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The Credit Theory of Money

By A. Mitchell Innes

[Editor's Note – So much has been written on the subject of "money" that a scientific writer like Mr. Innes is often misunderstood. Many economists and college professors have differed with the statements made in his first paper, but it seems that none were able to disprove his position. Following this number there will appear a symposium of criticisms and replies to the first paper, and we cordially invite criticisms and replies to this his second paper.]

The article which appeared in the May, 1913, number of this JOURNAL under the title "What is Money?" was a summary exposition of the Credit Theory of money, as opposed to the Metallic Theory which has hitherto been held by nearly all historians and has formed the basis of the teaching of practically all economists on the subject of money.

Up to the time of Adam Smith, not only was money identified with the precious metals, but it was popularly held that they formed the only real wealth; and though it must not be thought that the popular delusion was held by all serious thinkers, still, to Adam Smith belongs the credit of having finally and for all time established the principle that wealth does not reside in the precious metals.

But when it came to the question of the nature of money, Adam Smith's vision failed him, as the contradictory nature of his statements attests. It could not have been otherwise. Even to-day accurate information as to the historical facts concerning money is none too accessible: in the day of Adam Smith, the material on which to found a correct theory of money was not available, even had he possessed the knowledge with which to use it. Stuart perceived that the monetary unit was not necessarily identified with coinage, Mun realized that gold and silver were not the basis of foreign trade, Boisguillebert had boldly asserted that paper fulfilled all the functions which were performed by silver. But apart from a few half-formed ideas such as these, there was nothing which could guide Adam Smith in the attempt to solve the problems of his part of his Inquiry, and, having convinced himself of the truth of his main contention that wealth was not gold and silver, he was faced with two alternatives. Either money was not gold and silver, or it was not wealth, and he inevitably chose the latter alternative. Herein, however, Adam Smith came into conflict not with a popular delusion but with the realities of life as learnt from the universal experience of mankind. If money is not wealth, in the common acceptation of the word as meaning that mysterious "purchasing power" which alone constitutes real riches, then the whole of human commerce is based on a fallacy. Smith's definition of money as being, not wealth, but the "wheel which circulates wealth," does not explain the facts which we see around us, the striving after money, the desire to accumulate money. If money were but a wheel, why should we try to accumulate wheels. Why should a million wheels be of more use than one, or, if we are to regard money as all one wheel, why should a huge wheel serve better than a small one, or at any rate a moderate-sized one. The analogy is false.

Much has been written since the days of Adam Smith on the subject of money, and much useful investigation has been made, but we still hold to the old idea that gold and silver are the only real money and that all other forms of money are mere substitutes. The necessary result of this fundamental error is that the utmost confusion prevails in this branch of the science of political economy, as any one will see who cares to take the trouble to compare the chapters on "Wealth," "Money," "Capital," "Interest," "Income" in the works of recognized authorities since Adam Smith. There is hardly a point on which any two are agreed.

How complete the divorce is between the experience of daily life and the teaching of the economists can best be seen by reading, for example, Marshall's chapter on capital, with its complicated divisions into national capital, social capital, personal capital, etc. Every banker and every commercial man knows that there is only one kind of capital, and that is money. Every commercial and financial transaction is based on the truth of this proposition, every balance sheet is made out in this well-established fact. And yet every economist bases his teaching on the hypothesis that capital is not money.

//152// It is only when we understand and accept the credit theory, that we see how perfectly science harmonizes with the known facts of every day life.

Shortly, the Credit Theory is this : that a sale and purchase is the exchange of a commodity for credit. From this main theory springs the sub-theory that the value of credit or money does not depend on the value of any metal or metals, but on the right which the creditor acquires to "payment," that is to say, to satisfaction for the credit, and on the obligation of the debtor to "pay" his debt and conversely on the right of the debtor to release himself from his debt by the tender of an equivalent debt owed by the creditor, and the obligation of the creditor to accept this tender in satisfaction of his credit.¹

Such is the fundamental theory, but in practice it is not necessary for a debtor to acquire credits on the same persons to whom he is debtor. We are all both buyers and sellers, so that we are all at the same time both debtors and creditors of each other, and by the wonderfully efficient machinery of the banks to which we sell our credits, and which thus become the clearing houses of commerce, the debts and credits of the whole community are centralized and set off against each other. In practice, therefore, any good credit will pay any debt.

