d_1 + d_2 + x},$$

obviously an increase, since Deposits are usually about five times Reserve. The Bank, therefore, will be less solicitous about its store of gold; and the Bank Rate will have a tendency to fall. Money on short loan will be easier.

(2) Suppose that a deposit is made of £ x by cheques upon the outer banks. The Bank debits its banker customers with £ x , and credits its private customers with £ x . Both operations take place within "Other Deposits." These are differently distributed as a result; but the Weekly Account is not altered.

Suppose now that deposits are made by the Collecting Departments of Government:

(3) If in coin or bank notes: the Reserve is increased by £ x ; and, as in (1), the ratio of Reserve to Deposits is increased.

(4) If cheques are paid in, Other Deposits diminish to the extent that Public Deposits increase.

Similarly, the withdrawal either by an individual customer or by a bank of £ x in notes would lessen the ratio of Reserve to Deposits. The ratio would change from—

$$\frac{n + c}{d_1 + d_2} \quad \text{to} \quad \frac{n + c - x}{d_1 + d_2 - x}.$$

Think now what happens when the Bank buys bullion. It purchases, say, x ounces of standard gold bullion at £ y an ounce. The seller may take for his gold Bank of England notes for £ xy . The Banking Department hands over to the Issue Department the purchased gold; and the Issue Depart-

ment hands over $\text{£}xy$ in notes. The transaction will, therefore, have caused no change in the balance sheet of the Banking Department; what has happened is simply that $\text{£}xy$ notes have been given for gold and have been received for gold. The Banking Department has been the intermediary by which the Issue Department has bought $\text{£}xy$ worth of gold. In the Issue Department balance sheet, however, "Notes issued" have been increased by $\text{£}xy$; and on the Assets side "Coin and bullion" has been increased by the like amount.

Suppose, what is more likely to happen, that the seller is paid by a cheque upon the Bank of England. This he pays into, say, Barclays Bank. When this cheque has been cleared we shall have, as an effect, these alterations:—

ISSUE DEPARTMENT.

Notes issued ... + $\text{£}xy$ Coin and Bullion ... + $\text{£}xy$

BANKING DEPARTMENT.

Other Deposits ... + $\text{£}xy$ Notes and Coin ... + $\text{£}xy$

That is to say, the ratio of Reserve to Deposits is increased.

The effect of other banking operations upon the ratio of Reserve to Deposits should now be readily grasped; and we may put them briefly.

(1) The Bank lends $\text{£}x$ to a person by crediting his account with $\text{£}x$; so that Other Deposits are increased by $\text{£}x$ and Other Securities are also increased by $\text{£}x$. The ratio of Reserve to Deposits is decreased from—

$$\frac{n + c}{d_1 + d_2} \quad \text{to} \quad \frac{n + c}{d_1 + d_2 + x}$$

(2) The Bank discounts an approved Bill of Exchange for $\text{£}x$. That is, it buys the Bill at or beyond the official rate of discount. Again the ratio of Reserve to Deposits is decreased from—

$$\frac{n + c}{d_1 + d_2} \quad \text{to} \quad \frac{n + c}{d_1 + d_2 + x}$$

(3) The Bank buys Stock Exchange Securities to the value of $\text{£}x$, paying for them by cheque. Either Government

Securities or Other Securities (Assets) are increased by £ x ; and Other Deposits (Liabilities) are also increased by £ x . The Ratio of Reserve to Deposits is decreased from—

$$\frac{n + c}{d_1 + d_2} \quad \text{to} \quad \frac{n + c}{d_1 + d_2 + x}$$

(4) The Bank sells Securities for £ x , being paid by cheque. Either Government Securities or Other Securities are decreased by £ x (Assets) and Other Deposits (Liabilities) are also decreased by £ x . The ratio of Reserve to Deposits is increased from—

$$\frac{n + c}{d_1 + d_2} \quad \text{to} \quad \frac{n + c}{d_1 + d_2 - x}$$

The ratio of Reserve to Deposits is, therefore,

- increased* by the addition to deposits in coin or Bank notes,
 by the purchase of bullion (when payment is made
 by cheque or by a credit deposit),
 by borrowing against security,
 by selling securities;
- decreased* by withdrawal of coin or Bank notes,
 by lending or discounting,
 by buying Securities.

The actual banking return is, in accordance with statutory requirements, made up on each Wednesday, is considered by the Court of Governors on the Thursday, and appears in the morning papers on Friday. The first return after the amalgamation of the Government currency notes with the notes of the Bank of England is a kind of historic landmark. For, besides the information about the note issue, the information given in the Banking Department Return was extended in two notable directions: "Other Deposits," which before this return were not discriminated, are divided into "Bankers' Deposits," showing to what extent the Bank of England maintains the cash reserve for clearing purposes of the other banks, and "Other Accounts." And, on the assets side of the account, "Other Securities" are divided into "Discounts and Advances" and "Securities." "Discounts and Advan-

ces" in this item shows the extent to which the money market is indebted to the Bank. "Securities" shows the extent to which the Bank of England, on its own initiative, has created bank cash. (It appears that where a bill is discounted at the Bank on the initiative of the money market, it ranks as a "Discount." Where the Bank buys bills on its own initiative in the open market, these bills are ranked as "Securities.")

BANK OF ENGLAND.

An Account for the Week ended Wednesday, November 28th, 1928.

ISSUE DEPARTMENT.

| £ | | £ | |
|---------------------------|--------------------|-----------------------|--------------------|
| Notes issued— | | Government debt ... | 11,015,100 |
| In circulation ... | 367,001,148 | Other Government | |
| In banking department ... | 52,087,797 | Securities ... | 233,568,550 |
| | | Other securities ... | 10,176,193 |
| | | Silver coin ... | 5,240,157 |
| | | Amount of fiduciary | |
| | | issue ... | 260,000,000 |
| | | Gold coin and bullion | 159,088,945 |
| Total ... | 419,088,945 | Total ... | 419,088,945 |

BANKING DEPARTMENT.

| £ | | £ | |
|---------------------------|--------------------|---------------------------|--------------------|
| Proprietors' Capital ... | 14,553,000 | Government Securities ... | 52,180,327 |
| Rest ... | 3,254,001 | Other securities: | |
| Public deposits* ... | 21,452,051 | Discounts and | |
| Other deposits: | | advances ... | £13,586,293 |
| Bankers' ... | £62,879,409 | Securities ... | 20,214,565 |
| Other accounts | 37,185,203 | | |
| | 90,564,612 | Notes ... | 52,087,797 |
| 7-day and other bills ... | 2,649 | Gold and silver coin ... | 757,041 |
| Total ... | 138,826,313 | Total ... | 138,826,313 |

"Government securities" constitute the largest earning asset of the Bank. Fluctuation in the amount is consequent either upon alterations in the temporary advances to the Government ("Ways and Means Advances") or upon the Bank's buying and selling of Government securities. These include not only long term loans (like the 3½ per cent. Conversion stock) but also short term loans evidenced by Treasury bills.

* Including Exchequer, Savings Banks, Commissioners of National Debt, and dividend account.

CHAPTER XV.

A BANK BALANCE SHEET.

A Bank Balance Sheet.—The Bank of England is concerned about its Reserve; the other banks are concerned that they shall always have enough legal tender money to meet all the legitimate demands upon them. Their first duty is conceived to be to their depositors (including those to whom advances have been made) not to their shareholders or to would-be borrowers. They seek to ensure that any possible demands for payment shall be met.

When demands for legal money come upon him rapidly, the banker is anxious to turn his assets into legal means of payment, into the Bank of England Notes that constitute legal tender. That he is ultimately solvent is of less importance than that he can at the moment meet all admissible claims upon him. How far he can do this he sees from his balance sheet. He looks to the possible claims, either immediate or at a very short date. He compares with these the immediately available money, or that available without a great lapse of time. And—as if to emphasise from a banking point of view the importance of easy convertibility into cash—he arranges his assets in relation to the speed at which they may be turned into money, may become liquid.

The present monthly statement issued by the banks is, with slight modifications, that recommended by Lord Cunliffe's Committee (1918). Examine the statement.

The last four items on the liability side constitute claims upon the bank, claims that must be at need met—immediately or at very short notice—in legal tender currency. The *Capital* and *Reserve Fund* are also claims; but the bank need be under no anxiety regarding them. To meet these possible claims the bank has, in the first place, *Cash*. And you notice

PROPOSED MONTHLY STATEMENT TO BE PUBLISHED BY BANKS.

Statement of the average figures of the weekly Balance Sheets
during the month of 19.....

| LIABILITIES. | £ | s. | d. | ASSETS. | £ | s. | d. |
|------------------------------|---|----|----|-------------------------------|---|----|----|
| Capital:— | | | | Cash:— | | | |
| Registered £ | | | | (1) Coin, Bank and Cur- | | | |
| Subscribed £ | | | | rency Notes, and | | | |
| Paid up | | | | Balances with the | | | |
| Reserve Fund | | | | Bank of England £ | | | |
| Current, Deposit, and other | | | | (2) Balances with London | | | |
| Accounts | | | | Clearing Agents | | | |
| Acceptances | | | | and with other | | | |
| Endorsements, Guarantees, | | | | Banks, Bankers or | | | |
| and other obligations | | | | Banking Companies | | | |
| Notes in Circulation | | | | in the United King- | | | |
| | | | | dom | £ | | |
| | | | | (3) Items in transit | £ | | |
| | | | | Money at Call and at Short | | | |
| | | | | Notice | | | |
| | | | | British Bills of Exchange ... | | | |
| | | | | Foreign Bills, Foreign Bank | | | |
| | | | | Bills and Domiciled Bills... | | | |
| | | | | Balances abroad | | | |
| | | | | Investments:— | | | |
| | | | | (1) Securities of, or guaran- | | | |
| | | | | teed by, British | | | |
| | | | | Government | | | |
| | | | | (2) Indian and Colonial | | | |
| | | | | Government Securi- | | | |
| | | | | ties, British Corpora- | | | |
| | | | | tion Stocks, British | | | |
| | | | | Railway Debenture | | | |
| | | | | and Preference | | | |
| | | | | Stocks | | | |
| | | | | (3) Other investments | | | |
| | | | | Loans and Advances | | | |
| | | | | Other Assets | | | |
| | | | | Bank Premises | | | |
| | | | | Liabilities of Customers for | | | |
| | | | | Acceptances, as per contra. | | | |
| | | | | Liabilities of Customers for | | | |
| | | | | Endorsements, Guarantees, | | | |
| | | | | and other obligations, as | | | |
| | | | | per contra | | | |
| | | | | | | | |
| | £ | | | | £ | | |

that the Balance with the Bank of England is regarded as, is in fact, equivalent to actual cash. For in a moment it can be converted into coin or notes, into what the law prescribes as a means of cancelling debts.

It matters not that the Balance is not kept intact as a store of notes at the Bank of England; for the Bank of England treats the deposit of a bank-customer as it does the deposit of another customer. It keeps immediately available only a fraction of the deposit; the bulk of the deposit is actively employed—facilitating trade and industry, and earning profit for the Bank. The fraction kept immediately available is greater with the Bank of England than with the outer banks. For the Bank bears all the shocks of the money market; the outer banks merely transmit those shocks. The Bank's fraction may attain to nearly one-half; the joint-stock banks, other than the Bank of England, are happy with one-tenth.

Money at Call and at Short Notice is in the hands of active operators on the Stock Exchange, in Produce and other markets, and in the Discount Market. It is lent at low rates of interest on the stringent condition that it is repaid on demand, or in a stipulated short time, usually seven days as corresponding with the time for the advertised deposit rate. In practice it is as readily available as the Cash in hand. It is available for the banker, yet he makes a profit by it.

British Bills of Exchange are investments that give little trouble; a stream of constantly maturing Bills affords means of buying further Bills. The banker makes his profit by acting as intermediary between those who have Bills to meet and those who want to discount Bills.

Domiciled Bills are such as are accepted by persons resident abroad and payable in London. For these, as with the other Foreign Bills, there might in times of crisis be delay in transfer into legal money. So with *Balances abroad*; difficulties and delay might arise in having these transferred to London.

Lloyds Bank, in the return at the end of 1931, adopted the recommendations of the Cunliffe Committee regarding the form in which balance sheets should be presented for public

information. The Balance Sheet (facing page 192) for the half-year ending 31st December serves as illustration.

It will be noted that Bills are analysed into the three classes, (a) Treasury Bills, (b) British Bills of Exchange, (c) Colonial and Foreign Bills. The separate statement relating to Treasury Bills is an advance on the Committee's recommendations.

The liabilities are divided into two classes. Those above the line are liabilities to the shareholders; those, by far the more important, below the line are the bank's obligations to its customers.

Acceptances.—You will notice on the Liabilities side an item *Acceptances* balanced by a corresponding item on the Assets side, *Liabilities of Customers for Acceptances*. This is a steadily increasing item, and we should understand what it signifies. The Acceptances really imply a lending of the bank's name and credit in order to make a Bill payable by a trader into a first-class bill—one that will find a ready market, that will be a kind of international currency in any trading centre, and if necessary be discounted at the Bank of England. The customer on whose behalf the bank accepts the bill is, of course, under an obligation to provide funds for paying the bill when due; and in all but the rarest instances he does so provide. The acceptance by the bank merely undertakes that, if this most exceptional event should happen, the bank itself will pay from its own funds. In any event the bank, as acceptor, pays; and is reimbursed by the customer. It is again, you note, an exchanging of a wide credit for a narrow credit.

An interesting attempt in the autumn of 1932 was made to make greater use of such bills for purposes of home trade. Their utility in commercial transactions was once regarded as the most important for enabling credit to be given with something like security. To a large extent these home bills have now been superseded by bank overdrafts or by book credits. Probably the bill is the better means of affording credit. For it subjects the trader liable upon it to a rigid discipline, as compared with the easy convenience of the overdraft.

Bank Charges.—The banker's "one above Bank Rate, minimum five" often gives rise to the cry that the charges are too high. An able defence of the banks' attitude is given in this extract from *The Times* :—

"As a whole bank charges in this country are lighter than in any other country in the world. Nevertheless, some correspondents suggest that charges for overdrafts are excessive with Bank rate at $2\frac{1}{2}$ per cent., the bill rate at $1\frac{1}{2}$ to $1\frac{1}{4}$ per cent., and the nominal interest on London deposits as low as $\frac{1}{2}$ per cent. It is assumed that the charge for overdrafts never falls below 5 per cent., and that the banks do not allow more than $\frac{1}{2}$ per cent. on deposits. Neither of these assumptions is correct—the charge for advances ranges from 3 per cent. on the highly liquid loans to 5 per cent. on the less well secured advances, while the interest allowed on deposits ranges from $\frac{1}{2}$ to $1\frac{1}{2}$ per cent., and even more is paid in exceptional circumstances. In order to arrive at a sound opinion on the subject of bank charges it is necessary to bear in mind that a bank's expenses to-day amount to about 2 per cent. of its total deposits. Assuming that the whole of its deposits cost on an average about $\frac{1}{2}$ per cent., a bank must earn something like $2\frac{1}{2}$ per cent. to cover its outgoings. Nothing is earned on about 10 per cent. of the deposits which a bank must keep in cash to meet cheques, etc., nor is anything earned on cheques in transit which represent $2\frac{1}{2}$ per cent. of deposits. Between 6 and 7 per cent. is employed in short loans to the Money Market. These carry a very light rate owing to their high liquidity, and the present rates of $1\frac{1}{4}$ to $1\frac{1}{2}$ per cent. can show no profit. On bills also at present rates, which are $1\frac{1}{8}$ or $1\frac{1}{4}$ per cent. for fine paper, there must be a loss. This accounts for over 14 per cent. of the deposits. Thus on these four items, representing about 33 per cent. of the deposits of the London clearing institutions, the banks are not making enough to cover their expenses. They are dependent upon investments and overdrafts for the greater part of their earnings. Investments amount to about 17 per cent. of the deposits and advances to about 52 per cent. Investments probably yield between $4\frac{1}{2}$ and 5 per cent., and the average rate earned by advances is in fact less than 5 per

cent. The average earnings of the London banks to-day on their deposits cannot much exceed the sums required to meet expenses and other outgoings.

“The Risks of Overdrafts.—Rates on overdrafts are higher than on any other form of banking accommodation, for the reason that they carry the greater risk, particularly the uncovered overdraft. It is therefore right and proper that this type of advance should pay a higher rate, for bad debts and frozen credits are a very real problem in times of depression. Charges for overdrafts vary a great deal; they vary according to the security, the credit of the borrower, and the purpose for which the overdraft is required. First-class borrowers are no doubt able to obtain loans from the banks at rates lower than have to be paid by borrowers of poorer credit. Further, unsecured loans must pay a higher rate than secured. It is wrong to compare the overdraft rate with the rate at which self-liquidating bills can be discounted; a fairer comparison is to take the probable cost of a debenture issue, which in most cases would be more expensive. There are companies and firms which are to-day obtaining unsecured overdrafts at 5 per cent. which would have difficulty in raising money on debentures at less than 7 per cent., although debentures would rank in priority to a bank overdraft. The decline in financing by bill, which had begun before the War and was given a great impetus by Government bulk purchases during the War, is to be regretted. For instance, when the Government arranged for the bulk purchase of wool during the War it destroyed, quite unintentionally, an important part of the wool financing machinery in Yorkshire, for wool used to be financed by bills drawn on first-class firms, which were discounted by the banks at very fine rates. This valuable piece of financial machinery fell into disuse, which has deprived the woollen trade of a facility that many would like to see revived.

“The First Duty of the Banks.—Traders often prefer the easy convenience of overdraft to the rigid discipline of a bill; a bill has a definite date of maturity, whereas an overdraft has

not. In the War period no doubt the banks did not mind the transfer to the overdraft owing to its more remunerative character, but they probably hold different views on this matter to-day. If the margin between the overdraft rate and the bill rate was reduced by lowering the charge on overdrafts it would be difficult to restore the bill to its former favour since the inducement to finance by bill instead of by overdraft would be lessened. Finally, in considering the question of what constitutes a reasonable charge for advances, it should be realised that a bank's first duty is to its depositors and not to its debtors, and that it is the business of a bank to remain strong, which it cannot do unless it earns profits adequate to pay expenses and to maintain large reserves to meet contingencies. The banks pay modest dividends, most of which have lately been reduced. It is also fair to remember that during the prosperous War period the banks did not increase their distributions. Their excess profits were placed to reserves which were afterwards given back to industry, as it were, in the shape of provision for bad debts. With industry the story is different. The majority of industrial companies were less prudent in the management of their War profits. As a rule they increased dividends and paid bonuses. Had they realised, as the banks did, the abnormal character of the War profits they would have conserved their resources and been in a healthier position to-day."

Stability is Virtue.—Trade can go on steadily only when reasonable anticipations are fulfilled. If there is a chance of an enormous gain, accompanied by a chance of loss, there certainly is some incentive to gambling. But the business man, though not averse to an occasional hazardous venture, cannot look with equanimity on a continuous course of desperate gambles. He would like to be assured that what he has bargained for shall be his; and he is willing to relinquish the hope of getting far more than he expected so that he may be certain that he will not get far less than he expected.

In other words, he is anxious that the monetary unit, the measure of his debits and credits, shall not fluctuate wildly. That the names of the unit remain unchanged, that it is still

called a pound sterling or a dollar or a franc or a mark, is not the matter of moment to him. What he is interested in is the purchasing power of that unit; if he has sold a dozen yards of cloth for a pound he would like to know that, when he spends that pound, he will obtain for it what he regards as a fair compensation for his cloth.

The business world seeks a means of obtaining a reasonable stability in the purchasing power of the monetary unit. Now, the equivalence of that unit to a fixed weight of fixed commodity does afford something of a guarantee against excessive variations. And practical men have concluded that the thing desirable at the moment is a gold standard—whether or not at the old parity with the pound sterling is of less moment than certainty. The currencies of the world should be upon a gold basis. Practical men relinquish possible aspirations after a stable monetary unit, based on abstract Index Numbers, and content themselves with what alone is practicable, since it alone is comprehensible to the community at large. And it is the general community, not the theorist who has spent some years of study in getting at the back of money and so thinking only of its powers of purchase, that is concerned in this matter of money. This explains the reluctance of the Bank of England, mirroring in this the attitude of the business community, to relinquish the gold standard in 1931.

Exchange Restrictions.—The breakdown of the international gold standard is a very serious hindrance to world commerce, and this hindrance will remain until that standard is restored or a better one, as some suggest is possible, has been found to take its place. How serious is the breakdown is apparent from the fact that about 35 countries have imposed restrictions upon foreign payments. The London Chamber of Commerce in the summer of 1932 appealed to the Board of Trade to take some action to counteract these restrictions. It was suggested that the Government should take powers to create clearing houses to apply immediately to Austria and Hungary, and that other countries with exchange restrictions should be invited to attend a conference in London to discuss means for

avoiding an extension of the clearing-house system to their own nationals. The feeling had been widespread among business men that every effort should be made to limit in some way the undeniably evil effects of exchange restrictions. The Board of Trade in the course of its inquiries found that the clearing-house system was not likely to bring the relief which exporters need. Information received by the Board tended to indicate that the system is of doubtful value to creditor countries, because the clearing office of the country with the stronger currency tends to remain empty, while that with the weaker currency is filled to overflowing. This happens because exports from the weaker currency countries are arranged through other countries so as to enable the clearing system to be evaded.

It was not surprising therefore to learn that the Board of Trade came to the conclusion that a clearing-house system was not likely to have a favourable effect upon the British export trade. Representations, however, were made by the Government to various foreign countries which have imposed restrictions upon foreign payments. It is the existence of these restrictions which gives to the projected world monetary conference its importance. Until creditor countries can feel that any credits they give, either short-term or long-term, will be repaid, and the interest on them promptly met, foreign lending will be restricted and the machinery of international finance will not function as smoothly as will be necessary if international trade is to revive its former glories. It is an illusion to suppose that payments made into a blocked account, which are fashionable just now, form a satisfactory discharge of a foreign debt or that they can be continued for any length of time. In practice it will be found, at any rate in some cases, that currency paid into a blocked account is re-lent to another borrower without the consent of the creditor to whom the blocked account really belongs. As time goes on traders will realise even more clearly perhaps than they do to-day the paramount importance of restoring a common international standard of value and means of payment. In the absence of the discovery of a better alternative, the standard to which the world will return will be gold. For the moment the

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restoration of the gold standard internationally is out of the question, gold being concentrated in few hands. Redistribution will gradually, of course, take place as a result of adverse trade balances among the creditor countries, for the object of exchange restrictions and import quotas imposed by debtor countries is to give them a favourable trade balance which must express itself in adverse trade balances of creditor countries.