Again in theory we create a debt every time we buy and acquire a credit every time we sell, but in practice this theory is also modified, at least in advanced commercial communities. When we are successful in business, we accumulate credits on a banker and we can then buy without creating new debts, by merely transferring to our sellers a part of our accumulated credits. Or again, if we have no accumulated credits at the moment we wish to make a purchase, we can, instead of becoming the debtors of the person from whom we buy, arrange with our banker to "borrow" a credit on his books, and can transfer this borrowed credit to our seller, on undertaking to hand over to the banker the same amount of credit (and something over) which we acquire when we, in our turn, become sellers. Then again, the government, the greatest buyer of commodities and services in the land, issues in payment of its purchases² vast quantities of small tokens which are called coins or notes, and which are redeemable by the mechanism of taxation, and these credits on the government we can use in the payment of small purchases in preference to giving credits on ourselves or transferring those on our bankers.

So numerous have these government tokens become in the last few centuries and so universal their use in everyday life – far exceeding that of any other species of money – that we have come to associate them more especially with the word "money." But they have no more claim to the title than any other tokens or acknowledgements of debt. Every merchant who pays for a purchase with his bill, and every banker who issues his notes or authorizes drafts to be drawn on him, issues money just as surely as does a government which issues drafts on the Treasury, or which puts its stamp on a piece of metal or a sheet of paper, and of all the false ideas current on the subject of money none is more harmful than that which attributes to the government the special function of monopolizing the issues of money. If banks could not issue money, they could not carry on their business, and when the government puts obstacles in the way of the issue of certain forms of money, one of the results is to force the public to accustom itself to other and perhaps less convenient forms.

As can be clearly proved by careful study of history, a dollar or a pound or any other monetary unit is not a fixed thing of known size and weight, and of ascertained //153// value, nor did government money always hold the pre-eminent position which it to-day enjoys in most countries – not by any means.

In France not so long ago, not only were there many different monetary units, all called by the same name of *livre*, but these livres – or such of them as were used by the government – were again often classified

into *forte monnaie* and *faible monnaie*, the government money being *faible*. This distinction implied that the government money was of less value than bank money, or, in technical language, was depreciated in terms of bank money, so that the bankers refused, in spite of the legal tender laws, to accept a *livre* of credit on the government as an equivalent of a *livre* of credit on a bank.

The kings and their councillors were often puzzled by this phenomenon, and the consequences which flowed from it. Time and again they issued money which they certainly believed to be "forte," and declared to be so by law, and yet soon after, they had to avow that in some mysterious manner, it had "devenu faible," become weak.

With the apparent exception of England, where the depreciation of government money, though considerable, was far less than on the continent, a similar situation was general throughout Europe : in countries in which there was a dominant bank, like Amsterdam, Hamburg and Venice, the higher standard being known as "bank money," and the lower standard as "current money." Out of this situation rose another interesting and important phenomenon: - while the wholesale trade, which dealt with the bankers followed the bank standard, the retail trade which dealt largely through the medium of the government coins, naturally followed more or less closely the government standard³ and prices rose as the standard fell in value. In the German States, where there were literally hundreds of monetary standards, all called the same name of *Mark*⁴ the history of money is particularly involved, and the fact that the retail trade always followed a lower standard than did the wholesale trade in the same place, has led historians to believe that the latter used as their standard a *Mark* weight of pure silver, while the retail trade used the *Mark* weight of the debased silver used in the coins. But this idea can be conclusively shown to be erroneous, and the "mark of pfennigsilber" did not refer to the weight of the coins, but to the quantity of pfennig-coins (the only coins known in Germany during the greater part of the middle ages) required to make up a money mark.

As may well be imagined, much confusion usually prevailed in money matters, and the extreme difficulty of settling in what standard debts should be paid and contracts, especially as regards rents, should be fulfilled, often caused serious discontent. To remedy this the kings of France attempted, probably with little success, to introduce by legislation certain rules as to the standard which should be applied to the various cases which might arise.