CHAPTER XVI.

REGULATION OF THE NOTE CURRENCY.

Objects Aimed At.—Two things may be aimed at, either together or separately, in the regulation of the issue of paper money. (1) It may be regulated with the object of affecting the amount of money, and so of controlling prices. It may be thought desirable to keep prices stable, or to bring about a gently rising level of prices, or even to bring about a gently falling level of prices. And when a money system of a country ceases to be anchored to gold—or other commodity of value in itself—the controlling authority can effect any one of these three things. By inflating the currency it can raise prices; by deflating, it can lower prices; by alternating inflation and deflation according to circumstances it can keep prices stable.

(2) Unluckily, when attempts are made to “manage” a currency, the currency is apt to get out of control, takes the bit between its teeth, and a period of rapid inflation—and a consequent rapid rise of prices—sets in. In the past, therefore, practical men relinquished the idea of a managed currency; they contented themselves with so regulating the paper currency that it was kept always convertible into gold. The aim was to ensure a parity between gold and its paper representative. This second aim is not now so important as the first aim. For the conscious management of the currency is to-day considered possible and indeed imperative. Nevertheless we may consider, if only for its historic interest our attempt—successful for over a century—to keep the note at parity with gold. With the possible resumption of a gold parity with the pound, the methods for regulating the note currency will again become of great practical moment.

Assuring the Conversion.—A note, being a promise to pay gold should, it was assumed, be convertible into gold; and the

problem was how should that convertibility be assured? A paper currency is cheaper to maintain than a gold one; and it can be readily expanded to meet the demands of expanding trade. Could we obtain these advantages and yet guard against the danger incident to a fiduciary issue? Could we guard against the danger of so great inflation that neither gold nor anything else tangible measured prices?

Exhaustive investigations were made by Lord Cunliffe's Committee into this matter and their conclusions assured us that we could.

First, however, is it necessary to have any regulation at all in the interest of the holders of notes? Cheques are practically unrestricted; why not notes? The effective answer seems to be that cheques are mainly the signs of faith among business men in one another and in the banks. The business man knows, or ought to know, whom he can trust; he has abundant means of knowing what bank he can trust. He can close his account with it at short notice and without trouble. The cheque currency—deposits operated upon by cheque—is admirably suited to a business community. The business community may be trusted to look after itself.

The note currency is different, however. Notes come into the hands of people unable to judge of their goodness, of the possibility of their being immediately turned into gold. Some provision is needed for safeguarding the economically helpless.*

Bank notes are a part of the currency; and the reasons that impel the State to control the metallic currency apply with equal force here.

Limitation is Necessary.—Many have advocated that, in order to create a supply of credit money for trade and industry, a further supply of legal tender money—currency notes or

* Doubtless, this is now the less necessary in regard to our Bank of England notes. For they are legal tender. They will always pay a debt to the full amount represented by them. They are themselves money; for the State has said so. The bank notes that have not the privilege of legal tender are, however, only evidences of a debt due from the banker. If he should be unable to pay his debts, his notes entitle the holder merely to a share, along with other creditors, in his assets.

Bank notes—should be printed. This legal money would form a basis upon which the banks could make large loans. Such a policy would be, however, quite incompatible with an effective gold standard. For, while the Gold Standard Act, 1925, was operative, anyone with the requisite amount of paper could obtain his four hundred ounces of fine gold from the Bank of England. With the additional legal money there would be no check upon the outflow of gold.

Unfavourable exchanges could not be corrected by the resulting rising of prices. Rather, the resulting issue of paper money would make more intense the demand for gold to meet the demand abroad, since our country would be a good one for foreign sellers, but a bad one for foreign buyers. The gold standard would in the end be destroyed through the loss of our gold.

The Committee declared: "The device of making money cheap by the continued issue of new notes is thus altogether incompatible with the maintenance of a gold standard. Such a policy could only lead in the end to an unfavourable paper currency and a collapse of the foreign exchanges, with consequences to the whole commercial fabric which we will not attempt to describe. This result may be postponed for a time by restriction of the export of gold and by borrowing abroad. But the continuance of such a policy can only render necessary a remedial measure which would ultimately be inevitably more painful and protracted.

"No doubt it would be possible for the Bank of England, with the help of the joint-stock banks, without any legal restriction on the note issue, to keep the rate of discount sufficiently high to check loans, keep down prices, and stop the demand for further notes. But it is very undesirable to place the whole responsibility upon the discretion of the banks, subject as they will be to very great pressure in matters of this kind. If they know that they can get notes freely, the temptation to adopt a lax loan policy will be very great."*

* It would, indeed, seem that the check was not, under the gold standard itself, a very great one; and that the secure working of our banking system depends rather upon the moderation and sound reason of the bankers than upon legal enactments. For the ten per cent.

“In order therefore to ensure that this is not done, and the gold standard thereby endangered, it is, in our judgment, imperative that the issue of fiduciary notes shall be, as soon as practicable, once more limited by law, and that the present arrangement under which deposits at the Bank of England may be exchanged for legal tender currency without affecting the reserve of the Banking Department shall be terminated at the earliest possible moment. Additional demand for legal tender currency otherwise than in exchange for gold should be met from the reserves of the Bank of England and not by the Treasury, so that the necessary checks upon an undue issue may be brought regularly into play. We recommend that the note issue (except as regards existing private issues) should be entirely in the hands of the Bank of England; the notes should be payable in gold in London only, and should be legal tender throughout the United Kingdom.”

The parenthesis relating to private issues in the last sentence is no longer needed in respect of England and Wales. In 1921 the last of the private banks having the right to a note issue of its own ceased to have a separate existence. On becoming merged in Lloyds Bank the issue had to be relinquished. You note, too, that the suggestion regarding conversion into gold in London has not been adopted: the Gold Standard Act of 1925 practically made the notes inconvertible except in large amounts and then only for bullion, not for specie.

The Machinery for Note Control.—What machinery is best for the control of the note issue in order to ensure convertibility? Different answers are given under different systems of currency. Our own answer was still mainly embodied in the Bank Charter Act of 1844; and this answer, the Committee thought, needed but slight modification.

proportion at which the bankers aim is not a great one though, so the Chairman of the Westminster Bank roundly declared: “It is much more than is required for the ordinary working of a bank . . . the banks make a large sacrifice of profit in thus keeping idle so large a cash reserve.” And again: “the percentage was fixed upon as the sort of thing that the public might fairly expect of the banks; it was a matter of self respect that the banks should sacrifice so much of their profits.”

Yet a rigid dependence of note issue upon the amount of gold has its severe critics. Here is a little of what the Chairman of the Midland Bank said to his shareholders:—

“ In the United States credit can be readily expanded to meet trade requirements more or less regardless of the movement of gold, while with us such movements are a guiding factor. The explanation of the differences is to be found in the far greater elasticity of the Federal Reserve system as compared with our own central bank. The American system has been framed to suit modern conditions. And in fixing reserve requirements the development of deposit banking has been duly recognised.

“ On the other hand, the Bank of England continues to operate under the Act of 1844, and as a consequence although it holds a total of 151 millions of gold, its reserve against deposit liabilities is only 34 millions. This reserve, susceptible as it is to a drain occasioned by foreign demand for gold, is insufficient to permit open market operations with a view to increasing the volume of credit on anything more than quite a small scale. Its diminutive size does not allow the same freedom of policy as that allowed by the Federal Reserve Banks. If our central bank were to be re-established on the same reserve basis as either the Federal Reserve Banks or the recently reconstructed Reichsbank, or indeed in accordance with any modern system, the Bank of England would have a reserve standing at a far higher figure than it does to-day, and could work with much greater freedom of policy and with manifest advantages to our trade.

“ The present system may have suited conditions in 1844, when deposit banking was in its infancy. It might conceivably suit conditions to-day, but if so only as the result of accident. It has survived for 80 years by virtue of its own suspension of times of crisis, by the phenomenal supersession of the use of currency by that of cheques, and of fortuitous discoveries of gold. The vital need for the future is to insure that the maintenance of prosperity, with a growing population and an ever improving standard of living, both requiring an expansion in the volume of trade, shall not be hampered by false restrictions upon the quantity of money.”

In our system there is a fixed fiduciary issue. Beyond that fixed amount, notes are issued by the Issue Department to the Banking Department only in exchange for gold. From 1866 till the outbreak of the European War, no suspension of the Act was called for, and the Committee thought “ that the stringent provisions of this Act have often had the effect of preventing dangerous developments and the fact that they had to be temporarily suspended on certain rare and excep-

tional occasions (and those limited to the earlier years of the Act's operations, when experience of working the system was still immature), does not in our opinion invalidate this conclusion."

The modification of the 1844 Act suggested was intended to provide ready means of issuing emergency currency for payment in times of acute difficulty. Before 1914 such currency could be issued only by breaking the law, and afterwards obtaining an indemnity from Parliament. The Currency and Bank Act, 1914, gave the Bank of England, with the consent of the Treasury, the right to issue notes in excess of the legal limit. It is this right that the Committee wished to see made permanent. It should, however, be rigorously controlled: (1) Parliament should be at once told of any step taken by the Treasury in this matter; (2) Any profits from the excess issue should be surrendered by the Bank of England to the Exchequer; (3) The Bank Rate should be raised to as high a figure as will insure the earliest possible retirement of the excess issue. In the Currency and Bank Notes Act, 1928, the suggestion was adopted. We have now an "elasticity clause." In 1931, for instance, the existing fiduciary issue of £260,000,000 was increased to £275,000,000 in the hope—disappointed as it happened—of remaining on the gold standard.

Other Machinery for Controlling Note Issue.—Our method of ensuring the immediate turning of notes into gold was the restriction of issue: after a comparatively small amount of note currency had been issued, any further issue was merely a bullion certificate. The bank note had become a warehouse certificate, signifying that gold was stored and available. It made the primary purpose of notes—saving in wear of the metals and the greater convenience in handling—again prominent. This being so, the greater the issue of notes, the higher became the proportion of gold to notes; and the security of notes became thereby the greater.

The method of proportional reserve has in some instances been adopted. A fixed fiduciary issue is ordained. Notes issued above the limit are not covered in full by gold, but

by a proportion of gold. The objection to this method from our point of view is that the withdrawal of gold for export would cause a great fluctuation in the note issue. If, say, the proportion of gold to notes is fixed at one-third, then, as the gold is withdrawn, the notes require to be withdrawn in the ratio of 3:1. The method appears to work well in the United States, which under the Federal Reserve Act is now the great example of this method. With our great foreign payments it would be perhaps inapplicable.

The Fixed Fiduciary Issue.—Our system is that of rigid limitation with, however, a reserved power to exceed the limitation. This reserved power is available only in times of extreme monetary stress. The Government must acquiesce in the necessity, and steps must be taken to make the excess a merely temporary one.

We have a fixed issue, the amount of which has always been and is likely to continue below the amount of notes in the hands of the public; beyond this issue each note is a gold certificate. Our Bank note issue was by the Act of 1844 made to increase and decrease automatically in accordance with the amount of gold entering and leaving the Issue Department of the Bank.

The uncovered issue was fixed at £14,000,000, an amount to be increased by two-thirds of such country issues as still existed when the Bank Charter Act was passed. Provisions in the Act made it certain that sooner or later these country issues would disappear; and then the Bank of England would have the sole right of issue. The year 1921 saw the extinction of the last issue of the old private banks; and the figure of £260,000,000 of the Fiduciary Issue of the Bank of England was in 1928 fixed as the total of the unbacked legal tender paper in the country. (This was increased in 1931 to £275,000,000).

One purpose of the Act of 1928 was to merge the Fiduciary Issue of Treasury Notes into the Bank of England note issue. Through this merging the amount of the fixed fiduciary issue of the Bank was raised to £260,000,000.

Under the Currency and Bank Notes Act 1928, the Treasury, which in effect means the Chancellor of the Exchequer, may

now authorise the Bank of England to issue notes beyond the statutory amount.

Instead, therefore, of being what formerly it professed to be, a rigidly limited note issue, our note issue may be looked upon as elastic, as are those of the United States, of France, and of Germany.

The Federal Reserve Act.—Before the Federal Reserve Act of 1913 there was in the United States no central institution to keep watch over the General Reserve Fund, and to transmit it to the danger point. The thirty thousand or so banks were independent, each obliged to meet its engagements day by day at the counter or the Clearing House out of its own reserve. These were all “free” banks able, like our old private banks, to issue notes at will—with the apparently inevitable result of suspension of payment in times of stress. When a monetary panic occurred the banks could not meet their engagements: in 1837, and again in 1857, every bank in the United States is said to have suspended payment. The Banking Law of 1863, establishing “National” Banks, did much to secure the notes; but it deprived the currency of its power to expand with the needs of trade and industry. Rigid requirements for the Reserve to be held against all loans made it difficult to lend freely at times when money was urgently needed.

Dr. Kemmerer in his *A.B.C. of the Federal Reserve System* emphasises the evils that the Act was intended to combat: “To this defect of credit inelasticity coupled with that of decentralisation were to be attributed largely the frequent and wide fluctuations in the interest rates on call and short-time loans, for which American money markets were notorious, the alternation of periods of excessive speculation stimulated by redundancy of currency and credit with periods of stringency and liquidation brought on by scarcity.

“For this rigidity of our credit system the business men and the farmers paid the price of higher interest rates; the farmer suffered through the necessity of selling his staple crops largely in the fall when a tight money market was depressing prices, and of buying his supplies largely in the early spring when

easy money conditions tended to make prices abnormally high; the banker was compelled to keep large reserves and to tie up an excessive amount of his commercial deposits in capital investments, such as the purchase of bonds and the making of call loans on stock exchange collateral; while upon all classes in the community an uncertain and unstable money market, which was wont to collapse frequently in panics, imposed the burden of great financial anxiety." These evils the newly organised Federal Banks have overcome.

The Restrictions.—There is in the United States not a fixed issue, but a fixed proportion to the gold held. The Federal Reserve Act requires the Federal Reserve Banks to hold 40 per cent. of lawful money against their note issues. If the Reserve should fall below 40 per cent. a tax is charged. The design is to make the issue automatic rather than at the discretion of the bankers. One per cent. is charged if the proportion remains below $32\frac{1}{2}$ per cent.; after that point $1\frac{1}{2}$ per cent. is levied on each $2\frac{1}{2}$ per cent. of the deficiency.

The Act was designed to change the decentralised system of independent banks into a centralised system. It adapted our one reserve system to the conditions of the United States. There is not as with us a single central bank, but all the banks are subject to a central control; and each Federal Reserve Bank is alone in its district. It is, therefore, possible to provide credit when the community requires it; it is easier to prevent an expansion of credit that might lead to a financial crisis. By concerted action a machinery similar to our Bank Discount Rate can control credit.

Machinery of the Act.—The Act divides the area of the United States into twelve districts; in each district an important town is selected as the Federal Reserve City. That for No. 12 District, for instance, is San Francisco; and in that district there are branches of the Bank at Spokane, Portland, Seattle, and Salt Lake City. There is a Federal Reserve Board of seven members. Of this the Secretary of the Treasury is Chairman, and he has as a colleague the Comptroller of Currency. In this matter, therefore, there is an

imitation of the French system of giving the Government a controlling influence. Five other members are appointed by the President, with the consent of the Senate, to serve ten years. These five give their whole time to the work of the Board.

Just as with us the great Joint-Stock Banks deposit part of their reserves with the Bank of England, so in the United States each National Bank is required to keep a reserve of fixed proportion to its liabilities with the Federal Reserve Bank.

The Banks in Central Reserve Cities (New York, Chicago, and St. Louis) must make this reserve 13 per cent. of demand deposits (which are defined as those payable within 30 days), and 3 per cent. of other deposits. For banks in Reserve Cities the percentages are 10 and 3; for other banks 7 and 3.

The method of maintaining the required proportion is that of re-discounting bills with the Federal Reserve Bank.*

Present Position of the Federal Reserve Banks.—When the Federal Reserve System was first inaugurated, membership was almost confined to the banks having a Federal Charter, the National Banks as they were called. These were obliged by the Act to become stock holders of the Federal Reserve Banks or to give up their Charters. The State Banks and Trust Companies for the most part held aloof until the entrance of the United States into the War in 1917. Then it was that amendments in the Federal Reserve Act made it more attractive for Commercial Banks to enter the system. In addition, President Wilson made an appeal to the banks, and to this appeal they responded on an impressive scale. It still remains true that only a minority of the banks in the country are actual members of the system—roughly about nine thousand

* We seem to manage very well without decreeing this mechanical limitation. We may, indeed, with some justification, say that our banking traditions come down to us from the merchants of the City of London who have, either by force of arms or by the withdrawal of pecuniary help, been able to protect themselves against interference. Hence perhaps some of the merits of our banking system, certainly some of its freedom from legislative meddling. Legislation asks for uniformity; it is the essence of a great banking system to be able to adapt itself to unforeseen conditions. This ability we may predicate for our own system.

out of thirty thousand. These nine thousand are, however, much the most important of the banks, and hold about three quarters of the banking resources of the country. And the banks outside are closely linked with the system through correspondence with the large City banks.

The new banks are not intended as profit-making concerns, and their dividends are limited so that a big reserve may be built up. Six per cent. cumulative dividends shall be paid from earnings after expenses are met. Net earnings remaining shall be paid into surplus up to 100 per cent. of subscribed capital stock, and thereafter 10 per cent. shall be paid into surplus, the remainder being paid to the U.S. as a franchise tax to be applied to gold reserve or to retiring outstanding U.S. bonds.

A Federal Reserve Bank must maintain reserves in gold or lawful money of at least 35 per cent. of its deposits, in addition to reserves against notes.

The Bank of France.—France supplies a most striking instance of a centralised system. The system initiated by the great Napoleon has, indeed, served as a model for the rest of the financial world. The Banque de France is the great central bank; it holds the one gold reserve; it has the monopoly of note issue; it deals with the other banks rather than with the people, and stands ready at any time to rediscount paper already discounted by the banks. It is closely allied with the State—the Executive Government appoints the Governor and Deputy-Governor—and these, appointed to watch over the national interest, may disregard the opinions of the *régents*, the directors named by the shareholders. It is far more a department of State than the Bank of England is; it is never suggested among us that the conduct and management of the Bank should be matters of party politics.

A drawback to the Banque de France, from the point of view of international finance, is that it is not required to meet obligations unconditionally in gold. In consonance with the unlimited legal tender privilege of five-franc pieces, it has the option of paying silver.

CHAPTER XVII.

RECENT DEVELOPMENTS IN ENGLISH BANKING.

A Process of Development.—Our banking system was not the birth of a single day; it did not spring forth as the goddess of wisdom did from the head of Jupiter, fully equipped and able to cope with the complexities of modern business. It is rather an adaptation, slowly moulded into such a shape as shall most conduce to the smooth working of commerce. It has been evolved to help trade and traders. And, because it has been gradually adapted, not because it is built upon a carefully conceived plan, it works better in practice.

Changes in the system are, indeed, incessant; we need not complain of lack of enterprise and initiative on the part of our great bankers. They are ever on the look-out for methods of making profit, and when their search is a successful one, the community as well as the bankers is almost invariably benefited. We have recently, for instance, as one result of the unsettled state of the foreign exchanges, had a surprising extension of the foreign exchange business of the banks. Traders were anxious to put upon the banker's shoulders the risk that the exchanges would go against him. The banks sold him "forward" exchange at a present price; they covered their risks by buying "forward" exchange at a present price. The facilities afforded by the banks to a great and rather deplorable extent fed the spirit of speculation; on the other hand, those facilities undoubtedly made real trade less of a gamble.

An interesting instance of the exchange of wide credit for narrow credit is the "World Letter of Credit." A man desiring money facilities on his travels buys such a letter and wherever he goes throughout the commercial world, for our English banks have their agencies from China to Peru, he can without difficulty obtain money. The Letter of Credit is

easily bought, easily carried, easily used; and it is, therefore, in increasing demand among travellers.

The banks are nowadays, too, undertaking more trustee business than they did formerly. We have, indeed, a Public Trustee to whose charge legacies may be confided. But we are told that the management of trustee accounts by the bank is more elastic than his and can better serve the interests of those whom the legator wishes to benefit. The bank's charges, too, are, it would seem, decidedly lower than those of the Public Trustee.

Two Great Changes.—These are minor changes, however. The two outstanding features of the past century's developments in banking are (1) the centralisation of banking, (2) the shifting of importance from notes to deposits. Our banking system is now as real a unit as our railway system is. Different names are given to different banks, as the railway lines are called by different names in different parts of the country. We have still a multiplicity of names. But through the London Bankers' Clearing House; through the link supplied by the keeping of balances at the Bank of England; through the dependence of all the banks on the single reserve in the Banking Department of the Bank of England; through the influence of the "Bank Rate" of discount upon the money market; through the unifying influence of the Treasury, which to a growing extent consults with and takes the advice of the great bankers—those economists in practice—our banking system is one. The prosperity of one bank helps the whole banking world; the adversity of one fills the others with dismay.

The second great change, the almost complete supersession of the bank note by the deposit operated upon by cheque, is an instance of the impotence of regulation to control economic movements. The business world wanted a currency that would expand and contract according to the needs of business; the Bank Act of 1844 prevented the bank note from becoming such an elastic currency; and the business world, bankers and merchants, developed the cheque system. So it comes about that the less important part of our paper money is

elaborately regulated and restricted, and that the really important is left pretty much to the prudence of the banker. In theory our paper money is actual currency, is an equivalent for the gold of which for convenience sake it takes the place. In practice it is a supplement to the currency, and not a substitute; and it is a supplement perfectly adjustable to the demands of trade.

The Unifying of Banking.—Consider these two developments in detail. Our one-reserve, centralised, closely-linked system was long admired by the Americans, and when in 1913 they passed their Federal Reserve Act they imitated it. This Act aimed at securing control of credit issues by adapting the central banking system of England to American conditions. The Federal Reserve Banks are expected to exert an influence similar to that of the Bank of England. The American Financial crisis of 1907 was a sharp lesson that the 30,000 or so individual banks of the United States, each a financial unit, could not effectively cope with a monetary panic.