We, who are accustomed to the piping times of peace and to long periods of prosperity and government stability hardly realize how unstable a thing any given monetary unit may be. When we in the United States hear of a fall in the value of the paper of some bank or the money of some foreign government and see it quoted at a discount in terms of the dollar, we are accustomed to think of the dollar as an invariable unit and of the depreciated money as being something which has departed in value from our invariable standard. But when we take the trouble to study history we find that the //154// dollar of the American Government and the pound of the English Government have by no means always been the stable things we now imagine them to be. The English pound was in use in all the American colonies, and yet the pound of each differed in value from that of the others, and all Colonial pounds differed from that of the mother country. In the early days of the American Union, the different official monies differed from the standard in use in business and were at a heavy discount in terms of the latter.

The notion that we all have to-day that the government coin is the one and only dollar and that all other forms of money are promises to pay that dollar is no longer tenable in the face of the clear historical evidence to the contrary. A government dollar is a promise to "pay," a promise to "satisfy," a promise to "redeem," just as all other money is. All forms of money are identical in their nature. It is hard to get the public to realize this functional principle, without a true understanding of which it is impossible to grasp any of the phenomena of money. Hard, too, is it to realize that in America to-day, there are in any given place many different dollars in use, for the fact is not so apparent in our days as it was in former times. Let us suppose that I take to my banker in, say, New Orleans, a number of sight drafts of the same nominal value, one on the Sub-Treasury, one on another well-known bank in the city, one on an obscure tradesman in the suburbs, one on a well-known bank in New York, and one on a reputable merchant in Chicago. For the draft on the Sub-Treasury and for that on the bank in the city, my banker will probably

give me a credit for exactly the nominal value, but the others will all be exchanged at different prices. For the draft on the New York bank I might get more than the stated amount, for that of the New York merchant, I should probably get less, while for that on the obscure tradesman, my banker would probably give nothing without my endorsement, and even then I should receive less than the nominal amount. All these documents represent different dollars of debt, which the banker buys for whatever he thinks they may be worth to him. The banker whose dollars we buy, estimates all these other dollars in terms of his own. The dollar of a first class banker is the highest standard of credit that can be obtained generally speaking, though the standard of a first class banker in a city like London or New York may be worth to a provincial banker somewhat more than his own money. The dollar of government money in America is equal to that of bank money, because of the confidence which we have come to have in government credit, and it usually ranks in any given city slightly higher than does the money of a banker outside the city, not at all because it represents gold, but merely because the financial operations of the government are so extensive that government money is required everywhere for the discharge of taxes or other obligations to the government. Everybody who incurs a debt issues his own dollar, which may or may not be identical with the dollar of any one else's money. It is a little difficult to realize this curious fact, because in practice the only dollars which circulate are government dollars and bank dollars and, as both represent the highest and most convenient form of credit, their relative value is much the same, though not always identical. This apparent stability of government money in our day obscures the phenomenon which was familiar to our forefathers.

The one essential condition to the stability of all money by whomsoever issued is, as I explained in the former article, that it should be redeemable at the proper time, not in pieces of metal, but in credit. A credit redeems a debt and nothing else does, unless in virtue of a special statute or a particular contract.

The main obstacle to the adoption of a truer view of the nature of money is the difficulty of persuading the public that "things are not the way they seem," that what appears to be the simple and obvious explanation of every-day phenomenon is incompatible with ascertainable, demonstrable facts – to make the public realize, as it were, that while they believe themselves to be watching the sun's progress round the earth, they are really watching the progress of the earth round the sun. It is hard to disbelieve the evidence of our senses.

We see a law which establishes in the United States a "standard dollar" of a definite weight of gold of a certain fineness; we see a law making the acceptance of //155// these coins in payment of debt obligatory on the creditor – a law which is cheerfully obeyed without question; we see all commercial transactions carried on in dollars; and finally we everywhere see coins (or equivalent notes) called dollars or multiples or fractions thereof, by means of which innumerable purchases are made and debts settled. Seeing all these things, what more natural than to believe that, when the Law declared a certain coin to be the Standard Dollar, it really became so: that when we pronounce the word "dollar" we refer to a standard coin, that when we do our commercial transactions we do them, theoretically at least, in these coins with which we are so familiar. What more obvious than that when we give or take a "promise to pay" so many dollars, we mean thereby a promise to pay golden coins or their equivalent.

Suddenly we are told that our cherished beliefs are erroneous, that the Law has no power to create a standard dollar, that, when we buy and sell, the standard which we use is not a piece of gold, but something abstract and intangible, that when we "promise to pay" we do not undertake to pay gold coins, but that we merely undertake to cancel our debt by an equivalent credit expressed in terms of our abstract, intangible standard; that a government coin is a "promise to pay," just like a private bill or note. What wonder if the teacher of the novel doctrine is viewed with suspicion? What wonder if the public refuses to be at once convinced that the earth revolves around the sun?

So it is, however. The eye has never seen, nor the hand touched a dollar. All that we can touch or see is a promise to pay or satisfy a debt due for an amount called a dollar. That which we handle may be called a dollar certificate or a dollar note or a dollar coin; it may bear words promising to pay a dollar or promising to exchange it for a dollar coin of gold or silver, or it may merely bear the word dollar, or, in the case of the English sovereign, worth a pound, it may bear no inscription at all, but merely a king's head. What is

stamped on the face of a coin or printed on the face of a note matters not at all; what does matter, and this is the only thing that matters is: What is the obligation which the issuer of that coin or note really undertakes, and is he able to fulfill that promise, whatever it may be?

The theory of an abstract standard is not so extraordinary as it first appears, and it presents no difficulty to those scientific men with whom I have discussed the theory. All our measures are the same. No one has ever seen an ounce or a foot or an hour. A foot is the distance between two fixed points, but neither the distance nor the points have a corporeal existence. We divide, as it were, infinite distance or space into arbitrary parts, and devise more or less accurate implements for measuring such parts when applied to things having a corporeal existence. Weight is the force of gravity as demonstrated with reference to the objects around us, and we measure it by comparing the effect of this force on any given objects with that exerted on another known object. But at best, this measure is but an approximation, because the force is not exerted everywhere equally.

Our measure of time is a thing to which no concrete standard can be applied, and an hour can never be reckoned with perfect accuracy. In countries where solar time is used, the hour is the twenty-fourth part of the time reckoned from sunset to sunset, and the standard is therefore of the roughest. But because the people who calculate thus live in countries where the difference between the length of a day in summer and in winter is not so great as it is further north, they feel no inconvenience from this inaccuracy, and indeed they do not seem to be aware of it – so strong is the force of habit.

Credit and debt are abstract ideas, and we could not, if we would, measure them by the standard of any tangible thing. We divide, as it were, infinite credit and debt into arbitrary parts called a dollar or a pound, and long habit makes us think of these measures as something fixed and accurate; whereas, as a matter of fact, they are peculiarly liable to fluctuation.

Now there's only one test to which monetary theories can be subjected, and which they must pass, and that is the test of history. Nothing but history can confirm the accuracy of our reasoning, and if our theory cannot stand the test of history, then there is no truth in it. It is no use to appeal to the evidence of our senses, it is useless to cite laws in support of a theory. A law is not a scientific truth. The law may assert that a certain piece of metal is a standard dollar, but that does not make it so. The law might assert that the sun revolved around the earth, but that would not influence the forces of nature.

Like causes produce like effects, and if governments had been able to create standard coins having a fixed value in terms of the monetary unit, the monetary history of the world must have been different from what it has been. While modern historians deplore the wickedness of medieval monarchs who brought all sorts of evils on their people by their unprincipled debasements of the coinage, the kings themselves, who should have been pretty good judges, attributed their misfortunes to the wickedness of their subjects, impelled by lust of gain to clip and file the coins, and to force the precious metals above their official, or as the royal documents said, their "proper value" – and to clip the coins, and to offer or take the coins at any but their official value were crimes for which severe penalties were enacted.