Apparently there, as with us at the opening of the nineteenth century, any man who was able to rent a corner block, lay down a marble floor, and put in mahogany desks, could call himself a "Bank" or a "Trust Company." Sharp experience long ago taught us that not every man deserved enough public credit to conduct banking business and to issue his notes. At the close of the Napoleonic Wars we had ourselves over 900 banks issuing their own notes; it was a new El Dorado for an impecunious trader when he found that he could make his notes circulate as money, that he could borrow without price from the public that which he could lend again at high interest.

Difficulties arose when the banks failed to maintain even the narrow margin necessary to ensure payment. Between 1813 and 1815, 280 banks failed; in 1825 actually eighty-two stopped payment during a single disastrous month. The process of elimination of the unfit went on until in 1844, the year of the Bank Act, there were 207 note issuing private banks. Since then amalgamation with the Joint-Stock Banks has been the main cause of the disappearance of the private banks having the right of note issue. In 1921 the last of all

went—Messrs. Fox Fowler and Company of Wellington, Somerset, its bank note issue being extinguished upon its amalgamation with Lloyds Bank Limited.

The Bank of England now has the monopoly in this country of note issue. Its note has come to be looked upon as a banking reserve rather than as part of the currency, and moreover as a banking reserve that can in times of great exigency be made indefinitely greater. The Act of 1914 authorises the Treasury in time of stress to sanction an issue beyond the limit laid down by the Bank Charter Act. The awkward and roundabout method of obtaining an Act of Indemnity when more legal tender was called for is thereby obviated.

Increase in Banking Facilities.—The lessening in the number of banks has not led to a lessening of banking facilities. On the contrary these banks have covered the country with branches; there are indeed over 9,000 banking offices in England and Wales. And, of course, the position of the manager of one of these branches is very different from that of an independent banker in the old days. The bank manager may, in any difficulty, speedily command the resources of the head office; the head office can rely upon the help of the Bank of England; and the whole system works down to a minimum of reserve cash.

One great incentive to amalgamation is in fact this possibility of cutting calculations more finely, of allowing less margin for error. For, of course, the larger the numbers considered the steadier they are. One suicide in a village of five hundred makes a great difference in the annual percentage; one more or less in London has no appreciable effect. The bigger the sweep of the banking net, the more people included in the Cheque and Credit system, the more nearly will payments out of the bank balance payments into the bank. The one danger to be feared then would be that people will of a sudden seek "hard" money, will be content with nothing except what is a material, tangible "store of value." We need not anticipate this, however; nor under any banking system would it be possible to fight against such a revulsion of feeling.

Cheque Currency is Uncontrolled.—The second development that has, since 1844, not merely modified but quite revolutionised our banking system is that of the cheque. John Stuart Mill, writing in the middle of the last century, and commenting on the possibility that cheques might cause an undue expansion of credit, has a curious note. He argues that the restrictions imposed by the Act of 1844 were some obstacle to such an expansion; and he suggests: "It would not be to the purpose to say, by way of objection, that the obstacle may be evaded by granting the increased advance in book credits, to be drawn against by cheques, without the aid of bank notes. But this substitute for bank-note currency certainly has not yet been organised; and the law having manifested its intention that, in the case supposed, increased credits should not be granted, it is yet a problem whether the law would not reach what might be regarded as an evasion of its prohibitions, or whether deference to the law would not produce (as it has hitherto done) on the part of banking establishments, conformity to its spirit and purpose, as well as to its mere letter."

The cheque currency is now, however, so admirably organised that it performs, smoothly, speedily, and cheaply, the bulk of exchange work. And it is the second alternative that impels our bankers to follow the lead of the Bank of England in making credit facilities more difficult to obtain. It is certainly not by compulsion of law. The cheque currency is untrammelled by government regulations, and is all the better for the freedom.

Bank Deposits.—The essence of the cheque system is that purchasing power is for the most part in the form of bank deposits operated upon by cheque. The legal tender money—gold and subsidiary coin, and Bank of England notes representing gold—could adapt itself to the needs of commerce only with difficulty. There was, under the Bank Charter Act of 1844, no means whereby the legal tender currency could be increased except the importation of gold (either to form the basis of an increase in the note issue of the Bank of England or to be passed to the Mint for coinage). Gold already in use,

as watch cases or ornaments, might conceivably reach the Mint; but probably this rarely happened. Nor could the legal currency be diminished—apart from the ordinary demand, about £2,000,000 a year, by jewellers and others—except by the export of bullion or sovereigns.

The cheque currency can, unlike this slow moving currency, adapt itself at once to the requirements of the business community. Each merchant becomes his own note issuer; he issues his note to the exact amount called for by the transaction; the transaction and the drawing of a cheque are coincident so that, according to our quantity theory of money, prices are kept fairly stable. So long as the men drawing the cheques are thought to be men of substance, the system works without a hitch.

There are limits, no doubt, to the creation of the deposits that enable men to draw cheques. These credits rest upon real foundations: the banker does not grant them without discrimination. The credits, moreover, are granted upon condition of interest payments; and, since the bank granting the credit must be prepared, if need be, to meet the cheques in legal tender, a reserve of legal tender must be held. As the scale upon which banking is conducted becomes larger and more closely knit, so the reserve called for becomes smaller but more mobile. Some reserve though there must be. The cheque currency is thus a supplement to the coin and bank note currency; it is not a mere substitute. The Currency Principle rules in theory; in practice we live under the Banking Principle.

Banking Principle versus Currency Principle.—This contention—now obsolete, since the development of the cheque has made bank notes of but slight importance—refers to regulations regarding the issue of notes. Should this issue be left to the prudence and intelligence of the issuing bank (Banking Principle), or should it be minutely regulated by the State, by the Authority controlling the currency (Currency Principle)? If the first, then the issue could expand and contract with the varying needs of commerce; the bank note would, when trade is brisk, be an accession to the currency.

The bank notes would represent the credit of the bank, they would be issued against the assets of the bank—not against gold; and the amount of issue would be regulated solely by the needs of the bank's customers. If the second, the bank note would be restricted to its first historic function, the saving of the inconvenience of handling large sums. It would be a modern goldsmith's receipt acknowledging the deposit of gold.

Pushed to its logical conclusion the Currency Principle would make a bank note into a mere bullion certificate. This extreme view, to which indeed the opinion of the "City" seems tending now that the cheque performs so great a part of the work of money, is best put in Lord Overstone's words before the Committee preceding the Bank Act of 1844:

"A metallic currency, I conceive, by virtue of its own intrinsic value, will regulate itself; but a paper currency, having no intrinsic value, requires to be subjected to some artificial regulation respecting its amount. The use of paper money is resorted to on account of its greater economy and convenience; but it is important that the paper currency should be made to conform to what a metallic currency would be, and especially that it should be kept at the same value with the metallic currency, by being kept at all times of the same amount. Now the influx and efflux of bullion is the only sure test of what would have been the variations of a metallic currency, and therefore I conceive that that constitutes the only proper rule by which to regulate the fluctuations of a paper currency."

Some Regulation Apparently Needed.—Wherever and whenever the Banking Principle has been allowed to operate untrammelled, over-issue of notes and ultimate bank-failure have resulted. The over-issue may not have been in excess of what could eventually be redeemed; in numberless instances it was only an over-issue that occasioned a demand in excess of what could be redeemed at the moment. This latter, however, is what matters to the banker. If conversion is delayed, the notes depreciate; and the distrust engendered may mean a grievous blow at our whole credit structure.

Experience seems to show that some regulation is necessary: otherwise the keen competition of the banks would make them venture large issues on a slight basis. And it is to be remembered that the object of allowing a bank to issue notes is not to enable it to make money, but to enable it the better to serve the public. A little less profit with a deal more security is only reasonable.

The first essential, that is, of an efficient bank note-issue is safety. Perhaps our Bank Charter Act (1844) was even over-cautious in the matter. It certainly did not quite adopt the principle that every note must represent bullion; for it recognised a fiduciary issue of £14,000,000—the circulation of notes for some years never having been below £16,000,000. Through the falling in of private note issues, the fiduciary issue had reached £19,750,000 before the 1928 Act fixed the limit of £260,000,000. Every note issued beyond this amount is a certificate that gold to the amount named is in the custody of the Issue Department.

The gold immobilised is looked upon as absurdly large. It is, if we look upon it merely as a reserve to insure convertibility of the notes issued. It is not, however, if we look upon it as a basis upon which, in time of need—as during the once recurrent crises, and in 1914—additional note issue may be authorised. The loss of interest entailed by the immobilising of the gold may be looked upon as an insurance premium against collapse of our credit structure—an insurance premium paid by the Bank of England as some return for its many privileges.

Paper Money Issued by Bank Only.—The amalgamation of the Currency Note Issue and the Bank of England Note Issue was in essence simply a recognition of a set of facts that had developed of themselves—largely as the result of the difficult conditions brought about by the Great War. The actual Act, giving statutory form to the amalgamation, is the Government's adoption of the conclusions of the Cunliffe Committee. The fiduciary limit—the issue apart from gold backing—is fixed. Provisions, however, are made for emergency issues. The limit (of £260,000,000) differs only slightly

from the combined limits, at the beginning of 1928, of Bank of England fiduciary issue (£19,750,000) and the uncovered Currency Note Issue.

The Currency Note Return on March 29th, 1928, was—

| | | | | |
|-----------------------|-----|-----|-----|--------------|
| Outstanding | ... | ... | ... | £288,249,558 |
| Silver Coin | ... | ... | ... | 5,500,000 |
| Bank of England Notes | ... | ... | ... | 56,250,000 |

The uncovered issue was therefore ... £226,499,558

The allowable fiduciary issue under the Act is thus considerably over the amount of the notes in the hands of the public.

Note that, as stated on page 200, in 1931 the fiduciary issue was raised from £260,000,000 to £275,000,000.

Home Bills of Exchange.—During the last half-century Home Bills of Exchange, like the bank note, have been ousted from their old importance by the cheque. Formerly they were numerous. Those drawn by the wholesale dealers on their retail customers once formed a considerable part of the paper in the Discount Market. Now they are seldom seen. The retail houses pay by cheque; and, wanting credit for current operations, they have recourse to their bankers. It is quite possible that under the Currency Act of 1928 the importance of these home merchantile bills may revive. For we learn, from the Government's spokesmen during the debate upon the bill, that they are to be accepted by the Bank of England as forming part of the backing for the fiduciary issue.

CHAPTER XVIII.

FOREIGN EXCHANGES.

Purchasing Power Parity.—A debt payable in one country has value in another country. This value becomes identified with a readily transferable piece of paper; and this piece of paper, this Bill of Exchange, becomes a part of the money that enables the workers of the world to co-operate with one another. Goods have a value measured in the money of country *A*. They also have a value measured in the money of country *B*. These values, if we allow for cost of transfer, cannot be greatly different from one another. That is to say, the money of country *A* is brought into relation with the money of country *B* through their both commanding the same goods. This relation is expressed as a Rate of Exchange.

This Rate of Exchange is either the number of units of the foreign money that a pound sterling will buy, or it may be the cost of one unit. That is to say, we may indicate how many francs in Paris a pound sterling will buy; or we may say what part of a pound sterling in London must be given to obtain credit for one rupee in Calcutta. With few exceptions, our method of calculating is to state how many units of the foreign currency the pound sterling will buy.

When gold was the effective basis of currency in the two countries, purchasing power parity was secured by what was an almost automatic flow of gold from the country with the low gold point (from the country with the lower purchasing power for its gold) to the country with the high gold point (to the country with the higher purchasing power for its gold). As soon as the parity had been attained by such transference—as soon, that is, as an ounce of gold commanded approximately the same in both markets—the flow of gold ceased.

The Essence of Foreign Exchange.—The fundamental fact in the exchange is this: obligations are incurred by the

inhabitants of one country; these obligations entitle the inhabitants of another country to payment. We buy from abroad an altogether startling amount of our foodstuffs and our raw material. These have to be paid for in foreign money. We sell abroad our products. We accept payment in foreign money. The question therefore is pertinent: how does this foreign money compare with our own? We incur foreign obligations in order to satisfy our hunger—we have a big grain bill to pay; in order to gratify our love of luxuries we buy a great deal of silk; and in order to provide for a stream of dividends from abroad we invest capital in other countries, and so link up our fortunes with enterprise afar off. The obligations are measured in money. In other words payment of money is due abroad.

While a country was under an effective gold standard, every obligation incurred—for merchandise imported, for interest charges to be met abroad, for services rendered by foreigners, for money spent or loaned abroad—constituted a legal claim on a part of our stock of gold. For international obligations were measured in gold: if an American performed a service for a resident in Great Britain then the American was entitled to take from Great Britain a fixed weight of gold. It did not matter that the settling medium was almost invariably paper. So long as a country was able and willing to settle the balance of its foreign debts in gold, the value of the balance was a legal claim on an equivalent weight of gold. Nor is the matter very different now. Gold still acts as the makeweight. For it is still the one commodity that can certainly be sold.

Consider the particular example. There might be in London a great demand for credit in New York, but a small supply of credit available. That is, there were many bills representing obligations incurred by London to America, but few bills representing obligations incurred by America to London. The obligations did not balance, and a weight of gold was due to America. The cost—including freight and insurance and interest—of shipping the gold to the creditor country is very small, and in peace time almost invariable. It follows that the gold values of foreign Bills of Exchange (payable in countries known to fulfil their obligations under the gold

standard) were almost fixed and practically stationary. The values could diverge from the mint par only to the extent of the cost of transmitting gold. Before the War, therefore, the ordinary trader never needed to consider possible fluctuations in the exchanges.*

While the countries were under an effective gold system the quantity of bills offered does not affect the specie points. The banks created a demand sufficient to absorb any excess however great. There was only a small margin of profit. This was enough, however, to make the banks buy the excess supply, convert it after collection in the debtor country into gold, and upon the arrival of the gold in the home country exchange it again into their own currency.

Similarly, there might be a great demand for foreign bills (the banker's customers come to him for drafts to cancel their obligations abroad). The banker drew the draft needed, found perhaps that he had few bills to send for covering the drafts; and was constrained to send gold to be placed to his credit in the equivalent foreign currency. There might be no market abroad for our cottons or iron goods. For gold there always is a market.

This is true when the currencies compared are on a gold

* For a continuous period of thirty-three years (1880-1913) the pound sterling varied within the narrow limits of 4.82 and 4.91 dollars (the par value being 4.866). The price can go higher or lower than par to the extent of shipping gold and to that extent only. At one point, the demand for bills largely exceeding the supply, it becomes cheaper to export gold: a pound sterling will buy fewer dollars in London than in New York, even allowing for cost of shipping. This is the outgoing gold (or specie) point. Instead of paying high for dollars in London, the debtor in London sends the actual gold across the Atlantic to be turned into dollars in New York. For, though there may be no market in New York for our goods, we can always get dollars for our gold.

Conversely, an American having an obligation to meet in London—needing therefore pounds sterling—may find that his dollars will in New York buy fewer pounds sterling than usual. The supply of American bills in London largely exceeds the demand. More dollars, therefore, are needed to buy pounds. Rather than accept the lower exchange rates, the American debtor will turn dollars into gold at New York and send actual gold to London where it will exchange for its equivalent in pounds. This is for England the incoming gold (or specie) point.

basis. With the relinquishing of the gold basis, Foreign Exchange becomes a relation between purchasing powers (represented by goods, not by gold). We speak then of purchasing power parity not of gold parity. The holder of a foreign bill offers then to the prospective buyer a title, not to a definite amount of gold, but to an amount of paper currency, for the redemption of which no date is set, no provision made, and of which the purchasing power may change rapidly and inexplicably. The owner of a "pound" in London wishes to know then what correspondence the goods he can buy in London have with the goods the paper money can buy. That gives a basis of comparison.

Under gold the Coinage Laws of the countries concerned—or rather the actual state of the currency, which usually deviated from the legal requirements—supplied the means of comparison. With the relinquishing of the gold standard it is a more elaborate calculation that must be made. Index Numbers obtain a new importance. Consciously or unconsciously the holders and buyers of foreign bills assess the value of those bills in accordance with the prices ruling in the countries concerned, and with the likelihood of their rise or fall.

When the easy and stable relation among the currencies, when those currencies were based on gold, no longer holds, the buyer of a Bill of Exchange must always ask himself not one but a series of questions, rendering exchange operations no longer a matter of routine but of complicated problems. It is not simply how much gold will this enable me to get? but how much merchandise will this buy at the moment in the country on which it is drawn? What are the present economic and political conditions of the country whose currency is offered, and what are its future prospects? Are these conditions such as to make it reasonably certain that I shall be able to re-sell at a profit or to obtain settlement ultimately in gold or goods or services?

Foreign Loans.—Consider this particular kind of invisible export, a foreign loan, a little more. A country may create a number of claims upon foreign holders of purchasing power in much the same manner as a merchant temporarily embar-

passed may create purchasing power for himself. If the latter can persuade a banker that the security offered is sound, and that there is a reasonable prospect of gain, he obtains an overdraft; he has a sum placed to his credit and may operate upon it by cheque.

Similarly a country may, while its credit is good and there is a reasonable hope that it will at some near future date meet its liabilities, and till it does pay interest charges, float a foreign loan. That is, investors in countries abroad are invited to remit to the borrowing country part of their claims on the community at large, claims attested by their possession of money. The obligations incurred by the investors who respond to the invitation have a counter-effect to obligations incurred by the borrowing country (for its imports perhaps).*

* The extraordinary amount of foreign loans made by British investors is shown in this interesting table issued by the Bank of England in 1932. The amounts of Capital and Interest are in millions of pounds:—

| | 1929. | | 1930. | |
|--------------------------------|----------------|-------------|----------------|-------------|
| | Capital. | Interest. | Capital. | Interest. |
| Dominions and Colonies— | | | | |
| Australia | 418.5 | 20.6 | 429.6 | 20.8 |
| India | 224.0 | 8.4 | 224.0 | 8.6 |
| South Africa | 113.1 | 4.8 | 101.0 | 4.9 |
| Canada and Newfoundland | 94.7 | 3.7 | 97.6 | 3.8 |
| New Zealand | 90.4 | 5.0 | 104.3 | 5.2 |
| Crown Colonies | 63.7 | 2.9 | 55.0 | 2.8 |
| Other Colonies | 15.8 | .8 | 16.9 | .8 |
| | <u>1,020.2</u> | <u>46.2</u> | <u>1,028.4</u> | <u>46.9</u> |
| Europe— | | | | |
| Germany | 21.3 | 1.4 | 19.9 | 1.4 |
| Greece | 15.5 | .9 | 14.9 | .8 |
| Hungary | 11.0 | .7 | 11.2 | .7 |
| Other European Cities ... | 61.5 | 3.3 | 56.9 | 3.3 |
| | <u>109.3</u> | <u>6.3</u> | <u>102.9</u> | <u>6.2</u> |
| South America— | | | | |
| Brazil | 65.5 | 3.5 | 64.6 | 3.5 |
| Argentine | 35.0 | 1.6 | 32.5 | 1.4 |
| Chile | 21.0 | 1.1 | 21.4 | 1.2 |
| Other Countries | 7.7 | .6 | 6.8 | .4 |
| | <u>129.2</u> | <u>6.8</u> | <u>125.2</u> | <u>6.5</u> |

The questions an investor will ask and upon the answers to which the success or failure of the loan will depend are:— (1) What productive capacity has this nation? (largely a matter of geography). (2) How much can it save a year? That is, what excess of production has it over consumption, to meet its foreign obligations? (3) To what extent will its people submit by taxation to give up this excess?—a question clearly depending upon political conditions; a stable government like that of France could command a loan where a seemingly unstable one like that of Russia could not.

Raising a loan abroad means the export of a paper obligation—"a long-term foreign bill of exchange." But there is a limit to the acceptance abroad of such bills, and apparently the limit has been reached in regard to some countries.

Repaying the Loan.—While borrowing from abroad we obtain more goods from the lending country than we send; in exchange for the goods we export the paper evidence of our obligation. When we repay the loan, the process is reversed. Thus, consider the curious conditions that arise when, as during the war years, loans were contracted for unproductive purposes. During the war years we consumed a vast amount of commodities in which were embodied the services of men abroad; and we were so intensely occupied by the war that we supplied but a small amount of services in return. Now that peace is here, the process must be reversed. We ourselves, France, Italy, Germany, Austria, to a far greater extent, must give more services than we receive. We shall thereby be paying off part of our foreign debts.

The European nations are able to obtain the raw materials and other products needed from America or elsewhere by way

| | | | | | | |
|--------------------|-----|-----|--------------|------------|--------------|------------|
| Central America | ... | ... | 2.3 | .1 | 2.2 | .1 |
| Rest of the World— | | | | | | |
| Japan | ... | ... | 56.1 | 2.8 | 52.9 | 2.7 |
| China | ... | ... | 27.3 | 1.3 | 25.9 | 1.3 |
| Egypt | ... | ... | 8.1 | .3 | 8.5 | .3 |
| Other Cities | ... | ... | 14.2 | .8 | 13.3 | .7 |
| | | | <u>105.7</u> | <u>5.2</u> | <u>100.6</u> | <u>5.0</u> |

of long-term investments or credits. The amount of work executed upon the materials will be more than adequate to pay interest and to supply a moderate sinking fund, even after the debtor countries have supplied their internal needs. For efficiency and industry are still the distinctive traits of the European worker. Germany, for instance, obtains the proceeds of a loan from the United States in the form of cotton. The loan is paid off, in the event, by manufactured cottons, bought either by the United States or some other solvent buyer. These cottons are sold at a price that includes cost of the raw material, wages of labour, overhead charges, interest on the loan and a portion for sinking fund, taxes, and a profit.

Thus in a manner the creditor country purchasing the manufactured article pays itself the interest and sinking fund; and the question may arise whether it is not better to cancel the original debt, so that there will be no need, firstly, to make new loans of raw materials, secondly, to absorb immense quantities of foreign manufactured articles. This, at all events, is how it appeals to our own manufacturers and possibly to those of the United States.

The Problem of International Debt.—The countries of the world are nowadays in an extraordinary condition. There were certainly, even before 1914, many countries indebted to foreigners. But the debts were almost invariably represented by something tangible, a railway, a great business undertaking, a well equipped municipality. The debts were payable, moreover, to individual capitalists who had foregone their control over capital so that undeveloped countries might the more rapidly rise to affluence. The war debts, however, have left no abiding good behind them; and they are due in great measure from Government to Government. This very fact has the seeds of contention in it; for no debtor has a consuming love for his creditor. This is so even between former allies; it is more so when the debts are penalties.

Foreign obligations by one country must be balanced by a capacity in other countries to absorb the surplus production with which alone those obligations can be met. If the burden of any country's external obligations is beyond its capacity to pay, and it cannot be assisted by foreign loans, the effort to meet those obligations must result on the one hand in dislocation of markets in other countries, and, on the other hand, in a continuous depreciation of the currency of the debtor country.

The Bill of Exchange.—The Foreign Bill of Exchange is the instrument called into being by trade between individuals

belonging to different countries. A cheque, we saw, is a command. The person who is entitled to draw a cheque is in the position of being enabled to issue an order to a banker: he tells the banker to pay a sum of money to a named person or to his order, or to the bearer of the cheque.

A cheque is, however, only a special kind of these orders that transfer the possession of money. A Bill of Exchange (B/E) is the big class that includes cheques. A cheque is a Bill of Exchange drawn on a banker. And in home trade this particular kind of Bill of Exchange has practically superseded the "Home Bill" drawn by one trader upon another. Three persons may be concerned in the Bill—the drawer, the acceptor, and at times a third party who is entitled to receive payment.

There is always the maker (or drawer) to whom a debt is usually due: there can be no bill without a drawer's name; with this we have a perfectly good bill though no other name appears. The drawee will ultimately put his name upon the bill unless indeed the drawer has no right to ask him to do so. But the bill can be dealt with (negotiated) before being accepted.

Then there is the acceptor (or drawee) who may have the drawer's money available to pay the debt, and who presumably has agreed to pay the bill when it becomes due. And there may be the creditor (or payee) to whom the bill is handed in payment of another debt. Jones has sold goods to Smith and has bought goods from Robinson. In order to pay Robinson, Jones draws a bill on Smith; Smith accepts it; and Robinson obtains the money.

A Bill of Exchange is an order by one person, addressed to another, directing the payment of a certain sum of money on demand, or at a fixed future time, to a specified person, or to his order, or to bearer. When this written command is accepted—authenticated, that is, by the signature of the drawee—it becomes an acknowledgement of debt, and an enforceable undertaking to pay the debt. The bill is a visible sign of a right to receive money; and this right may be transferred.

The person who takes a bill in an honest manner is entitled to the payment promised in the bill; he may take it as

confidently as he takes the current coin of the realm. How others may have obtained the bill matters not at all; the holder depends solely upon his own conduct. Though there has been fraud or deceit (but not forgery) in the making of the bill, or in its transfer, or though there is no real transaction to which the bill relates, the endorsee of a Bill of Exchange for value is entitled to the amount upon the bill. The Bill of Exchange drawn against goods to be delivered to the acceptor of the Bill is evidence of service. This evidence is recognised within a narrow circle, including we may suppose the drawer's banker. The banker buys (discounts) the bill and gives the drawer a right to payment from the bank. This is an extension of the credit; it is evidence more widely acceptable of service. And if cheques are turned into cash the evidence is more widely acceptable still.

The Function of the Bill of Exchange.—We saw that by our cheque system, inland transactions could be settled well-nigh without the intervention of money. The Bill of Exchange system has the same economising effect in relation to foreign trade. This trade does in the end what all other trade does: it permits men to help one another. By means of foreign trade not only people at home but people throughout the world become a society for mutual help, a big co-operative society. By its means the Hindoo gathering the tea-leaves in a plantation of Assam and the weaver in a Blackburn mill help one another. To an altogether unprecedented extent we in this country have become dependent for our essential supplies upon water-borne trade. Any slackening in the streams flowing upon us from every quarter produces want and distress; as sudden cessation of the streams would reduce us to helplessness.

How is it that we prevail upon peoples abroad to maintain these supplies; how do we pay, that is, for the imports upon which we have grown accustomed to rely? We value the supplies in money, but if we were to pay in gold—the only international currency—our stock of the precious metal would be depleted many times in the year. We pay for the imports by ourselves rendering services.

Our services, too, are valued in money, whether those services are embodied in cotton or iron or woollen goods, or whether they are such services as are rendered by bankers or by shipowners or by the various mercantile agents. The value of the services we give equals, in the long run, the value of the services we get. Obligations incurred (measured in gold) balance obligations conferred (also measured in gold): service pays for service. And the Bill of Exchange is the instrument that enables services to be offset by services. The Bill of Exchange gives its owner the right to a specified sum of money at a given time and place. This right can be bought and sold. The Bill of Exchange, therefore, so transfers property that it affords a cheap and convenient way of paying debts incurred in a foreign country; and enables a merchant who has sold goods abroad to be paid for his goods in money of his own country.

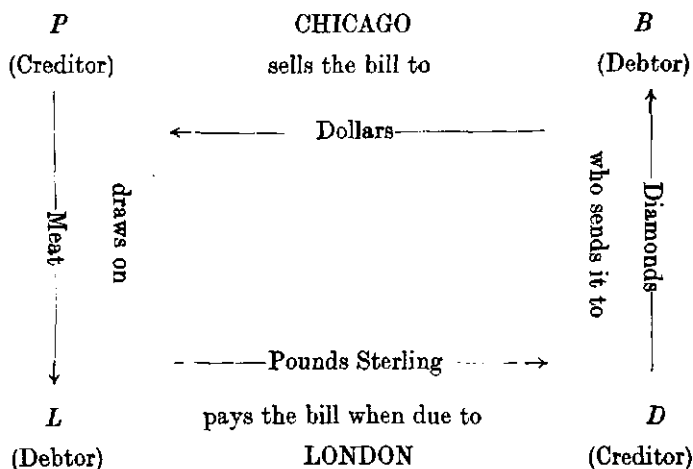
The Original Function of a Bill of Exchange.—The Bill of Exchange, in the first place, saves the expense and risk of transporting the precious metals from place to place. This was its original function. For even before acceptance the bill may be perfect, and the early bills were drawn and circulated before actual acceptance. A man comes to another in London and says, “You have a debt to collect in Melbourne, haven’t you?” “Yes, so-and-so owes me £1,000.” “Well, I have £900 to pay there; would you draw upon your debtor for £900 of his account in favour of my creditor, and sell the instrument to me?” “I will.”

The instrument is bought, is sent to Melbourne; the acceptance is procured, and the money is paid on the maturity of the bill. The drawer’s name is the essential part of the bill; since the drawer is in the last resort responsible for the amount to be paid. You may safely take a bill drawn by a good man even though it has not been accepted. In the second place, however, bills permit a creditor to receive present payment of a debt due some time hence. This function is nowadays as important as the first.

The Work of a Bill of Exchange.—A London merchant buys some thousand tins of meat from a Chicago packer.

How is he to pay? He could send English money, but, in the first place, the packer wants dollars, not notes or even ingots of gold; and, in the second place, the expense of sending gold across the Atlantic would add to the cost of the goods. All could be conveniently settled if someone in London, a diamond dealer in Hatton Garden, perhaps, sold to a buyer in Chicago an article costing as much as the meat. There would be a debtor and a creditor in both London and Chicago; and if the meat-buyer paid for the diamonds, and the diamond-buyer paid for the meat, everyone would be satisfied.

The bill achieves this. *P*, the packer, draws a bill for the amount of money due to him; *L*, the London importer, accepts the bill. He acknowledges his indebtedness, that is, and makes an unconditional promise to pay the bill when it becomes due. *P* now has the right to money in London. He sells this right to *B*, the buyer of diamonds, who wants to pay money in London. *B* sends the bill to *D*, the diamond merchant, who, by means of his bank, collects the money from *L*. All this seems very complicated; a diagram should show that it is really quite simple.



You realise that in practice a debt abroad is seldom thus offset by a credit abroad of exactly the same amount. Bankers and bill brokers are the reservoirs for collecting the credit on places abroad. Those who need to pay abroad go to these reservoirs and tap them to the required extent. The banker's draft is a Bill of Exchange made to order.

A "Banker's Credit."—The intervention of the banker in the making of Bills of Exchange effects another result which makes these Bills of Exchange more readily negotiable. We may perhaps look for a moment at this work of the banker in regard to Bills. The seller will, in order to avoid delay in the receipt of his money, usually ask his banker to discount the bill. When the banker does so he keeps the bill in his portfolio until maturity; he credits his customer with the amount paid for the bill, and reckons his bill among the item "Discounts," which forms part of his assets. Upon the maturity he sends the bill to the bank where the exporter has declared it to be payable.

Where the drawer of a bill is known and trusted by the banker who discounts it this is a convenient course. For even if the exporter does not meet the bill the drawer undertakes to do so. The seller will not, however, obtain so good a price for his bill as he would if the bill has on it the name of a bank or accepting house. And where buyer and seller are unknown to the London banker, and to those in the London Money Market who deal with Bills of Exchange, discounting a bill will present what are perhaps insuperable difficulties. If the seller is to be able to discount his bill without difficulty he must have it accepted by somebody known and trusted in the centre where he wishes to discount it. If the buyer is not such a person the buyer must, as part of his bargain, find an accepting house which makes it its business to accept bills on behalf of its clients. When a banker agrees to accept bills on behalf of a customer, the banker opens a credit in favour of the party with whom the customer wishes to deal.

Thus, the exporter abroad does not want to be out of his money during the time the goods are on the road to

England. He writes to the British importer asking him to arrange for payment to be made as soon as the goods are ready for shipment. The importer in England goes to his bank and asks it to arrange the matter with its agents abroad. The bank abroad advises the shipper of goods that a credit has been opened in his favour by the bank in London. The shipper is then able on carrying out the terms of his contract, to obtain payment of his goods at once. This "Banker's Credit" is, that is to say, an authority by the importer to the exporter to draw upon the Bank, which will accept the Bills when they come forward. It is a means of enabling exporters to draw bills on well-known bankers, instead of upon their customers who may be hardly known to them. The exporter obtains a bill which he can readily sell, and international trade is financed, though those directly concerned are only known to their own bankers.

It would simplify matters further if both countries had the same currency; we should not only be relieved from the need of sending money, we should be able at once to compare prices. There would be no need to remember that £1,000 contains as much gold as \$4,866. But, as J. S. Mills says, "So much of barbarism still remains in the transactions of the most civilised nations, that almost all independent countries choose to assert their nationality by having, to their own inconvenience and that of their neighbours, a peculiar currency of their own."

The Balance of Trade.—There are in modern times innumerable transactions among trading nations; and payments must be made for many things other than commodities. There are quasi tributes to make in the form of administration expenses, remittances of revenue, of rents and other income to those living abroad, emigration of capital, or its transmission for foreign investments. All these payments constitute the obligations of one country to another; and in the long run they will balance one another. For no country, any more than an individual, can continue heaping up debt.

This equation, when a country has as much to pay abroad as it has to receive, is rarely established. There will usually

be a discrepancy between the amounts to be received and the amounts to be paid. The bill broker, buying bills from those who have money to receive and selling bills to those who have money to pay, may be asked for bills to a greater amount than bills are offered him.

He will not refuse the bills on that account. His correspondents, however, in Chicago or elsewhere, cannot wholly meet these bills by setting them against the bills bought by the broker; part of the amount necessary must be sent in gold. The sending of the gold will involve the broker in trouble and expense; it will also lock up a portion of his capital for a while. He is, therefore, able to charge more for the bills he sells than a comparison of the money represented seems to justify. Bills upon the foreign country—the right, that is, to receive money in that country—are at a premium. This premium the broker cannot retain for himself; he must share it with those who have sold abroad and who, as a result, have money to draw abroad. Their credits now sell for more.

We perpetuate, indeed, some of the errors of the Mercantilists in our foreign exchange vocabulary. When foreign credits are at a premium, so that those wishing to pay money abroad must pay more for their bills than the par rate, the exchanges are said to be against us, to be unfavourable. But, of course, the people with money to draw abroad will by this very fact be favoured. They have, in addition to their ordinary profit, the excess over par at which they can sell their credits. The importing of goods is penalised, the exporting is encouraged. So, when we have more to draw abroad than to pay, the exchanges are said to be for us, to be favourable. Then it is that importers get a benefit when paying and exporters get less when receiving. The terms themselves are reminiscent of the old Mercantile Theory that considered trade as a struggle among nations as to which should draw to itself the greatest share of the precious metals. Conditions were favourable when gold tended to come; conditions were unfavourable when gold tended to depart.

Exports Pay for Imports.—Study a concrete example. We shall then better realise what happens. *M* of Melbourne has

sold a consignment of wool to *L* of London. Before its being sent from Melbourne the wool becomes represented by a Bill of Lading; and this enables *M* to obtain payment for the wool five or six weeks before its arrival in London. *M* draws a Bill of Exchange (or draft) upon *L* for the amount, that is, he instructs *L* to pay a definite sum at a definite time; it may be, according to the terms of the bargain, "at sight," or in three months. *M* takes this bill to a Melbourne banker, who, knowing *M* to be a sound man, will buy it.

For, if *L*, to whom the bill is addressed, does not pay it, *M*, who has drawn the bill, is responsible for the payment. Usually, as an additional safeguard—as a collateral security, he says—the banker will require also the Bills of Lading, and the other shipping documents. The Bill of Lading gives a title to the possession of the goods named in it.

The banker sends the draft and the documents to his London agent, from whom *L* will be able to obtain the Bill of Lading—enabling him to get the wool—by accepting (undertaking to pay) or by actually paying the bill. The Melbourne banker has now at his disposal credit in London. He is, therefore, in a position to sell bills to any of his customers who, having bought goods—cottons or woollens or machinery—from England, wish to make payments in London. The Banker draws upon his London agent and sells the draft to the Australasian importer. The Bill of Exchange enables exports to be paid for by imports without entailing any passage of money.

Adjustment of Debts.—Every export from our country helps, that is, to build up a supply of foreign exchange. Almost invariably an export means an increase in the credit standing abroad of a British bank. Every import, on the other hand, creates a demand for foreign exchange. Almost invariably it means that a British bank will be asked to grant credit abroad. And this is true though the export comes from one country and the import goes to another: exports build up the supply of foreign exchange, imports deplete it.

In normal times we buy from the United States an enormous worth of cotton and foodstuffs and goods of all descriptions; we

sell far less than we buy. With a country like Brazil matters are very different. We send to Rio Janeiro or to Bahia or to Santos manufactured goods of a far greater value than that of the comparatively small amount of coffee and rubber we buy. Brazil, however, sends a great proportion of her coffee crop to the coffee-drinking States and imports little in exchange.

A merchant in Santos who had bought Manchester goods would have difficulty in finding one who, having exported coffee to England, had a credit on England to sell. He would find numbers who had credit to receive in New York; and this credit would, in all probability, be represented by a bill on England. The New Orleans exporter, who had sent cotton to Liverpool, would have a bill on Liverpool to sell; the New York exporter, who had sold wheat to London would have a bill on London. Either bill would be welcome to Brazilians having payments to make in England.

The cottons sent to Rio Janeiro help to pay for the wheat from New York; the coffee sent from Santos pays for the cottons from Liverpool. Our great and far-reaching foreign trade, the long and well-deserved confidence in our bankers, the high reputation of our merchants and manufacturers—these have brought about the curious state of affairs that foreign exchange transactions are usually settled by bills drawn on London. A bill drawn on London is a kind of international currency; and our bankers thereby take toll of the world's trade. The number of payments to be made in London is astonishingly great; these payments are from every part of the world. The holder of a good bill on London is, therefore, sure of a ready purchaser. It comes about, therefore, that London draws few bills but accepts many.

Invisible Exports.—Exports pay for imports, we have said; and, allowances being made, this is true. The payments due to a country will in the long run balance payments due from the country whatever those payments are for. For a longer and shorter while, however, a country may have to pay more abroad than it has to receive. This was our state during the War, when our workers were diverted from production to destruction, or to the production of munitions of war that

were expended without return. Then it was that we sent abroad in payment for the necessaries of life a vast number of securities, chiefly to the United States. The holders in this country of "dollar securities" were obliged to lend them to the Treasury on fixed terms; and the Treasury sent them to New York in order to prevent the discrepancy between credit abroad and debt abroad from being too great. And, because the securities were not enough, we were obliged to create things for sale, obliged to float loans in the United States in order to keep the exchanges "pegged."

The securities sold had entitled people in this country to receive annual payments from the earnings of railways and mines, factories and ships, working abroad. They represented those savings of the nation as a whole which had been invested to exploit the resources of the "new" countries. Shares in undertakings at home, too, went into American possession. For, in these days, when a slip of paper conveys a title to property, we can export our railways and canals, the very houses we build and the fields we cultivate. So it comes about that now, instead of being in the position of having more to receive than to give, we must, so far as the United States is concerned, produce and export more than we receive unless we wish to become even further in debt.

CHAPTER XIX.

CREDIT CYCLES.

Vicissitudes of Things.—The man that lived to himself had little need to trouble about what occurred in lands across the sea. To him the season's difference, the prospect of plenty or the dread of dearth, was the thing that mattered. Even so, he was not free from ups and downs, from the alternation of prosperity and poverty that many regard as a modern condition, as a result of the close dependence of man upon man. In primitive times themselves, in the hunting and fishing stages even, there must have been the constant interchanging between superfluity and scarcity. True, there was no unemployment. But that was because the man unemployed, whether with or against his will, speedily perished; he could have no recourse to "doles" or to charity. There were ups and downs of life.

As soon as men reasoned about the life they lived, the causes of the succession were sought. We may take it that when Joseph's seven years of plenty were followed by seven years of famine, when the seven lean kine ate up the seven fat kine, many an explanation was forthcoming. Bacon later in time has a curious essay, "Of Vicissitudes of Things," in which he discusses the mutations in the world. In it he has a tentative explanation of changes that had already been noted: "There is a toy which I have heard, and I would not have it given over, but waited upon a little. They say it is observed in the Low Countries (I know not in what part) that every five and thirty years the same kind and suit of years and weathers come again; as great frosts, great wet, great drought, warm winters, summers with little heat, and the like; and they call it the prime. It is a thing I do the rather mention, because, computing backwards, I have found some concurrence."

Later investigators have sought to establish a ten years' recurrency of similar conditions. In a decade the wheel

would have come full circle. We should have passed through a period of expansion when prices and profits were high, when work was plentiful and wages good, when interest was high and bank reserves low. The boom, when everyone seemed to be making his fortune, would have been succeeded by a slump, a period of depression, when prices were falling, profits were low, unemployment was rife, wages and interest low, and bank reserves—signifying the destruction of part of the country's credit—rising. "There is," says Mill, "a commercial crisis when a great number of merchants and traders at once either have or apprehend they shall have a difficulty in meeting their engagements." In other words, credit, on which they have come to depend, has broken down, there follows pressure on the banks, and a financial panic occurs. The question whether such periods of panic are inevitable companions of our modern productive system is a question of much practical importance.

Definite Periods not Applicable.—Definite periods of time are, we might anticipate, hardly applicable. In these days of mass production, conditions change with astonishing rapidity; a great shortage of one commodity, when its producers are making exorbitant profits, is succeeded by a great glut, when the goods produced cannot be sold at prices that will enable the producer to continue. And this may occur in much less than ten years. High prices obtainable for motor cars, let us suppose, point out to the makers that the market is far from being satisfied. It is clear that, at present prices, profits will continue high; and the optimistic trader sees no reason why they should fall.

In 1919 and 1920 it seemed as though the occupation that all traders coveted was that of a motor car dealer. Here was the money-making business; and firms the world over worked vigorously to supply the unsatisfied demand. Plants were increased; more workers were engaged; firms strove against firms to capture the profits to be made. So many cars were put upon the market that remunerative prices could not be obtained. The boom had become a slump in 1922.

For we must note this about our modern units of production,

—about the “firms,” that is, which supply the market. Each firm works with little reference to others. Within the firm there is an effective and beneficial organisation; workers are appointed to do what they are best fitted to do; the output of one set of workers is adjusted to that of another set. The number of watch cases will be in proportion to the number of watch glasses; in a well-organised boot factory the “uppers” will not be more numerous than the soles to which they will be attached.

Outside the firm, we are not, indeed, justified in saying there is chaos and confusion; there is at all events a great deal of working in the dark. Firm *A* does not know how effective an answer Firm *B* is going to make to the increased market demand; Firm *A*, in fact, hardly considers what effort Firm *B* is making. The one big fact in its consideration is the exceptional market. There is the eagerly awaited chance of profits, and each firm borrows largely in order to increase its output.

And borrowing is easy. For merchants have given lavish orders at remunerative prices; and the banker willingly transforms the debt due from the merchant into present purchasing power. The traders think the demand will continue to exceed the supply, or even the prospective supply, and that prices will rise. With the constantly rising price it seems a safe operation to borrow; for there will be such exceptional profit that even a high rate of interest is of slight consequence. It was, for instance, estimated that during the Great War of 1914-18 interest was on the average $5\frac{1}{2}$ per cent. but that, by reason of the rise in prices, 20 per cent. could well have been paid. During the boom after the Armistice the difference was certainly greater. The demand for banking accommodation to finance dealings could not in such circumstances have been checked by raising the discount rate—unless, indeed, the minimum had been raised to a quite unprecedented figure.

As a result ever more and more is put on the market. When a thousand and one firms are doing this, no wonder a difficulty in disposing occurs. Prices break, credits are contracted, and in some instances manufacturers and traders, disappointed

in their anticipations, are unable to meet their obligations. Their debts have overtaken and exceeded their assets. And so closely knit is the business world nowadays that difficulty and depression in any one considerable branch has its effect upon the whole. Business men nowadays can pay their way only when they can collect the debts due to themselves. The banking system binds all together, and if a man cannot collect what is due to him he cannot pay what is due from him to others.

The order of events is this. Demand exceeds supply. Prices therefore rise. Increased prices stimulate production; and production exceeds the purchasing power of consumers. Stocks accumulate and are held on borrowed capital. In some quarter the reserve needed to continue holding is exhausted. Goods are thrown on the market; prices break suddenly, and business confidence is sapped.