The rise of the value of gold *ecus* of France and the gold guineas of England, the latter popularly valued as high as 30 though officially issued at 20 shillings may with some plausibility be accounted for on the theory that silver not gold was the "standard of value," and that it is perfectly natural that gold might vary in terms of silver, as much as any other commodity. But how account for the fact that the "gros tournois", a coin of good silver, constantly rose in value in spite of all the kings could do to prevent it, and in spite of the fact that it was being progressively reduced in weight. How account for the fact that, when in the fifteenth century, the gulden became one of the most used of the monetary units of Germany, the gold gulden coin (there was no silver coin of that name) became of more value than the gulden of money, as used in commerce. How, above all, account for the fact that while, as I have said, the guinea rose in terms of the shilling, so also did the shillings themselves. The full weight shilling of William III, as it issued from the mint - for William III would never have been guilty of debasing the coinage - was more than the shilling of commerce, and was snapped up by dealers and exported to Holland. "Ah, but," say the critics, "you have forgotten that all the shillings in circulation were clipped and filed, till there was not a full

weight coin in the country, never had the coinage been in so deplorable a condition." But if it is admitted that the rise of the value of the gold coins and the full weight silver coins was due to the debasement of the coins through clipping, then it has to be admitted that the clipped coins must have been the standard of value and not the full-weight coins as issued by the government. But what, then, becomes of the theory that the standard is fixed by government through its coinage. And if the standard was not fixed through the official coinage, as it certainly was not, who fixed the amount of metal which was called a shilling? The merchants? They certainly did not. On the contrary, they appealed to parliament for protection against the evil-doers who for their profit exported the full-weight silver coins. Was it those who secretly clipped the good coins? If so, the power of these evil-doers over the monetary standard exceeded the combined power of king and parliament and the great body of the merchants. The idea is too absurd to discuss. Besides the clipped shillings were not a standard; the price at which they should be given and taken was a matter of haggling between the buyer and the seller, and often gave rise to great difficulty. Indeed, just as happens frequently during the middle ages, no one knew for certain what was the value of the coins in his pocket. "But," say the triumphant critics, "you will not deny that the great recoinage act of 1696, which called in the damaged coins at great expense to the government, exchanged them for a whole new issue of full weight coins, resulted in the re-establishment of the value of the shilling. You will surely not deny the rise of the value of our money was the direct result of this beneficent measure." And the critic points to the unanimous verdict of historians. It is true that all historians ascribe the fall in the value of the shilling to the debased condition of the coinage and its rise to the recoinage act. But in this they only follow Macaulay, whose history has been characterized by a wit as the greatest work of fiction //157// in the English language. Certainly he had made no special study of the problems of money.

Let us then look at the facts a little more closely.

It is not King Jean or King Philippe or Edward or Henry who have been the depreciators of money, but King War, the great creator of debts, helped by his lieutenants, plague, murrain and ruined crops - whatever, in fact, prevents debts from being punctually discharged. It is not recoinage acts which have been the restorers of the value of money, but Peace, the great creator of credits, and upon the invariable truth of this statement the credit theory of money must largely depend. Now, for seven years - from 1690 to 1697 - the country had been engaged in the most costly war ever known to English history up to that time. The armies of the allies had to be maintained largely by English subsidies, and Parliament, feeling its newly acquired strength, and as unable as the rest of the country to appreciate the character of the great Dutchman who devoted his life to their service, doled out supplies with a stingy hand. At the same time a series of disastrously wet and cold seasons, which the Jacobites attributed to the curse of God on the Usurper, did great damage to agriculture. The customs dues fell to half, and the people could not pay their taxes. The country was over head and ears in debt.