Business and the Weather.—If the break of prices is sharp we have the painful phenomenon of what, looked at from various points of view, is called a commercial crisis or a financial panic or a trade depression. The burden of all debts grows: we have bankruptcies and unemployment and distress. The causes of such and the possible remedies are sufficiently important topics to call for close attention. Are we to attribute the fits and starts, the boom and the slump and the quiescence, to the weather? Do we agree with Professor Jevons when he connects *The Sun's Heat and Trade Activity*? Certainly a year that gives bumper crops, when the land smiles and winter seems far away, is a year that creates optimism among men, among business men as among farmers. In Pippa's song, you remember, "The year's at the spring, And day's at the morn, Morning's at seven, The hill-side's dew-pearled, The lark's on the wing, The snail's on the thorn"; and the conclusion reached is "God's in his heaven, All's right with the world." Now is the eagerly anticipated time of big profits.

Credit Expansion.—A wave of optimism goes over the world of business, too; enterprises that promise great profits are eagerly taken up; bankers willingly grant credits. And the

optimism creates meat to feed on. People who have bought find that prices have risen; those who have obtained credits can increase their credits because the value of securities has gone up.

The Bank's Reserve becomes diminished. In other words, the ratio of Cash and Notes in its Banking Department to the Public and other Deposits is lower. For the expansion of credit, forcing up prices, brings in its train a demand for more legal tender currency: the banks demand it in order to maintain their normal proportion of cash to liabilities; the general public demands it for payment of wages and for retail transactions. There would be a domestic drain on the reserve. Not that gold will, as for a foreign drain, leave the Bank; notes are as good for internal circulation as gold. None the less the notes could be obtained from the Issue Department only by the transferring of gold to that department.

A foreign drain, too, is as a rule coincident with a domestic drain. For the rise in prices makes the country a good market to sell in, a bad market to buy from. Gold, the price of which is fixed, alone retains its former value and is sought in lieu of goods. The gold reserve tends to be depleted.

A Contraction of Credit.—The Bank of England raises its rate of discount. The raising of the Bank Rate is a danger signal. The outer banks raise their rates, and grant credits on more onerous terms. New enterprises must be deferred. There is a lessened demand for building materials, for machinery, and for other capital goods; the slackening of employment lessens the demand for consumption goods also. Those who have bought stocks on credit, having greater interest charges to meet, perhaps even finding it difficult to renew their loans, press their goods on a falling market. There might ensue a depression as little reasonable as the previous boom—a dull and dreary November after a glorious August. We can hardly say, however, that the weather and the harvests are the invariable cause of credit cycles. We cannot even say that, from the profit point of view, an exuberant harvest is better than a niggardly return from the fields—a farmer may get more for a scanty crop than for an abundant one. Examine

an instance or two of these difficult periods we call financial crises.

The 1920 Crisis.—What we have said is illustrated by the boom and slump following upon the signing of the Armistice in the November of 1918. Till March 1920 there was a steep rise of prices. The boom was followed by a slump; and the fall in prices was as steep as the rise. Here are *The Times'* figures for the period in question:—

| Items. | June 1919. | Dec. 1919. | June 1920. | Dec. 1920. | June 1921. |
|---|---------------|---------------|---------------|---------------|---------------|
| | | In million £. | | | |
| Currency Note Circulation | 342·3 | 358·1 | 357·3 | 367·6 | 323·9 |
| Bank of England Note Circulation | 78·3 | 91·3 | 120·0 | 132·8 | 129·0 |
| Treasury Bills | 797 | 1,106 | 1,102 | 1,102 | 1,221 |
| *Deposits | 1,593·2 | 1,633·0 | 1,671·9 | 1,720·2 | 1,705·8 |
| *Discounts | 224·9 | 219·7 | 196·0 | 290·4 | 338·1 |
| *Advances | 515·9 | 741·2 | 839·7 | 802·2 | 768·6 |
| <i>The Times</i> Index Number (Basis Dec. 1913 = 100) ... | 244·7 | 296·9 | 307·4 | 240·3 | 186·7 |

These figures merit attention. They certainly do not lend support to the contention that credit expansion causes the boom, credit contraction causes the slump. The extraordinary conditions of the time probably made a crisis inevitable; and however clearly bankers foresaw the dangers of credit expansion they could not have prevented it.

At the Armistice the world was starved for goods; for the resources of the warring nations had been in great measure diverted during four disastrous years from production to destruction. The demand from buyers eager to get capital goods, eager to obtain stocks of consumption goods, seemed without bounds; and merchants and manufacturers hastened to satisfy it. They did not wait to weigh the difference

* Of eight clearing banks.

between the world's wants and the world's powers to buy. Indeed, so much money existed, much of it "pegged" at an altogether misleading height, that excuse existed for the mistake.

To dealers, merchants, and manufacturers, it seemed that the prospects for months ahead were secure. Yet there were some who counselled caution. Here is a passage from a careful analysis in the *Round Table* (September 1919):—

"For our own sakes and for the world's we must help Europe to mend its broken economic life. We must trade with it, because we must sell our goods. Yet we cannot trade except on credit, since Europe has, broadly, no means of paying. How can we give credit without enormous adverse balance of trade, and when we too must borrow? Must we not sell our exports only to those countries who can pay us in immediate imports? If we use our labour and capital to provide exports for an impoverished Europe, which must owe us for them, is not our power to purchase our own imports *pro tanto* reduced?"

"There is no wholly satisfactory answer to these questions. Strictly speaking we cannot afford to give credit. On the other hand, to some extent we must. It is an impossible policy to refuse to trade with Europe at all. We must ourselves rely, in our turn, on getting credit elsewhere. The crisis is too great and urgent. Most of Europe is in desperate need. Unless its industries get started the very gravest social disorders and even social collapse seem probable, and the reaction on ourselves would be profound. The rapidity, too, of our recovery depends on that of Europe. We must all go forward more or less together."

It gradually became clear that the output of goods was far beyond the power of the peoples impoverished by war to buy. Instead of selling our goods we were giving them away; for there were no goods in existence, or in immediate prospect, to obtain in return.

The Crisis of 1847.—Consider again the first financial crisis that happened after the Bank Charter Act of 1844, the crisis that made evident wherein the virtue of the Act lay.

There had been in the period preceding 1847 an exceptional locking-up of capital in railway construction; there was much less readily available purchasing power. The wealth of which people were possessed had lost much of its liquidity. In this state of things a comparatively slight shock to the Money Market might cause such a loss of confidence that a crisis followed. The slight shock came. For, in their manner, the merchant being ever prone to optimism, Liverpool Corn Importers based their orders abroad upon the prices and profits realised during the potato famine year of 1846. But 1847 was a year of bountiful harvest. The too optimistic merchants failed to sell the corn at the anticipated prices; their bankruptcy made the position of the banks difficult, and several of those in Liverpool and Manchester suspended payment. Commercial paper became discredited throughout the business community, and pressure arose upon the store of legal money; in other words, upon the reserve of the Bank of England.

The Bank Governors met their difficulties in the manner that has now become traditional. The Bank Rate was raised to 8 per cent., but at that rate ample advances were made on all manner of securities; permission to exceed the statutory issue was obtained from the Government; and the knowledge that lawful means of payment could still be had calmed the storm. We live, you note, under a system of credit rather than of gold. The money of the Market is credit at a banker's; an enormous superstructure of credit build upon a tiny foundation of gold. If the superstructure is cut down there must, to liquidate indebtedness, be an increase in what the law recognises as lawful means of cancelling debts, in gold or in the paper that is acceptable by the community in lieu of gold.

The Bank's Policy in 1866.—The Bank was called upon to do what the Governor declared it did do to meet the crisis of 1866: "When the storm came upon us, on the morning on which it became known that the house of Overend, Gurney & Co. had failed, we were in as sound and healthy a position as any banking establishment could hold, and on that day and throughout the succeeding weeks we made advances which would hardly be credited.

“It was not unnatural that in this state of things a certain degree of alarm should have taken possession of the public mind, and that those who required accommodation from the Bank should have gone to the Chancellor of the Exchequer and requested the Government to empower us to issue notes beyond the statutory amount, if we should think that such a measure was desirable.

“But we had to act before we could receive any such power; and before the Chancellor of the Exchequer was perhaps out of his bed we had advanced one-half of our reserves, which were certainly thus reduced to an amount which we could not witness without regret. But we could not flinch from the duty which we conceived was imposed upon us of supporting the banking community; and I am not aware that any legitimate application made for assistance to this house was refused. Every gentleman who came here with adequate security was liberally dealt with; and if accommodation could not be afforded to the full extent which was demanded, no one who offered proper security failed to obtain relief from this house.”

In other words, the Bank enabled all who were solvent to obtain present means of payment without being forced to realise their property in a falling market. The fall of prices due to the contraction of credit was not, therefore, the steeper by reason of obligatory sales at ruinous prices.

The Merit of the Bank Charter Act.—The Act of 1844, you remember, had been designed to make Bank Notes—beyond a fixed and low limit—merely certificates indicating that gold to the specified amount was in the Issue Department. In 1847, three years after the passing of the Act, the urgent needs for legal tender money obliged the Governors of the Bank to ask, and the Government to grant, permission to exceed the limit fixed. The permission was not used; during the several “suspension of the Bank Act,” the legal limit has, in fact, been exceeded only in 1857. But it meant that the store of gold accumulated in the Issue Department could, if need be, supplement the currency. The Act did not, as was hoped in some quarters, obviate monetary difficulties; it did make

certain that adequate means of countering the difficulties shall not be wanting. The Act ensures that gold will be available whenever extreme necessity calls for the gold.

Certainly it is a paradox that the merit of the Act becomes evident only by breaking or suspending the Act. Peel himself acknowledged that this was so. A stock of gold was accumulated and preserved. It is available for use only on an extraordinary occasion; and the Bank Governors must satisfy the Government of the day, and in the event Parliament itself, that the occasion is extraordinary.

The ostensible reason for the Act is not, therefore, the real reason; the gold reserve is not so much to ensure convertibility of notes as to enable the State, through its agent the Bank, to exercise its sovereign right of creating legal money. It enables the Bank to do what experience has shown to be the one way of calming a panic, and of causing the business life of a community to resume an unruffled course.

It prevents any really solvent debtor—who has, however, not immediately available resources—from becoming bankrupt. At a time when men fear that they will, through no fault of their own, but simply through the inability of others to pay debts, be unable to meet their engagements, then whatever bank keeps the banking reserve of the country is called upon to lend that reserve freely. Whoever has acceptable evidence that he is solvent should be helped to avoid bankruptcy: the bank's advances must be a temporary substitute till the frozen stream of credits and debits becomes thawed and there is no longer need of the added legal money. A holder of heavy stocks should not, for instance, be obliged to sell in a falling market and thereby still further depress prices; and an advance refused is pretty sure to mean such a sale.

Certainly the advances should be made on what, in ordinary times, would be regarded as onerous terms: the bank rate should be sufficiently high to be a deterrent to any except those who really need the advance. So long as the Government, and its creature the Bank, retain the confidence of the business community, a domestic demand for legal tender can be met in a comparatively easy manner. The difficulty comes

when a foreign demand—to be met by gold alone—accompanies the domestic demand.

The Crisis of 1825.—An early crisis, that of 1825, illustrates this point. Obligations had been incurred abroad to what was then a most exceptional extent: we had not then come to look upon the system whereby a man may link his fortune with enterprises in distant lands as a perfectly natural system. South America had severed itself from political dependence upon Europe. It seemed that the new republics were an insatiable and most profitable market for goods, and a secure and highly satisfactory field for investment. The mines of Mexico and Peru would provide an ever-increasing stream of dividends; the loans to the newly-created republics would—backed as they were by the tax-paying capacity of the newly enfranchised people—enable our capitalists to stake a claim in the lands that would now flourish.

Even if these calculations had been justified ultimately, they brought present disaster. The obligations incurred, entitling those abroad to call for gold, caused a rapid depletion of the Bank's stock of gold. The circulation of the notes of private banks disguised the fact that the gold basis was being carried away. The Bank of a sudden decided that credit must be contracted. Many firms could not get the advances upon which they had counted, and became bankrupt. The usury laws—prohibiting more than five per cent. interest—were a clog; and the Bank was forced to allay the panic by providing additional money. Notes below £5 had long been withdrawn; but, during the clamour for acceptable money, someone remembered a chest of one-pound notes. These were circulated and had some effect in preventing further failures. The foreign drain needed other measures. Gold was borrowed from France, and bank rate was raised in order to attract gold from abroad and to discourage discount at home.

The Crisis of 1914.—When the War broke out in 1914 the Bank followed the recognised method of dealing with a drain upon its reserve, from abroad as well as from at home. It

became loaded up with advances made to those acceptors who could not, by reason of the inability of their debtors to pay, meet the bills. The Bank Rate was at once raised to 10 per cent., and not only was the Bank authorised, with the Treasury's assent, to exceed the statutory limit for notes, but Treasury Notes, additional legal tender, were issued through it to the banks and the public.

We may put the matter in this way: Money is needed in our complex state of society for the multiplied and multifarious exchanges by which we live. The money is usually some form of credit paper. When a great mass of credit is annihilated, a substitute is sought. The only acceptable substitute is what the State by its fiat decrees is legal money. Certainly we may assume that in time of monetary stringency fewer transactions will be performed; but the decrease in business will be far more than merely set off by the decrease in means of exchange (in the tokens of credit).

Steadying Influence of the Banks.—We can hardly doubt that our banking system with its far flung tentacles—no longer confined in its operations to a single country—allows of better organisation in industry and commerce. This better organisation should diminish distressing fluctuations. An industry, the raising of wheat, or growing of timber, or mining of gold, will have its units of production where geography dictates. Yet by the combining effect of the banks the business side may be so concentrated that knowledge of the essential conditions of the industry are accessible to all who control. There need, then, be no absurd miscalculations leading to a great disproportion between the amount of the particular commodity placed to man's service and the amount that can command prices giving an adequate reward.

For instance, the many rubber plantations of the Malay States and those scattered elsewhere throughout the tropical belt are, of necessity, where climatic and other conditions are favourable to the rubber-yielding trees; where, too, the required supply of labour is available. It is, however, to London that these establishments look for capital and control, and particularly for the disposal of the product. The business

organisation is centred in London. There the financial arrangements are made—long loans are sought from the investing public, short loans from the banks; prices are fixed and profits declared there. And there the broad principles are settled upon which the industry shall be managed.

Every powerful concern in Britain, even if engaged in highly specialised local industries, maintains its London office. It finds that the trade exhibitions, the facilities for interviews with foreign buyers, for borrowing, for access to tender specifications and the like, amply justify such an establishment. And the same thing applies in not much less degree to other than British concerns. The combining of many units of production may be fraught with danger to the public that buys the product; there is, at all events, the compensation that such combination enables supply to adapt itself to effective demand.

The Crisis of 1931.—Some comments upon this, particularly in regard to the departure from the gold standard, begin on page 64.

APPENDIX I.

SOME BANKING TERMS.

Bank Cash.—The amount of legal money held by a bank or immediately available. This consists of coin and notes in the till to meet customers' immediate needs, additional notes in the vaults as a currency reserve, and balances at the Bank of England. The proportion of bank cash to the bank's liabilities to the public is now about ten per cent.

Banker.—One who holds himself out as taking money on deposit, such money being withdrawable on demand by cheque.

“By custom we call a man a banker who has an open shop, with the proper counters, servants, and books for receiving other people's money to keep it safe and return it on demand.” (The curious effort of the legislature to state what it understands by “banker” is enshrined in section two of the Bills of Exchange Act, 1882: “‘Banker’ includes a body of persons whether incorporated or not who carry on the business of banking.” In short, a Banker is one who keeps a Bank.)

Central Bank.—One usually established by the Government (fulfilling its obvious function of controlling the currency) to control the creation of credit and prevent its undue expansion, to govern the issue of paper or faith money, and to take steps for preserving an adequate supply of gold. The Bank of England, the Bank of France, the Federal Reserve Bank of the United States, the Reichsbank, are such central banks.

“Cross Firing.”—The making of accommodation bills of exchange by the following method: two firms draw upon each other in order to obtain negotiable instruments which they discount—usually at different banks—and so obtain a temporary loan, this loan being repaid, unless the bank manager is quick enough to discern the process, by the creation of other accommodation notes.

Deflation.—A decrease in the quantity of money without a corresponding decrease in the amount of goods produced.

Devaluation (of a Currency).—A reduction in the amount of gold contained in the standard coin, so as to bring the coin to the value of the depreciated paper. It was, for example, an instance of devaluation when Belgium in 1926 created its new gold unit called the "Belga" (containing 209211 gramme of fine gold), relinquishing thereby the familiar 25·22 relation with our pound and adopting the ratio 35. After the depreciation of our own currency in terms of gold, many advocated a lessening of the weight of gold in our standard coin; but the urgent need to restore international confidence in the power of the pound sterling over gold made the Gold Standard Act of 1925 renew the parity of the pound to 113 grains of fine gold.

Drain of Gold.—The period during which gold flows abroad: a time of optimism, traders and manufacturers believing that if only they can get control of capital they can make big profits, has led to the creation of credit beyond the ordinary. The banks have allowed deposits to increase to a greater extent than the bounds of prudence, as indicated by the need for having legal money at their disposal. Prices rise; and the country becomes a good place to sell in, but a poor place to buy in. Creditors abroad will not accept bank promises for the excess of imports. They want payment in gold. Exchanges, therefore, go against us, and our stock of gold becomes depleted.

Fiduciary Currency.—A currency based upon faith in the issuer, not upon the commodity value of the currency. Such is now all our currency (including silver and copper) apart from gold. In other words, the British currency—now that gold no longer circulates—consists solely of tokens, taken in confidence that they represent a defined weight of gold. In a narrower sense the term is applied to that part of the Bank of England issue of notes which is uncovered by gold, a fiduciary issue now amounting to £275,000,000.

"*First Line of Defence*" (*i.e.* defence against withdrawals greater than usual from the banks)—that which bears the first

brunt of demands for cash. It is usually taken to be "Bank Cash." Dr. Leaf, however, showed that when a bank wishes to strengthen its position it tends to call in the money it has upon short loan. It "puts the market in the Bank"—causing bill-brokers to discount their fine paper at the Bank of England, or to borrow from the Bank on "floaters" or Treasury Bills, in order to repay the lending bank. The lending bank's balance at the Bank is thereby augmented.

"*Floaters.*"—Stock Exchange securities of the highest class (Government stocks and others issued by the Bank of England). In these the Bank of England is always prepared to deal; and the outer bank and discount houses, which always hold large amounts of these readily accepted stocks, sell them to the Bank or deposit them as security for loans whenever it appears necessary to have a greater supply of legal money.

"*Frozen Credit.*"—Inability to obtain credit upon securities that, in ordinary times, are readily accepted as a basis for a banker's advance.

"*Forward Exchange.*"—The buying and selling, at prices fixed at the moment, of foreign currency to be delivered in the future. Violent fluctuations in the exchange may upset reasoned calculations. They may turn the anticipated profit into a loss (or, indeed, enhance the anticipated profit). The trader who wishes to get rid of this particular gambling element in his transactions covers himself by an operation in "forward" exchange: if he has francs to pay in the future he buys them from the bank now; if he has francs to collect in the future he sells them now. The bank usually covers itself by an operation in the opposite direction; if it sells forward exchange, it also buys forward exchange.

Gold Bullion Standard.—A modification of the Gold Standard system. The power of a thing to command gold still remains the measure of the market value of that thing. Gold is not, however, put upon the market as coins; its market is restricted to a defined place, and it is sold in a defined way.

Gold Exchange Standard.—Another modification of the Gold Standard System. Again the value of a thing depends

upon the value of the gold it commands. The currency is kept at parity with gold, however, not by a free market for gold, but by a free market for gold credits abroad. (See the account of the Danzig Bank.)

Gold Standard.—This exists in a country where the unit of money (the “Money of Account”) has a value equal to the value of a specified weight of fine gold, where (owing to the facilities for marketing and moving gold) the paper or other representation of gold cannot cease to have value equal to that of the gold it represents.

Index Numbers.—Figures showing the changes in the purchasing power of the money unit. In other words, Index Numbers show the changes in average prices, which rise and fall in proportion to the decrease or increase in the purchasing power. Thus if the Index Numbers rise we have an indication that the purchasing power of money is falling.

Inflation.—An increase in the quantity of money without a corresponding increase in the supply of goods produced, the inflation being signified by a rise in general prices.

“*A Managed Currency.*”—A money system that is regulated in order to achieve a definite purpose, sometimes to keep prices stable, sometimes to provide money for the encouragement of trade and industry. Before 1914 the English currency system, so far as the quantity of money was concerned, practically managed itself: the amount of legal money depended upon the flow of gold to or from the Bank of England. Through the financial activities of the Treasury—particularly in regard to Treasury Bills and Treasury Notes—our own currency is no longer “automatic”; it is, in some measure, a “managed” one.

Money.—The means established by law, or by custom, for the payment of debts. It includes all forms of currency, together with bank deposits withdrawable by cheque. It is the purchasing power available at any one moment.

Open Market Operations.—The Macmillan Report thus explains the process by which the central banks, through their open market operations, hold command over the amount of purchasing power in the country:

“ If the Bank purchases securities in the market the transaction is settled by crediting the drawing account of the broker or other party through whom they are purchased. This eventually leads to an increase in the balances of the joint-stock banks at the Bank of England. The Bank's holdings of securities will of course have been increased by the same operation. The deposits of the joint-stock banks at the Bank are the equivalent of cash and the banks thus find themselves with more than their usual proportion of cash to deposits and are in a position to grant further loans to their customers or otherwise to create additional credit. Since the banks as a whole maintain a cash proportion to deposits of from 10 per cent. to 11 per cent. they are in fact able to increase their deposits by some 10 times the cash created by the Bank of England. By the opposite process a sale of securities by the Bank of England or the calling in of a loan will reduce the cash of the joint-stock banks and entail a reduction of their deposits. The Bank of England is thus in a position (provided that it has knowledge of the variations in the note holdings of the joint-stock banks) to exercise almost complete control over the amount of bankers' cash in the country, and thus, given the conventions which govern the transactions of the joint-stock banks, over the total volume of deposits within such limits as are set by the existence of the international gold standard. The bankers' cash may, of course, be reinforced by gold imports without action on the part of the Bank of England, but it is within the power of the Bank to take steps to offset any expansion in deposits which might thus arise.

“ There are normally no direct borrowing or lending transactions between the Bank of England and the joint-stock banks. The connection is established through the discount market. That market employs funds lent to it by the joint-stock banks (as well as other institutions, British and foreign) at call or short notice. If a joint-stock bank or other lender finds its cash position is below normal, it withdraws call money from the discount market. That market, if it cannot supply itself with necessary funds from other banks or other sources, brings bills to the Bank of England for discount or

borrow from the Bank on the security of bills or Government securities, thus again increasing the cash basis."

Over Valuation (of a Currency).—The artificial maintenance of a higher purchasing power for a unit of money of a country abroad than it has at home. This can be brought about by "pegging the exchanges." (See below.)

"Pegging the Exchanges."—The process, widely adopted during the Great War and apparently still followed in France, of maintaining rates of exchange at an artificial height. The national unit of money is made to possess in the world's markets a higher buying power than it has at home. Thus a depreciation of money may be partially concealed. In our own case, during the period January 1st, 1916 to March 21st, 1919, the American exchange was effectively pegged. By raising loans in the United States and by vast sales to America of "dollar securities" held by British nationals, the rate was maintained at 4-76½ dollars to the pound sterling. This is below the Mint Par (4-866⅔), and also below the peace-time Specie Point (about 4-82). But, at a time when export of gold was unusually costly, the rate was high enough to prevent profits on gold exports, and our stock of gold was retained. Such a "pegging of the exchanges" is again, in the view of the Government, rendered necessary. The establishment, in the summer of 1932, of an Exchange Equalisation Account showed that the financial authorities contemplated active steps to prevent great fluctuations in the exchanges.

The "Proportion."—The relation between the *Reserve* (the Coin and Notes in the Banking Department of the Bank of England) and the two items on the liability side combined, "*Public*" *Deposits* and "*Other*" *Deposits*. Before 1914 the Proportion was usually about 40 per cent. Now, possibly as a result of the greater power given to the Bank by the Currency and Bank Notes Act of 1914, the proportion may be lower without causing anxiety.

Reflation.—This term—a variant of "inflation"—signifies an amount of inflation sufficient, and only sufficient, to bring prices back to a general level assured as fair to all concerned.

“Spot” Exchange.—The buying or selling of foreign currency for delivery at once.

Tabular Standard.—A system of currency whereby the weight of the standard coin is varied inversely as prices tend to rise or fall. A unit of money is made to have a constant purchasing power over a group of selected goods.

Treasury Bills.—Notes issued by Government acknowledging a debt to be paid to bearer at a certain date. They are in effect promissory notes of a government, distinguished however from bank notes by the following among special features: (1) they are issued at a discount, and thus earn interest for the cash that, being temporarily superfluous, is invested in them; (2) tenders are invited for them, and the response to the invitation given is an index of the relation between the supply of money and the demand for it; (3) they are issued in denominations of £5,000 and above, so that the private investor can seldom have recourse to them, though they are excellent short investments for the banks and the discount houses. “Hot Treasury Bills” are such as have just been issued.

From the wording of a Treasury Bill we can understand much of its nature:

This Treasury Bill entitles or order to the payment of £..... at the Bank of England out of the consolidated funds of the United Kingdom on the

Secretary to His Majesty's Treasury.

If the first blank is not filled in the Bill will be paid to the bearer. These Treasury Bills form part of the “floating debt” of the United Kingdom. This represents temporary discrepancies between revenue and expenditure of the country. Probably they should be re-paid by the end of the financial year; but for a long time the amount of maturing Treasuries has been met by the issue of a not very different amount of new Treasuries.

The Bills were introduced in 1877 on the suggestion of Mr. Bagehot. His idea was that thereby the Government would be enabled to utilise the supply of money always on the London Money Market. Recently only three months' Bills have been issued; and these are not, as ordinary bills are, entitled to days of grace. Each Friday a notice appears in the *London Gazette* that the following Friday the Bank of England will, on behalf of the Government offer Treasury Bills to be tendered for by the following Friday. The Bills are issued in denominations of £5,000 and £10,000. But tenders are made for an amount not less than £50,000 and must be submitted through a London bank or a Discount House or Broker. The price offered for the Bills is expressed in pounds, shillings, and pence per one hundred pounds face value of the Bill.

APPENDIX II.

“GRESHAM'S LAW” ILLUSTRATED.

Macaulay, in his own vivid manner, gives a well-known instance of the operation of “Gresham's Law”—that bad money drives out good, but that good cannot drive out bad. Speaking of the disorders that obliged William the Third's Government to improve the coinage, he says: “It was absolutely necessary to apply a remedy to an internal evil which had by slow degrees grown to a fearful magnitude. The silver coin, which was then the standard coin of the realm, was in a state at which the boldest and most enlightened statesman stood aghast.

“Till the reign of Charles the Second our coin had been struck by a process as old as the thirteenth century. Edward the First had invited hither skilful artists from Florence, which, in his time, was to London what London, in the time of William the Third, was to Moscow. During many generations, the instruments which were then introduced into our mint continued to be employed with little alteration. The metal was divided with shears, and afterwards shaped and stamped by the hammer. In these operations much was left to the hand and eye of the workmen.

“It necessarily happened that some pieces contained a little more and some a little less than the just quantity of silver: few pieces were exactly round; and the rims were not marked. It was therefore in the course of years discovered that to clip the coin was one of the easiest and most profitable kinds of fraud. In the reign of Elizabeth it had been thought necessary to enact that the clippers should be, as the coiner had long been, liable to the penalties of high treason. The practice of paring down money, however, was far too lucrative to be so checked; and, about the time of the Restoration, people began to observe that a large proportion of the crowns,

half-crowns, and shillings, which were then passing from hand to hand, had undergone some slight mutilation.

“ That was a time fruitful of experiments and inventions in all the departments of science. A great improvement in the mode of shaping and striking the coin was suggested. A mill, which to a great extent superseded the human hand, was set up in the Tower of London. This mill was worked by horses, and would doubtless be considered by modern engineers as a rude and feeble machine. The pieces which it produced, however, were among the best in Europe. It was not easy to counterfeit them; and, as their shape was exactly circular, and their edges were inscribed with a legend, clipping was not to be apprehended. The hammered coins and the milled coins were current together. They were received without distinction in public, and consequently in private, payments.

“ The financiers of that age seem to have expected that the new money, which was excellent, would soon displace the old money which was much impaired. Yet any man of plain understanding might have known that, when the State treats perfect coin and light coin as of equal value, the perfect coin will not drive the light coin out of circulation, but will itself be driven out. A clipped crown on English ground went as far in the payment of a tax or a debt as a milled crown. But the milled crown, as soon as it had been flung into the crucible or carried across the Channel, became much more valuable than the clipped crown. It might therefore have been predicted, as confidently as anything can be predicted which depends on the human will, that the inferior pieces would remain in the only market in which they could fetch the same price as the superior pieces, and that the superior pieces would take some form or fly to some place in which some advantage could be derived from their superiority.

“ The politicians of that age, however, generally overlooked these very obvious considerations. They marvelled exceedingly that everybody should be so perverse as to use light money in preference to good money. In other words, they marvelled that nobody chose to pay twelve ounces of silver when ten would serve the turn. The horse in the Tower still paced his rounds. Fresh waggon loads of choice money still

went forth from the mill; and still they vanished as fast as they appeared. Great masses were melted down; great masses exported; great masses hoarded; but scarcely one new piece was to be found in the till of a shop, or in the leathern bag which the farmer carried home from the cattle fair. In the receipts and payments of the Exchequer the milled money did not exceed ten shillings in a hundred pounds. Meanwhile the shears of the clippers were constantly at work. The coiners, too, multiplied and prospered: for the worse the current money became the more easily it was imitated.

“The evil proceeded with constantly accelerating velocity. At length in the autumn of 1685 it could hardly be said that the country possessed, for practical purposes, any measure of the value of commodities. It was a mere chance whether what was called a shilling was really tenpence, sixpence, or a groat.

“The evils produced by this state of the currency were not such as have generally been thought worthy to occupy a prominent place in history. Yet it may well be doubted whether all the misery which had been inflicted on the English nation in a quarter of a century by bad Kings, bad Ministers, bad Parliaments, and bad Judges, was equal to the misery caused in a single year by bad crowns and bad shillings.

“Those events which furnish the best themes for pathetic or indignant eloquence are not always those which most affect the happiness of the great body of the people. The misgovernment of Charles and James, gross as it had been, had not prevented the common business of life from going steadily and prosperously on. While the honour and independence of the State were sold to a foreign power, while chartered rights were invaded, while fundamental laws were violated, hundreds of thousands of quiet, honest, and industrious families laboured and traded, ate their meals, and lay down to rest, in comfort and security.

“Whether Whigs or Tories, Protestants or Jesuits were uppermost, the grazier drove his beasts to market; the grocer weighed his currants; the draper measured out his broadcloth; the hum of buyers and sellers was as loud as ever in the towns; the harvest home was celebrated as joyously as ever in the

hamlets; the cream overflowed the pails in Cheshire; the apple juice foamed in the presses of Herefordshire; the piles of crockery glowed in the furnaces of the Trent; and the barrows of coal rolled fast along the timber railways of the Tyne. But when the great instrument of exchange became thoroughly deranged, all trade, all industry, were smitten as with a palsy.

“The evil was felt daily and hourly in almost every place and by almost every class—in the dairy and on the threshing floor, by the anvil and by the loom, on the billows of the ocean and in the depths of the mine. Nothing could be purchased without a dispute. Over every counter there was wrangling from morning to night. The workman and his employer had a quarrel as regularly as Saturday came round. On a fair day or a market day the clamours, the reproaches, the taunts, the curses, were incessant; and it was well if no booth was overturned and no head broken.

“No merchant would contract to deliver goods without making some stipulation about the quality of the coin in which he was to be paid. Even men of business were often bewildered by the confusion into which all pecuniary transactions were thrown. The simple and the careless were pillaged without mercy by extortioners whose demands grew even more rapidly than the money shrank. The price of the necessaries of life—of shoes, of ale, of oatmeal—rose fast. The labourer found that the bit of metal which, when he received it, was called a shilling would hardly, when he wanted to purchase a pot of beer or a loaf of rye bread, go as far as sixpence. Where artisans of more than usual intelligence were collected together in large numbers, as in the dockyard of Chatham, they were able to make their complaints heard and to obtain redress. But the ignorant and helpless peasant was cruelly ground between one class that would give money only by tale and another which would take it only by weight.”

APPENDIX III.

DECIMAL COINAGE.

The Purpose of Currency.—The great office of money is to facilitate exchanges, and thereby enable people to help one another. And that system of currency is best which enables exchanges to be accomplished with least trouble and friction. If we approach from that standpoint this question of decimal coinage, we shall probably agree with the Royal Commission that reported in 1920. Constituted to consider “whether it is advisable to make any changes in the denomination of the Currency and money of account with a view to placing them on a decimal basis,” it decided that the advantages claimed for the decimal system were in theory only, or mainly; that for practical purposes we had evolved an admirable system of currency, and that if we wished to use decimals in the keeping of accounts we could—while maintaining our present coinage—easily do so.

The existing system may have defects, and these are evident to all; an alternative system, however, presents itself as an ideal, and we should learn only by awkward experiences any defects. Then, as often enough in monetary affairs, “Better bear those ills we have than fly to others that we know not of.”

A Letter from the U.S.A.—America, which has the decimal system (or rather the centesimal), is not quite happy with it, and devises means of obtaining the advantages of our duo-decimal system. An entertaining letter from Mr. Halsey, the Commissioner of the American Institute of Weights and Measures, is worth considering. He has very kindly given permission to quote it here.

In his letter he is showing how in practice the American gets rid of the shackles of the decimal system: “If you buy stocks through a broker you will find that his ordinary commission

is one-eighth of 1 per cent. of the par value, except that if you buy a few shares of high-priced stocks, his commission will be one-quarter or even one-half of 1 per cent., while if your purchase is large enough to induce him to reduce his commission the rate will be one-sixteenth of 1 per cent. These practices are the more striking because we have a smaller unit of value than the cent—the mil, which is one-tenth of a cent. In practice, however, this unit is used only in certain tax ratings, some (not all) of our taxes being levied at so many mills on the dollar. The mil is, however, never used in commercial or financial transactions, the cent in such cases being always divided into halves, quarters, eighths, and sixteenths.

“Why is it, if the decimal principle is so superior, that after more than a century of experience with our currency, we depart from that principle whenever we are not bound down to it by the ratio of our basic denominations? The question is one for the decimalists to answer.

“Having now examined the practice in large transactions, let us turn our attention to small ones. When we go to a shop to buy something—a cigar, for example—of which two are priced at a ‘quarter’ of a dollar, if we buy one we are always penalised $2\frac{1}{2}$ cents, for the price of one such cigar is always 15 cents, never $12\frac{1}{2}$. Similarly if we buy one article of which three are priced at a ‘quarter,’ we pay 10 cents, not $8\frac{1}{3}$.

“The Englishman under the same circumstances pays 6d. or 4d. respectively, but he does not stop here. If the thing he buys is priced at 2, 3, 4, 6, 8, 12, 16, 24, or 48 for a shilling, he can buy any desired number up to a shilling’s worth and take the exact amount of money from his pocket, or, failing that, get back the right change. We can do that for fifth and twenty-fifths of a ‘quarter’s’ worth, but for no other fraction; and who wants fifths or twenty-fifths of anything? Many things are priced at so many for a ‘quarter’ dollar, the number going up or down as the price per piece goes down or up; but unless the number happens to be 5 or 25, we must buy a ‘quarter’s’ worth whether we want it or not or submit to a petty loss.

“Similarly, if an article is priced, for example, at 7s. per

dozen, the Englishman knows without a thought that that is equivalent to 7d. each. Compare this with the nearly equivalent value, \$1.75 per dozen, and you will see an advantage in your system which you do not realise, because it is such an everyday affair. If things were priced by tens instead of dozens we could do as you do, but things are not so priced. The dozen has the same superiority over the ten that the shilling has over the 'quarter' dollar—greater divisibility.

"Your shilling is the most wonderful denominator of value in the world, while our 'quarter' is absolutely the worst. You will never know how good a thing your shilling is until you lose it. Some Englishman has called our country 'the land without a sixpence,' and to an Englishman that tells much, whilst to most of us it tells nothing. The franc, being divided into 100 parts, while our 'quarter' is divided into 25, the former is superior to the latter in divisibility because it can be divided by two twice, while the 'quarter' cannot be so divided even once. The franc is, however, far inferior to the shilling in divisibility, and it is inferior to the dollar as a measure of large values, because of its small size; and by the same token the dollar is for that purpose inferior to the pound sterling.

"On the other hand, when divided decimally the pound will be inferior in divisibility to the dollar because the inflexibility of a decimally divided base unit increases with its size. Just as the dollar is inferior in this respect to the franc, so will the pound be inferior to the dollar. At first sight nothing seems so odd to an American as your half-crown, but on deeper insight we find that it endures because it is the eighth part of a pound, precisely as, under different names—bit, levy, and shilling (*sic*)—the eighth part of a dollar is in common use in different parts of our country, although it does not have, and never has had, a coin to represent it. On our Pacific slope they scarcely know the meaning of a 'quarter,' always calling it 'two bits.'

"To sum up the comparison of systems in order of merit as measures of large values is—British, American, French; as a means of making purchases—British, French, American;

and as a means of keeping accounts—American, French, British.

“ We find, then, that our currency is superior to yours as a means of keeping accounts, while yours is superior to ours as a means of buying and selling commodities, and saddled, as we are, with unfortunate decimal arithmetic, the wit of man cannot devise a system that is other than inferior for one or other function, between which we must choose. The quarrel over currency, like that over weights and measures, is in reality, although in disguise, a quarrel over arithmetical notation. We are saddled with a bad system of arithmetic which is out of joint with many requirements. In the circumstances we must compromise, something must give way, and the question is—what shall it be ?

“ The metric system of weights and measures sacrifices the ordinary system of division of units, which in itself is one of the few perfect things in this world. In other words it sacrifices the essentially good for the essentially bad, so that nothing really satisfactory can be based upon it. Of currency and weights and measures alike, so long as the decimal system of arithmetic endures, a really satisfactory system is impossible. Compromise there must be, although a much better compromise than the extremely amateurish metric system could easily be devised.

“ If you adopt a decimal currency, you will both gain and lose. You will gain for the accountant, and you will lose for everybody else. Moreover, just as we make partial use of the duodecimal principle, so you will do the same. What exceptions you will make I do not know, but you will make them, because decimal divisions are fundamentally and inherently bad.”

The Practical Point of View.—The point emphasised here is, you note, that for the needs of ordinary life our system is better than any decimal system that may be suggested. In America, as soon as they get away from account-keeping, they forsake the decimal principle. The ratios of their effective coins are two to one; so that they have the Nickel (5 cents), the Dime (10 cents), the “quarter,” the “half,” and the

Dollar. And their gold coins are the Half-eagle (\$5), the Eagle (\$10), and the Double-eagle.

The escape from the decimal system of notation (imposed on primitive races because man has ten digits to count with) is, in fact, regarded by Sir E. E. Tylor as a step upward in civilisation. It is a step dictated by the need of a unit capable of divisions and sub-divisions. "The manner in which English in common with German, Dutch, Danish, and even Russian has adopted Medieval Latin *dozena* (from *duodecim*) shows how convenient an arrangement it was found to buy and sell by the dozen and how necessary it was to have a special word for it."

History of the Movement for Decimal Coinage.—The agitation for some revision of our coinage in the direction of decimalisation is of long standing. If only our farthing were one-thousandth (.001) of a pound, we should have a decimal system ready made. To obtain one as it is, however, we should need to give up the pound or the penny—either increase the weight of gold in a sovereign or diminish the token value of a penny.

As early as 1824 a scheme, practically the same as that upon which the Commission was required to report, was brought before the House of Commons. This was the pound and mil scheme in which the pound was retained unimpaired, was to be divided into ten double shillings, and each double shilling into a hundred farthings. The decimalists succeeded in 1849 in obtaining the issue of a florin which since has become as familiar as our half-crown; but this is the one fruit of their labours. And in face of the adverse report of the Commission there is little likelihood of our currency system undergoing material change.

Mr. Gladstone as Chancellor of the Exchequer, and therefore in close touch with practical affairs, in his answer to a deputation from the Decimal Association (1854) summed up the matter: "I cannot doubt that a decimal system of coinage would be of immense value in monetary transactions. The weight of authority on that head is irresistible; but I do not think, when we come to the adoption of a system, that we have

obtained sufficient evidence as to the sense and feeling of the country with respect to it.

“It is true that those people who have studied the question are gentlemen who have been more or less actively engaged in commercial pursuits, but the public at large do not seem to be acquainted with it. It is, as you are aware, the enormous masses of the community who have immense businesses to transact that must guide the Government in the matter. They are attached to the present arrangement of the currency, as it admits of the different system of divisors, and it is the basis of all their notions of value. It has also many facilities of division, which you may lose if you abandon it. It is impossible for you not to be struck with this—an advantage which takes its origin from the number of factors which a combination of the decimal with duodecimal give rise to. With the Government it is impossible not to be so struck.

“Again, it is so wound up in the habits of the people that it would not be advisable to have recourse to any change in it unless we had clear evidence that it was one the people themselves required and understood. This, too, is a question in which the mere judgment of a Minister is of no importance, and which the general feeling of the public can alone decide. I frankly own I am by no means convinced that you can get rid of the penny; but as I said just now, nothing is more unimportant on such a question than the opinion of an individual Minister. I would only ask you, are the people prepared for the change? All I say is that I cannot take any decisive step until we are satisfied that the subject has been thoroughly sifted, and is well understood by the public.”

The Latin Union and the System.—When in 1865 the Latin Union was concluded, the question again arose. The British Government was invited by the Emperor Napoleon III. to enter the Convention, or to consider a method of linking the sovereign with the coinage of the Latin Union (a coinage ultimately based on the gold coin of the value of five francs).

The Royal Commission appointed to consider the question of an international coinage reported that the adoption by the

Latin Union and the United States of the British sovereign as monetary unit (as the international coin) provided the one practical basis. The European currencies had been deranged, we had long enjoyed a sound currency system: "Where the currency has become very much deranged it can hardly be said to be an inconvenience to establish a sound system: where frequent changes of the currency have occurred this inconvenience of a further change in order to establish a permanent or general system is less felt. The inconvenience is greatest where a sound system has long been in existence, and is deeply rooted in the feelings and habits of the people."

Another obstacle to a uniform international coinage was raised when Germany in 1870 adopted a system of decimal coinage unrelated to the Latin System. Besides, even if a theoretical equivalence was established among the standard coins there would be in practice a divergence. For there would be varying degrees of adherence to the coinage laws and varying degrees of abrasion among the coins; even now the Mint Par is superseded by the Commercial Par. *The Committee on Commercial and Industrial Policy after the War* deprecated any change in our system. Decimalisation means the abandonment or modification of either the pound or the penny. The abandonment of the sovereign as the standard and working unit of international exchange is out of the question. And to preserve the credit of the penny at home is as important as to maintain that of the sovereign abroad.

The crux of the question for us is, however, the alteration of the value of the penny, and it is necessary to consider closely what this change means and what are the advantages it offers. It would do nothing towards unifying the various subsidiary coinages of the British Empire, such as the Indian rupee and the Straits dollar, and it would bring us no nearer to Canada, Newfoundland, British Honduras and British Guiana which now use the United States dollar. It would not advance us a step towards the adoption of an international currency and it cannot, therefore, be said to have any really important bearing upon the promotion of foreign trade. It would still be necessary for this purpose, though perhaps

slightly easier, to translate our prices into foreign currencies at the varying rates of exchange.

The proposal in fact offers little more than a purely domestic convenience in the simplification of account keeping. This convenience would no doubt be considerable in the case of banks and large commercial firms; but it would offer no great attraction to the majority of smaller firms, while for the great mass of daily retail transactions it is doubtful whether our existing duodecimal system is not practically superior to a decimal system. At any rate, the former is firmly rooted in the minds of the people.

Some Disadvantages of Change.—Apart from this consideration the change would involve the readjustment of the innumerable retail transactions which are based upon the penny. Prices which are now fixed in multiples of the penny would have no exact equivalent in the new coinage. In every case either the purchaser would have to get less for his pence or the scale of prices would have to be raised. More than £19,000,000 of Postal Revenue was collected in 1913-14 by charges based on units not exceeding 2d. A loss of 4 per cent. on this amount would be nearly £1,000,000. The finance of the National Insurance Act would have to be recast, since, while the monetary benefits are paid in shillings, the contributions are calculated in pence. The same necessity would apply to railway, tramway, and omnibus fares. The fact that no exact equivalent for existing rates could be fixed in these cases would cause special difficulties.

As another illustration of the far-reaching effect of the coinage, it must be noted that all hourly and piece-work wages would have to be revised. In the cotton trade, for example, wages rates rest on elaborate price lists expressed in pence or fractions of a penny. In each individual case the wage-earner must either lose or gain, and, although no doubt after elaborate negotiations a common measure would be found by give and take over the whole range of rates, the process would inevitably involve much friction and probably in some cases serious labour disputes. While powerful associations of workmen would be able to protect themselves,

unorganised labour would probably stand to lose by the change. It is not improbable that the suspicion might arise among workmen that an indirect attack was being made upon their newly won rises of wages by means of the depreciation of the working man's coin.

Again, to quote from Mr. Gladstone's speech in 1854: "An alteration of the value of coins, which are in point of fact the measures of value and the basis of the whole idea of value of the masses of the people, is a very serious matter and one which ought not to be undertaken on any mere abstract opinion and consideration without fully ascertaining that the ground under foot is secure."

We are in the controversy to distinguish between coins in circulation and the reckoning of money of account.

Coins in Circulation.—Coins provide machinery for the adjustment of small payments. When we consider in this respect the convenience of a coinage system the question to which we chiefly direct ourselves is: do these coins make easy the myriad transactions of everyday life in which actual coins pass?

The retailing of commodities forms a great part of such transactions; and the desirable property in a system of coinage is that it should provide coins capable of division, as far as possible, into parts without remainder in the same ways as the units of weights and measures are divided. Our system of weights (16 ounces to one pound, for instance; 12 inches to one foot) invites us to think in halves and quarters, and implies a demand for similar division of the money units.

Our existing system is admirably adapted to the needs of everyday life. The shilling of 48 farthings is divisible without remainder by 2, 3, 4, 6, 8, 12, 16, 24; the half-florin of 50 mils would be divisible by 2, 5, 10, 25. And the convenience of the binary system is the greater in that we have what is largely a binary system of weights and measures.

Money of Account.—A convenient money of account is one that makes easy the record of transactions and the calcula-

tions relating to them, and usually, as with us, the standard coin is the unit of account. But, as we have seen, the unit of account is not of necessity represented by a coin; shilling was the Old English money of account, but the coin in circulation was the silver penny. The existing system entails compound arithmetic; and perhaps a decimal system might save a little time in school. It is doubtful whether the saving would be great, and in any event the compound arithmetic gives a useful mental exercise; and the vulgar fractions would need to be learned for other purposes. And the advantages of the decimal system in accounting could be obtained without tampering with our coinage. One of the members of the Commission explained a useful method:

(a) To convert into pounds and decimals of £1 to three places of decimals, sums expressed in £ s. d.

The pounds remain unaltered, multiply the shillings by five, and make two decimal places. Multiply the pence by four; if the product is less than 12, add 0; if between 12 and 36 inclusive, add 1; if more than 36 add 2. Make three decimal places. Add the whole, and the sum is the answer.

(b) To convert into £ s. d. sums expressed in pounds and decimals of £1 to three decimal places.

The pounds remain unaltered. Multiply the figure in the first decimal place by 2 and add 1 if the figure in the second decimal place is 5 or upwards. The result is a number of shillings. Form a number out of (1) the second decimal figure of what is left after subtracting 5 and (2) the third decimal figure. If the figure so formed is less than 12, add 0; if between 12 and 36 inclusive, subtract 1; if more than 36, subtract 2. Divide the result by 4. The quotient is the number of pence.

The application of these rules may be illustrated by a simple example:—

| £ | s. | d. | |
|---|----|----|----------|
| 7 | 0 | 0 | = £7·000 |
| 0 | 13 | 0 | = £·65 |
| 0 | 0 | 6 | = £·025 |

Decimalised form £7·675

Table I. on next page shows the decimalised values of the $\frac{1}{4}$ d., $\frac{1}{2}$ d., 1d., 2d., etc., to 11d., and 1s., 2s., etc., to 19s.

It would tend to greater accuracy in the final results of a large number of arithmetical operations in which only three places of decimals are used if 3d. were always called $\cdot 013$, which is $\cdot 0005$ more than the true value, and 9d. were called $\cdot 037$, which is $\cdot 0005$ less than the true value.

If the operator examines the forms which these decimals take, and compares them with one another, he will see that they lend themselves easily to memorising and to arithmetical manipulation. Conversion and re-conversion, and any calculation in which decimal processes are an advantage, present no more difficulty with this than any other system. Its disadvantage, as compared with a system of decimal currency which is exact to three places of decimals, is that in large calculations, especially if multiplication is involved, the decimalisation must be extended to four or more places of decimals if complete accuracy is required.

The gain from decimalising arises from the elimination of compound arithmetic in computations involving multiplication and division, especially if use be made of what are known as "contracted" methods, the rules for which are well known. Where extensive calculations have to be made, as in the Statistical Departments of large businesses, or in the Actuarial Department of an Assurance Company, resort is had to mechanical aids, such as the Arithmometer and slide rule, or to books of logarithms and other tables. None of these can be used to advantage unless the operator has facility in converting £ s. d. values into their decimal equivalents or vice versa. Given such facility, calculations can be made by mechanical means with great speed and accuracy.

Some Advantages of the Decimal System.—That a decimal system has some advantages is undoubted. Such are the following:—

(1) Our arithmetic system is based on ten, and it is clearly a convenience to be able to make our monetary calculations on the same ten basis (when we add 9 and 6, it is desirable that the result should appear as 15, not as 1s. 3d.). We

TABLE I.

| Pence. | Proportion of £1. | The same expressed in Decimals exactly. | The same to Three Places of Decimals. | Shillings. | Proportion of £1. | The same expressed in Decimals. | Shillings. | Proportion of £1. | The same expressed in Decimals. |
|--------|-------------------|---|---------------------------------------|------------|-------------------|---------------------------------|------------|-------------------|---------------------------------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| 1 | $\frac{1}{80}$ | .0010416 | .001 | 1 | $\frac{1}{20}$ | .05 | 14 | $\frac{7}{10}$ | .7 |
| 2 | $\frac{2}{80}$ | .002083 | .002 | 2 | $\frac{1}{10}$ | .1 | 15 | $\frac{3}{4}$ | .75 |
| 3 | $\frac{3}{80}$ | .00416 | .004 | 3 | $\frac{3}{20}$ | .15 | 16 | $\frac{4}{5}$ | .8 |
| 4 | $\frac{4}{80}$ | .0083 | .008 | 4 | $\frac{1}{5}$ | .2 | 17 | $\frac{7}{8}$ | .85 |
| 5 | $\frac{5}{80}$ | .0125 | .013 | 5 | $\frac{1}{4}$ | .25 | 18 | $\frac{9}{10}$ | .9 |
| 6 | $\frac{6}{80}$ | .016 | .017 | 6 | $\frac{3}{10}$ | .3 | 19 | $\frac{19}{20}$ | .95 |
| 7 | $\frac{7}{80}$ | .02083 | .021 | 7 | $\frac{7}{20}$ | .35 | | | |
| 8 | $\frac{8}{80}$ | .025 | .025 | 8 | $\frac{2}{5}$ | .4 | | | |
| 9 | $\frac{9}{80}$ | .02916 | .029 | 9 | $\frac{9}{20}$ | .45 | | | |
| 10 | $\frac{10}{80}$ | .03 | .033 | 10 | $\frac{1}{2}$ | .5 | | | |
| 11 | $\frac{11}{80}$ | .0375 | .038 | 11 | $\frac{11}{20}$ | .55 | | | |
| 12 | $\frac{12}{80}$ | .0416 | .042 | 12 | $\frac{3}{5}$ | .6 | | | |
| 13 | $\frac{13}{80}$ | .04583 | .046 | 13 | $\frac{13}{20}$ | .65 | | | |

should, however, note in passing that errors are incident in decimals themselves; and in particular some of us have difficulty with the decimal point.

(2) The decimal system is closely allied to percentages in which enormous numbers of calculations are now made.

(3) Greater ease in comparing prices and payments in foreign moneys.

(4) It would lead to the adoption of the metric system of weights and measures.

The competing methods of obtaining the advantages are embodied in the Bills of which Lord Southwark and Lord Leverhulme are the respective sponsors. The first seeks to enact that: "For the existing coinage of silver, copper, and bronze, there shall be substituted a coinage based on a decimal system, that is to say, each coin shall be a thousandth part or the multiple of a thousandth part in value of a sovereign, and such part is hereinafter in this Act called a 'mil.'" The schedule of suggested coins is:—

SCHEDULE.

| Denomination of Coin. | Value in Pounds. | Value in Mils. |
|-------------------------------------|------------------|----------------|
| Silver: | | |
| Double florin | ·200 | 200 |
| Florin | ·100 | 100 |
| Half florin | ·050 | 50 |
| Quarter florin | ·025 | 25 |
| Nickel or other metal alloy: | | |
| Ten mil piece | ·010 | 10 |
| Five mil piece | ·005 | 5 |
| Bronze: | | |
| Four mil piece | ·004 | 4 |
| Three mil piece | ·003 | 3 |
| Two mil piece | ·002 | 2 |
| Mil piece | ·001 | 1 |

Lord Leverhulme's alternative abandons the sovereign as the unit. Though he would, in the interest of foreign trade,

have it coined, it ceases to be the money of account. He creates a new unit of 100 half-pennies called a royal: "For the existing coinage of gold, silver, nickel, and bronze, there shall be substituted a new coinage based on a decimal system; this is to say, each coin shall be of a value equal to that of one four hundred and eightieth part, or a multiple or a fraction of one four hundred and eightieth part, of a sovereign; such four hundred and eightieth part shall be and is in this Act denominated a halfpenny, and one hundred half-pennies shall be and are in this Act denominated a 'royal.'"

Under this Act the coins suggested are:—

| Denomination of Coins. | Value in Royals. | Value in Half-pennies. |
|------------------------------------|---------------------|---------------------------|
| Gold: | | |
| Guinea | 5.00 | 500 |
| Pound Sterling or Sovereign | 4.80 | 480 |
| Half Guinea | 2.50 | 250 |
| Silver: | | |
| Royal | 1.00 | 100 |
| Florin | .50 | 50 |
| Shilling | .25 | 25 |
| Nickel: | | |
| Tester | .10 | 10 |
| Bit | .05 | 5 |
| Bronze: | | |
| Penny | .02 | 2 |
| Half-penny | .01 | 1 |
| Farthing | .005 | $\frac{1}{2}$ |

The advantages claimed for this second scheme include:

(1) Greater simplicity, so that the public would more easily understand it;

(2) The retention unaltered of the penny, the standard of value in the transactions of the mass of the people;

(3) Provision of an exact equivalent of present coins, except the farthing;

(4) The provision, in the Royal of 4s. 2d., of a more useful, because smaller, unit than the pound;

(5) The establishment of a bond between English-speaking nations—since the Royal and the Dollar (the basis of the currency system of the United States of America, Canada, Newfoundland, and British Honduras) are approximately equal;

(6) The retention untouched of the bronze coins; which greatly outnumber the silver and gold coins;

(7) The approximation provided to the coinage of numerically the larger part of the world.

The insuperable objection, in the eyes of the bankers, to this scheme is the abolition of the pound as the unit of value. This would endanger the position of London as the financial centre of the world: the sovereign is known and trusted throughout the conservative East, and it is the only coin having legal tender practically throughout the Empire. It is the material counterpart of the bond afforded by a common king and a common flag. The subsidiary currencies do not matter so long as the common standard of value in the sovereign is maintained.

The Minting of the New Coins.—The practical difficulty, arising from the additional labour thrown upon the Mint, is not to be disregarded. The Deputy Master of the Mint, one of the Commissioners, gives a careful estimate: "To replace by mil-value coins the whole of those which Lord Southwark's Bill entirely discards, viz. the crown, half-crown, threepence, penny, half-penny, and farthing, might require the whole normal output of the Mint, at its present capacity, for some 13 years, nothing being left for ordinary increases of currency.

"If one half of the output were devoted to replacement, and the other to meeting ordinary demands, the period might be doubled. A further period of some six or seven years might

be required, on the same supposition, for replacement of existing shillings and sixpences by half-florins and quarter-florins under the latter designation. On the other hand, the above calculation is based on existing capacity only, without taking account of extension or outside assistance, both of which may be regarded as possible, if necessary.

“Moreover, as regards the question of urgency, the pressure would be relieved by the suggested temporary retention not only of the half-crown, the value of which in currency requires at least two coins of a mil-series for replacement, but also of the existing bronze coins at nominal values expressed in mils.

“If this were arranged, the immediate special requirements, apart from any reintroduction of double florins, which have not been coined since 1890, and from normal increases, would apparently be restricted to the supply, firstly, of 10-mil pieces (between two or three hundred million) to take the place of the existing threepences, and, secondly, of such mil coins of smaller denominations as might be needed for purposes of change or otherwise to supplement the existing bronze coins according to the values (4, $4\frac{1}{6}$, or 5 mils suggested in the case of the penny, and 2, $2\frac{1}{2}$, or $2\frac{1}{2}$ in the case of the half-penny) that might be assigned to these. Such requirements could probably be met in a comparatively short time, although it would be difficult to estimate the period with any precision in the absence of a definite decision with regard to the existing bronze.”

We may take it that for a generation the question of change will not come within the range of practical politics. The report, though by no means unanimous, is clear enough in the matter.

“In our opinion, therefore, it is not advisable to make any change in the denomination of the currency and money of account of the United Kingdom with a view to placing them on a decimal basis.

“In support of this conclusion the following considerations appear to us to be sufficient:—

“(1) In any other scheme for reducing the existing system to a decimal basis the pound should be retained.

“ (2) The pound and mil scheme is the only strongly supported scheme which complies with the condition.

“ (3) The advantage to be gained by a change to the pound and mil scheme as regards keeping accounts is in no way commensurate with the loss of the convenience of the existing system for other purposes.

“ (4) Grave difficulties will be created by any alteration of the penny.

“ (5) The scheme cannot be tried as an experiment or on a voluntary basis.”

APPENDIX IV.

FALL IN PRICES AND ITS EFFECTS.

The fall of international prices was a cause of world depression during the years 1924-32. During the course of the year 1930, the Board of Trade index number, taking 1924 as the base, fell by 17 per cent. During 1931 it fell by over 21 per cent.* The table below gives the figures in regard to various groups:—

| Date. | Cereals and Meat. | Other Foods. | Textiles. | Minerals. | Miscellaneous. | Complete Index. |
|---------------|-------------------|--------------|-----------|-----------|----------------|-----------------|
| Average 1924 | 159.9 | 169.9 | 210.6 | 145.2 | 131.5 | 159.3 |
| „ 1928 | 145.0 | 149.4 | 161.7 | 111.9 | 119.3 | 135.1 |
| „ 1929 | 135.6 | 136.8 | 141.9 | 116.2 | 112.7 | 127.2 |
| „ 1930 | 113.4 | 122.9 | 99.1 | 101.6 | 101.5 | 106.8 |
| End Feb. 1930 | 119.5 | 132.2 | 115.1 | 110.1 | 108.4 | 115.9 |
| „ Jan. 1931 | 94.3 | 110.8 | 75.8 | 91.5 | 90.4 | 91.3 |
| „ Feb. 1931 | 92.9 | 108.4 | 78.0 | 93.5 | 90.5 | 91.6 |

(Average 1913 = 100.)

The movements in the cost of living index, which occur in regard to retail prices, are much less than in wholesale prices. In the first quarter of 1931 the wholesale price index for all

* The *real rate* of interest to a business concern under obligations to pay fixed rates (to debenture holders, for instance) would thereby be augmented. Suppose the nominal rate to be 6 per cent., and suppose the borrower to be a shoe manufacturer able at the beginning of the year to get a pound for each pair. He borrows £100, stipulating to return £106 at the year's end. The borrowed £100 is equivalent to 100 pairs of shoes. The repayment of £106 entails, however, the selling of $106 \times \frac{100}{79}$ pairs (for each pair has now only 79 per cent. of its former power over the pound). That is, to meet his obligation he must sell 134 pairs, a real rate of interest of 34 per cent. The reluctance to initiate undertakings under such risks is intelligible.

We can understand, too, the eager advocacy in many quarters of a policy of *reflation*. The term was devised in order to avoid the odium

articles was 64, the cost of living index was 85. Apparently the sharper fall in the wholesale level of prices than in the level of the cost of living, was apparent also in other countries. The results of the fall in prices in bringing about the reluctance of the business community to enter upon fresh enterprises are well explained in the Macmillan Report:

- “ 1. All incomes fixed in terms of money, such as interest on the National Debt, debentures, and other fixed interest securities, remain unaltered. Thus incomes derived from those sources are able to purchase an

attached, and rightly attached, to inflation. It signifies a definitely restricted amount of inflation. The policy is effectively presented in a little pamphlet (issued for private circulation) by Mr. Harold Macmillan, M.P.

“ *Reflation.*—It will be seen, however, that in the present state of acute depression, our policy proposals must also provide for some extraordinary action first to lift the economic system out of the rut in which it is now embedded. The energy for this task can only be engendered by the impulse of a rise in prices, from their present unprofitable level. The economic system hinges upon the industrialist and the *entrepreneur*, yet he is the person who is most injured by the fall in commodity prices. The interest he has to pay on fixed-interest bearing debt remains stationary in terms of money; the wages and salaries he pays his workers form a stubborn cost not easy of reduction, while the price he obtains for his product is reduced. Added to this already great discouragement is his uncertainty as to how rapidly prices will fall. He is made nervous of buying stocks of materials and incurring wage, salary and interest costs, which may not be recovered in the price obtained for his products when they reach the market. Nor are his troubles lessened by the effect of this fall on the political circumstances in which he has to live. The Government suffers in much the same way as the industrialist. The price fall produces depression and increases the cost of unemployment and poor law relief, reduces the yield of taxation, and increases the burden of Government and Municipal debt. To balance the accounts, taxation and rates have to be increased, thus adding to the difficulties of the industrialists and intensifying the depression.

“ The increase in the value of money in terms of commodities which can arise from the production disequilibrium already referred to has been intensified by the policy of deflation pursued by the Banks to protect their Gold reserves in accordance with Gold Standard practice. As a result, the artificially enhanced burden of National and Municipal debt, Debentures, Rents, Mortgages, and all other fixed-interest bearing securities are crushing the life out of industry. Means must be found to scale down those burdens to honest and manageable proportions.”

increased proportion of the national output at the lower price level now prevailing. On the other hand, such incomes will, of course, lose this advantage if the fall of prices proves to be only temporary, and meanwhile the rate of interest on all new lending should fall.

- “ 2. Many other incomes, which are not contractual in the same way as is interest on the National Debt, are fixed by custom or by statute. In the latter category fall, for instance, many classes of pensions and unemployment relief. Unless and until measures are taken by Parliament to alter these charges, the recipients benefit in the same way as do holders of contractual incomes.
- “ 3. The proportion of the national output which can be purchased by those classes of recipients being increased, the amount left for distribution between the remaining sections of the community is reduced, with the result that so long as salaries and wages are unchanged the final residue available for profits is inadequate.
- “ 4. The attempt to affect an adjustment sets in train a series of consequences making for acute trade depression and unemployment.
- “ 5. In the sphere of international debts also a large fall of prices greatly increases the real burden falling upon the debtor nations.

“ It is apparent from this summary that a severe fall in prices upsets the entire balance of every kind of money settlement. It works to the advantage of those whose incomes are protected by contract or otherwise and to the disadvantage, either in the form of reduced incomes or of unemployment, of those who receive the residue of the national income. It brings with it the problem of reducing rates and costs. For the entrepreneur, faced with a fall in the price of his commodity and the money receipts he derives therefrom, must seek to reduce his money costs of production whether in the form of wages or otherwise.

“Thus when prices fall the first person upon whom the impact falls is the business man (unless the fall is due to an increase in efficiency). Nothing occurs automatically to change his costs of production save in a minority of cases where wages are regulated by changes in the cost of living or by sliding scales based on selling prices, and even here, whatever reduction takes place necessarily lags behind the fall of prices in articles of international trade. The result is, in the first instance, a narrowing of the margin between prices and costs, that is to say, a diminution of profit. The burden of reducing costs is thrown on business men to effect as best they can.

“Some part of their costs, *e.g.* rates and taxes and interest charges, it is not in their power to diminish. As regards the rest, their first effort, naturally, is to increase efficiency. But an important increase may not be possible unless they have been failing to do their best previously. Moreover, it will not help them competitively unless they can increase their own efficiency faster than their rivals are increasing theirs.

“Next they will, no doubt, cut out various items of expense which were never justifiable on strictly business principles, but were due to kindheartedness, old custom, and for the sake of the amenities of life. If this is not enough, there are various further measures which they can take gradually in greater or less degree. They will cut out some of their marginal and least profitable lines of business, which are not essential to the maintenance of their connections and their organisation—which will already have the effect of somewhat reducing employment. They will resist rises in salaries and wages, which otherwise they would have been inclined to grant. They will endeavour to adjust the conditions of labour so as to make it cost less without earnings being reduced. And finally they may be compelled to join issue with their men to seek a general reduction of wages.”

Devaluation.—To inflate (or to reflate, if one must use the less familiar term) in order to bring about the rise in prices by means of devaluation was, however, obnoxious to the Committee:

“It has been represented to us that, without in any way departing from the principle or the practice of adherence to an international standard, it is desirable for us in the national interest to do now what might have been accomplished with much less difficulty in 1925, namely, to revise the gold-parity of sterling. Such a step is urged on the ground that, if we diminished the gold equivalent of the £ sterling by 10 per cent. thereby reducing our gold-costs automatically by the same percentage, this would restore to our export industries and to the industries which compete with imported goods what they lost by the return to gold at a figure which was inappropriate to the then existing facts, and that it would also have the great advantage of affecting all sterling costs equally, whether or not they were protected by contract.

“We have no hesitation in rejecting this course. It is no doubt true that an essential attribute of a sovereign state is a power at any time to alter the value of its currency for any reasons deemed to be in the national interest, and that legally, therefore, there is nothing to prevent the British Government and Parliament from taking such a step. The same may be said of a measure writing down all debts, including those owing by the State itself, by a prescribed percentage—an expedient which would in fact over a considerable field have precisely the same effect. But, while all things may be lawful, all things are not expedient, and in our opinion the devaluation by any Government of a currency standing at its par value suddenly and without notice (as must be the case to prevent foreign creditors removing their property) is emphatically one of those things which are not expedient. International trade, commerce and finance are based on confidence. One of the foundation stones on which that confidence reposes is the general belief that all countries will seek to maintain so far as lies in their power the value of their national currency as it has been fixed by law, and will only give legal recognition to its depreciation when that depreciation has already come about *de facto*. It has frequently been the case—we have numerous examples of recent years—that either through the misfortunes of war, or mistakes of policy, or the collapse of prices, currencies have fallen so far below

par that their restoration would involve either great social injustices or national efforts and sacrifices for which no adequate compensation can be expected. The view may be held that our own case in 1925 was of this character. The British currency had been depreciated for some years. It was obvious to the whole world that it was an open question whether its restoration to par was in the national interest and there is no doubt in our minds as to our absolute freedom at that time to fix it, if it suited us, at a lower par value corresponding to the then existing exchange. But it would be to adopt an entirely new principle, and one which would undoubtedly be an immense shock to the international financial world, if the Government of the greatest creditor nation were deliberately and by an act of positive policy to announce one morning that it had reduced by law the value of its currency from the par at which it was standing to some lower value.

“Moreover, considering the matter from another point of view, in the environment of the present world slump the relief to be obtained from a 10 per cent. devaluation might prove to be disappointing. It is not certain that, with world demand at its present low ebb, such a measure would serve by itself to restore our export trades to their former position or to effect a radical cure of unemployment. On the contrary, in the atmosphere of crisis and distress which would inevitably surround such an extreme and sensational measure as the devaluation of sterling, we might well find that the state of affairs immediately ensuing on such an event would be worse than that which had preceded it.”

APPENDIX V.

WHERE STONES ARE MONEY.

A PACIFIC CURRENCY.

CREDIT AMONG THE YAP ISLANDERS.

TO THE EDITOR OF "THE TIMES."

Sir,—In these days of economic confusion and uncertainty it may be interesting to give a short account of the currency and credit of a very remote island of the Pacific, a spot difficult of access and almost untouched by foreign influences. I refer to Yap, in the Caroline Archipelago, situated a few degrees north of the Equator and 10,000 miles east of the Meridian of Greenwich.

It was my good fortune to be able to visit this island a few months ago. Its inhabitants present a very low type of humanity, with their scarred and tattooed bodies and their disfigured features, but they furnish a curious example of the creation of currency and credit that owes its origin to their own retarded intelligence. So retrograde are these islanders that even the Japanese Government, under whose mandate Yap passed at the termination of the War, has failed, in spite of admirable and persevering effort, to raise to any appreciable degree their social status.

The islands of the Caroline Archipelago are of either coral or basalt formation, and great must have been the surprise of the men of Yap when, venturing 400 miles to the west in their frail canoes, they came upon an island in the Pelew (Palau) group of entirely different nature—volcanic rock. To them this unknown stone must have appeared of miraculous origin, and they brought back with them to Yap specimens of their discovery. At what period this occurred it is impossible even to surmise.

Barter alone existed in the islands. Coconuts were exchanged for taro and fish for breadfruit, and in many places this continues to-day. The arrival, however, of the mysterious stone created a demand. It was of no practical use, no beauty, and no intrinsic value. There was no purpose for which they could employ it, but it became a factor of exchange, a basis for barter, and eventually the standard of all transactions.

As years went by, stones of much greater weight were brought from Palau, and until quite recently the islanders have been transporting them of the size and shape of millstones, many as large as wagon wheels, and of varying thickness. I was informed that the additional size and weight were to render difficult their removal by theft or during island

raids. In the centre of each stone is a hole. The circular form in which the stone was cut and the hole itself were adopted in order to facilitate the passage from the quarry in Palau to the water's edge. A pole was passed through the opening and held at each extremity by men, and in this manner the stone was wheeled down to the beach. No canoe, of course, could carry such a freight, so big they were, and the stones were fastened on rafts of bamboo and towed back across the 400 miles of ocean to Yap. There they had acquired a definite purchasing power. The islanders had in fact created a currency. The stones having no utilitarian or decorative worth, the basis of this currency had little or nothing to do with the material of which it consisted. It obtained its value from the effort that was required to cut and transport it—the perils, the sufferings, and the difficulties of the voyage, and the toil of hewing the stone, for of metal tools there were none—in short, the wonderful adventure. Many disasters occurred. Storms were met with; canoes capsized and their occupants were drowned or eaten by sharks. Sometimes the rafts sank, or, becoming unmanageable, had to be cut adrift. Often after long absences and many hardships the men returned having lost their stone. The voyage had been fruitless; the suffering in vain.

And then someone discovered credit! Evidence of the outward voyage, of the cutting of the stone at Palau, of its arrival and shipment on the beach and of the loss at sea, sufficed, and the returning islanders who had lost their stone were *credited* with its possession. Only the material useless object was lost, the effort by which it had been procured remained and the value was in the effort. It was, in short, the recognition of the possession of wealth—wealth that was the reward of labour and courage—of which the token had been lost in circumstances that rendered its recovery impossible. The island Chiefs confirmed the substantiated claims which, as no form of writing existed, were verbally accepted as binding and handed down orally from generation to generation. Every transfer of a stone, or transfer of the credit of a lost stone, was mentally registered by the Chiefs.

The recent introduction of coinage, though scarcely utilised by the natives, and the monthly passage of a steamer that makes the voyage from Yap to Palau in under two days, have completely upset the currency question in the island, and except in the official "Settlement" the natives have reverted to barter. No more stones come from Palau, but outside the native houses they can still be seen leaning against the walls and are still in use as currency. Contracts under the laws introduced by the Japanese Mandatory Government must nowadays be registered, and shortly before my visit I was told that the authorities were called upon to inscribe in the official folio the dowry given to his daughter by an island Chief—the credit of a stone that had been lost at sea several generations back by an ancestor; and shortly after the marriage the same non-existing stone was again transferred as the purchase price of a coconut plantation bought by the newly married couple.

For small change the islanders of Yap still use shells procured with some difficulty from New Guinea, which pass at a fixed value. But the case is different, for the shells are highly coloured and very ornamental and therefore possess a decorative value. There is no credit for lost shells.

I draw no inferences from the economic situation in Yap, and I do not know if there are any inferences to be drawn, but coming at first hand and so lately on this curious evolution of currency and credit, I think it may interest readers of *The Times* to hear of it.

I am, Sir, your obedient servant,

WALTER B. HARRIS.

Tangier, June 24.

APPENDIX VI.

THE 1932 CONVERSION SCHEME.

The terms upon which a borrower can get the money he wants vary indefinitely. The Moneylenders' Act (1927) seems to suggest that even 48 per cent. a year on the loan may not, in some conditions, be "harsh and unconscionable." For it is only when interest at a higher rate than this is charged that a *prima facie* case arises for revision of the loan contract by the Court.

And conditions may change from time to time. 1. The supply of money available for a particular purpose may be greatly augmented. 2. The urgency of the demand may be less intense. 3. The ability of the borrower to fulfil his contract, to pay the interest and to repay the principal, appears less doubtful. So it was with the British Government when the Chancellor of the Exchequer succeeded in converting the country's obligation to pay five per cent. on borrowings of 2,000 millions into an obligation to pay three and a half per cent.

The conversion, resulting in a saving of over £30,000,000 a year to the State, was possible because the war years, when the money was borrowed, were very different from 1932, when conversion took place. True it is, that patriotic motives played a part in the success of the scheme. From press and platform and Post Office pillar box appeals called to holders to "Convert your War Loan and help your Country." We are perhaps not cynical, though, in assuming that the decisive fact to most holders was that they couldn't do better than convert. Here, at any rate, the economic motive pulled in the same direction as the patriotic motive, not as it often does, in the opposite direction.

During the war years the man with a surplus of purchasing power was in happy case. Governments, manufacturers, merchants, were all eagerly competing for his money. In

order to get what it could not get through taxation, our own Government was constrained to offer very attractive terms. To lenders of £2,184,469,000—the greatest loan in the world's history—it undertook to pay five per cent. This rate is a striking contrast to the rate prevailing during the summer of 1932: then, week after week, the Government got all the money it wanted to borrow on Treasury Bills by paying less than one per cent. Temporarily there were highly favourable monetary conditions, and with them an imperious call to convert.

Clearly, this was the time to convert. The Government's credit was high; there was an extraordinary unwillingness among investors to put money into anything but government stock—into gilt-edged securities, that is; $2\frac{1}{2}$ per cent. Consols were, at the end of July at 73, thus giving a yield of just under $3\frac{1}{2}$ per cent. The terms of the five per cent. war loan provided that the principal should be repaid by 1948, and that the Government should have the right to pay off its debt at any time after 1929. The Government determined to exercise its option.

That it had a perfect right to do so is unquestionable. The charges made recklessly in some quarters of bad faith towards its creditors are baseless. They were founded on the assumption that when a Government borrows it will postpone repayment of the principal indefinitely. The history of most national debts does in fact support the assumption. Still, one cannot place a vague expectation against the clear stipulations of a contract.

The Government gave notice to all holders that it would repay its debt to them on December 1st. To pay back such an enormous sum was possible only by borrowing a like enormous sum; and the ready way to float a new loan is to persuade creditors to lend again what has been repaid to them. The scheme asks them to convert their old loan into a new one, though upon different terms. In the issue and repayment of Treasury Bills we have a weekly illustration of such conversion. Each week Treasury Bills mature and are paid. Each week Treasury Bills are issued to a not greatly differing amount; and those who tender for the new bills are mostly

those who obtain payment for the old. The conversion scheme succeeded in doing for a substantial part of our funded debt what issue and redemption of Treasury Bills do in relation to our floating debt.

For each holder of War Loan had an attractive alternative to the receipt of £100 for each £100 stock on December 1st. He could still remain a creditor of the Government though at $3\frac{1}{2}$ per cent., and, if he acted promptly, assenting to the conversion before the 31st July, he obtained for each £100 converted £1 bonus in cash free of income tax or surtax. The fact that only a little short of 92 per cent. of the loan was converted showed that the terms of the Government's offer were generous. Before the end of July the converted stock—to which was attached the curious name "Assented Stock"—stood at over par. That is to say, more money could be had by selling Assented Stock than by holding the Unassented Stock until December 1st, and many holders who had precipitatedly asked for their money changed their minds. This they were at liberty to do until the end of September. The few who asked for cash had assumed that at the end of December they would be able to buy high-grade securities yielding more than $3\frac{1}{2}$ per cent. For this expectation to be realised an almost miraculous recovery in trade and industry would have been required. This would have led to a greatly augmented demand for money with a consequent raising of interest rates. When it was obvious that this could hardly be, the rush to convert continued unabated. It was good business as well as good citizenship to convert. To assent to conversion was wisdom in the partnership between the Government and the investor. The scheme was in fact more successful than any of its advocates had dared to predict. By the end of September considerably less than £200,000,000 (less than 10 per cent.) remained unconverted. For, besides those who converted before 31st July, a number of holders from motives of patriotism and in order to save money for the State were allowing their holdings to be converted automatically.

The proportion of converters was greater than in the Goschen conversion of 1888 (when the 3 per cent. Consols were converted into $2\frac{3}{4}$ per cent., in 1903 to the present $2\frac{1}{2}$

per cent.) though this was regarded as a great success. And the saving effected was immensely greater than in what our forefathers considered a stupendous scheme—the Napoleonic War Loan Conversion in 1822. Spencer Walpole's account of this in his *History of England* is interesting for purposes of comparison:

“The National Debt hung like a dead weight round the shoulders of the nation, and the policy of repudiating the debt was openly discussed. Men fancied that it was impracticable to go on paying the vast charge which the debt occasioned, and they almost openly avowed that it would be necessary to resort to the sponge at last. Such language, five years before, would have led to the appointment of a secret committee, and to a State prosecution by the Attorney-General. But it was one thing to indict a Watson or a Hunt, it was another to prosecute a county member. The language which had been first heard in the Spa Fields was now used at county meetings, duly convened by the constituted authorities. Country gentlemen, whose support was invaluable to the Government, were demonstrating the folly of keeping faith with the fundholder. County members, whose political opinions were otherwise unimpeachable, were actually voting for repudiation under the cloak of debasing the currency. The Ministry were unable to ignore the great issue which was thus openly raised. They had the wisdom to see the folly of either tampering with the currency or of repudiating the debt, but they decided on obtaining some alleviation from its burden in a less objectionable manner.”

At that time the funded debt amounted to £795,000,000 of which £153,000,000 carried interest at 5 per cent. The conversion offer was one of £105 Four per cent. Stock for each £100 of Five per cent. Stock. The difficulty of finding any satisfactory alternative use for the money caused the conversion of all but £3,000,000. The burden that seemed well-nigh intolerable when this first of conversions on a grand scale took place is slight compared with ours. See the almost terrifying figures given in Chapter XII.

One curious result of the extraordinarily low rates of interest prevailing during the interval between the announce-

ment of the Conversion Scheme and the cash payment was this. The stock that entitled its holder to payment became eagerly sought after as a bill, as a means whereby banks could employ funds free for a while. During the August Bank Holiday week the Treasury Bills offered, to the extent of £40,000,000, were allotted at the low record of an average of only 9s. 11·05d. per cent. per annum. Though the cash bonus had been paid the margin between the prices of Unassented Stock (stock that entitled the holders to cash payment in December) and Assented Stock (stock that had been converted) became wider instead of, as might have been expected, narrower.

This widening of the margin was due on the one hand to sales of Assented Stock by some of those who had recently purchased War Loan solely for the purpose of converting it, thus depressing the price of Assented Stock, and on the other hand to the fact that not only was the supply of Unassented Stock very scarce owing to the success of the conversion, but that it was very attractive as a four months' bill to banks and other professional dealers in credit. French banks were reported to be buyers of the stock. The premium on Unassented War Loan was due entirely to its attractions as a bill and not as an investment. The abnormal ease in the money market and the relative scarcity of bills were responsible for the popularity of War Loan as a bill.

The very success of the conversion operation helped to produce the anomaly. For the supply of Unassented Stock was small, that of Assented Stock large. And, where certainty is needed in the payment of money, the Unassented Stock was more desirable than the Assented. For a passing while, though, it looked as though the holders that had converted had chosen the less profitable course.

The success of the conversion greatly exceeded the estimates of the financial experts, and perhaps affords another illustration of the difficulty of prophecy in matters financial.

The whole scheme was finally carried to a triumphal conclusion by the issue on October 11th of £150,000,000 in Two per Cent. Treasury Bonds payable in 5½ years. The state of the money market was such that on the very day of issue, the loan was over-subscribed. Cash applications were

invited. But in reality it was a conversion operation. Attractive terms were offered to holders of the £140,000,000 of Four-and-a-half per Cent. Treasury Bonds due to be repaid on December 1st. They receive preferential allotment and also a cash bonus of 10s. The Government's difficulty of providing the money due on December 1 was thereby easily overcome.

APPENDIX VII.

CURRENCY DETERIORATION:

ITS CAUSES, MEASURES, REMEDIES.

Deterioration of Gold Coinage.—So long as the gold sovereign does not circulate, the question of deterioration is less urgent. And, even before 1914, the Act of 1891, enacting that the loss on coins worn by fair usage should be borne by the State, was effective in preserving our currency sound. Abrasion there was, of course; but when, in the course of business, the coins reached the banks, they were if too light automatically retired. They were sent to the Mint and melted for fresh sovereigns, the Mint bearing the expenses of the change.

The ancient fraud of clipping was not to be apprehended; we are told though that sometimes dishonest workers in gold would "sweat" the coinage. They would obtain a supply of newly issued sovereigns, would shake them vigorously in a leather bag, and would make a considerable gain by collecting the resulting dust. "Garbling the coinage," selecting for export or for the melting pot the heaviest coin, was also bound to have had an effect in making the gold coins tend towards lightness. Nor could such a practice be stopped, or indeed be regarded as very blameworthy: for foreign payments the sovereigns passed by weight not by tale; and the working jeweller was entitled to his full-weight sovereign.

We shall, however, not again see an actual gold currency; the link between gold and paper will be afforded by the ease with which bullion can be received from the Bank for export or for working. The problem of deterioration of the gold is, therefore, solved. Provided that the link between gold and

paper is maintained intact, none need complain. War conditions have taught people to be content with paper; and there is no reason why the State should forgo the saving resulting from not coining gold.

Light Silver.—The silver currency loses its weight, too; and there is no very effective way of guarding against the loss. Nor is the question a serious one. For the silver coinage is merely subsidiary, merely token coinage; and the value in relation to gold is maintained by limitation of issue. We must note this, however: the great difference between the value of a silver coin as currency and as metal gives a corresponding incentive to illicit coining.

Certainly we have severe penal laws against tampering with the coinage. The Act of 1861, codifying penalties for offences against property states: "Whoever impairs, diminishes or lightens current gold or silver coin, with intent to pass the same, is liable to penal servitude for from three to fourteen years." "Whoever has in his possession filings or clippings is liable to the same punishment." The tendering or "uttering" false gold or silver coin is also punished.

Worn subsidiary coin is withdrawn by the banks to which it comes upon being paid in by retailers and others. The Coinage Acts, too, give power to the King by proclamation "to call in" currency; and the power is exercised at convenient times—at the beginning of a reign, for example. Then, perhaps, coins issued during the reign before the one just completed may be called in. For a certain period such coins will be taken at their nominal value at the banks and post offices. After that definite period has passed they are no longer current; they are worth only what the metal of which they are composed is worth. The Mint accepts from the banks, through the Bank of England, small quantities of worn silver at the nominal value.

That some remedy against the inevitable loss of weight in wear is necessary we may see when we consider the following figures. Careful and exhaustive investigations by the Mint Authorities upon the life and wear of silver coins have established the following facts:—

AVERAGE AGES AT WHICH SILVER COINS REACH THE STAGE OF ILLEGIBILITY (when they are no longer current).

| | |
|-------------------------|-------------|
| Half-crown | 64.66 years |
| Florin | 45.41 " |
| Shilling | 41.61 " |
| Sixpence | 28.22 " |
| Threepenny-piece | 32.76 " |

The life of the larger coins is longer than that of the smaller, except that the threepenny-piece lives longer than the sixpence. The sixpence obviously is very much more used than the too tiny threepenny-piece.

So, too, it was estimated that the average time a sovereign circulated before it became underweight was 24 years; of a half-sovereign, 15 years.

Gresham's Law.—The necessity of preventing the currency from deterioration is the more urgent from the fact that, once it becomes evident that some portion of the currency is inferior either in weight or in quality, the evil rapidly spreads through the whole. We have already noted in Chapter I. a striking illustration of this. The rapid disappearance of gold coins, as Treasury Notes appeared during the war, supplies another illustration. The tendency, to which the name "Gresham's Law" is applied, may be stated thus: the better money tends to be driven out of circulation by the worse. If we have a choice of methods for effecting the same purpose, we naturally choose the easier, cheaper method: if the penny *Daily News* satisfies me just as well as the twopenny *Times*, I buy the former; if a light coin frees me from debt as effectively as a heavy coin, I use the former.

I reserve the latter for purposes in which its greater weight is an advantage—for melting, perhaps, or for payments abroad, when coins are weighed, not counted (when they pass not by tale but by weight). "Gresham's Law" may be noted in the three following instances:—

(a) When paper representing gold but not readily transferable into gold (inconvertible paper) circulates along with

gold, the latter tends to disappear. For the gold can effect what the paper cannot. Both may, indeed, be legal tender. But no government decree can make the paper universally acceptable abroad, nor capable of transformation into bracelets or rings. For a single purpose the gold and the paper have equal power; for a purpose other than the freeing from debt the paper is inapplicable. Theory therefore teaches—and practical experience abundantly illustrates the teaching—that the coin will be diverted to the purposes for which it alone is suitable.

Suppose that in a country employing £100,000,000 of gold coins there was a sudden issue into effective circulation of inconvertible notes to the nominal value of £50,000,000. Prices would rise as the quantity of money increased; and with them the price in the market of gold. An ounce of gold could be sold to the goldsmith for more than it could be sold to the Mint, and no amount of penalty would effectively prevent its withdrawal from the circulation till in the end £50,000,000 in gold would have disappeared and paper taken its place. Withdrawal would now cease: for, since prices would resume their former level, there would be a re-establishment of the market price of gold and there would be no incentive to the melting or the exportation of gold coin.

(b) A similar result follows when part of the currency is below standard. This part will remain in circulation where the greater use can be made of it. That up to standard will have a tendency to disappear to where its superiority obtains for it an advantage. If a jeweller wants gold to work into ornament or plate he will be careful to select full-weight coins; if a banker is constrained to send gold abroad, he too will select full-weight coins.

(c) Again, when in a bimetallic system one metal is unfairly treated in the fixing of the ratio, the undervalued metal will tend to disappear. The Government will have an interest in making coins of the metal that, taking the established ratio into account, is the cheaper. So long as the monetary ratio between the metals corresponded with the market ratio, the system even in an isolated country would work well enough. Neither debtor nor creditor would need to trouble about the

particular metal in which payment was made. With a bimetallic union of the chief commercial nations of the world, the maintenance of the required correspondence might be assured. It could hardly be so within a single country; and the least disturbance would drive out the metal that had relatively risen in value.

Suppose now in the metal market silver falls in relation to gold, so that the Mint treatment of silver is more favourable than the market treatment. No one would take gold to the Mint; he would sell it and buy silver for coinage. And, presuming that no charge was exacted for coinage, it would be profitable to melt the gold and again exchange for silver.

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