Now observe. In 1694 the combatants were already exhausted, and negotiations for peace were unsuccessfully started. Throughout 1695, the war languished, and it was evident that peace was absolutely necessary. In 1696 war was practically over, and in 1697 peace was signed. The floating debt was funded through the agency of the newly founded Bank of England and foreign commerce, by means of which credits on foreign countries were acquired, was once again able to expand. These three causes were amply sufficient to account for the restoration of the value of English money, and had there been any one at that time who understood the nature of money, he could have predicted with absolute certainty the disastrous effect that the creation of a huge floating debt would have on the value of money and could have foretold the healing effect of the peace and the funding of the debt and the return of agricultural prosperity. He could have saved the government the wholly unnecessary expense (small, however, when compared with the total indebtedness) of the recoinage act. Far from doing anything to alleviate the situation, the Act intensified the crisis, and it was in spite of the Act, not because of it, that the finances of the country gradually returned to a normal condition.

I must here turn aside for a moment to explain the nature of a funding of debt. I said in the former article: "Hence it follows that a man is only solvent if he has *immediately available* credits at least equal to the amounts of his debts *immediately due and presented for payment*. If therefore the sum of his immediate debts exceeds the sum of his immediate credits, the real value of these debts to the creditors will fall to an

amount which will make them equal to the amount of his credits." The same thing of course applies to the indebtedness of a country.

The debts which count in the depreciation of the monetary unit are those which are contracted without any provision for their payment and which are either payable at sight as in the case of currency notes or payable at short terms and have to be constantly renewed for want of credits with which to cancel them. William's war debt was incurred for the maintenance of the English armies and for the payment of the subsidies with which he had fed the allies. In 1694 the association of rich British merchants calling themselves the Bank of England was formed for the express purpose of providing money to pay the war expenses. They did not supply him with gold in large quantities, but with immediately available credits. That is to say the merchants who possessed or could command large credits both at home and abroad, undertook to cancel with their credits the debts incurred by the government, and at the same time undertook not to present for payment the credits which they thus acquired on the government, on condition of the government paying to them an annual interest. This is what is meant by funding a debt or raising a loan. The immediate floating of debt of the //158// government is cancelled, so far as the government is concerned, and ceases consequently to affect the value of the monetary unit. In place of the load of debt clamoring for payment, there is only the interest on the debt, probably not more than five or six per cent of the capital, and amount which under normal circumstances a country has no difficulty in meeting.

I have dwelt on the financial situation of 1696 for the reason that it exposes better than any other case with which I am acquainted the fallacies of the arguments of the upholders of the theory of a metallic standard. To them the standard is a little piece of metal, and so long as someone (any one apparently) does not reduce its size or mix it with dross or clip bits out, it must remain invariable, unless, indeed, the government gives forced currency to its paper notes, which are held by economists to be promises to pay in the standard metal, and which, therefore, it is maintained, fall if the promise cannot be redeemed.

Now in the case under examination it cannot be argued, as did the Bullion Committee of 1810 that the fall in the value of the pound was due to the excessive issue of Bank of England notes, because, the Bank having just been started, there can have been no great circulation of notes. Nor can it be attributed to a forced currency of government notes, as in the case of the American war of independence or the civil war, because in this instance there was no government paper money. And consequently, the facts of the economic situation being ignored, it is attributed to the clipping of coinage.

Those who glibly talk of the arbitrary depreciation of the monetary unit through manipulations of the coinage do not realize how difficult a thing it is to carry through any change of a standard of measure to which people have become accustomed by long use. Even when the government money has become permanently depreciated and fixed at a lower level, bankers have, as history shows, been slow to adapt the new standard.

Even the strongest governments hesitate to undertake the difficult task of changing the existing system of weights and measures. Every scientific man in England and America is in favour of introducing the metric system of weights and measures, and (in England) a decimal system of money, and the change has been preached and advocated for many years, so far without success. No, to ask us to believe that the coin clippers wielded a power which enabled them to change the standard of money is to overtax our credulity. Why, even smaller changes than those mentioned have been attended with great difficulties. Though in England weights and measures have been standardized by law, local measures, local standards still linger on and are in daily use. It required the great revolution in France to change their standards and retail trade in the country is still calculated in sous, instead of the official franc and centime. In Egypt, the peasant still divides his piaster into forty faddahs, though the faddah has been officially dead these many years and the decimal millieme is the official change.

This slight sketch of the Credit Theory of money which I was able to give in the space allotted to me in the May 1913 number of the JOURNAL and the summary indication in that and the present number of the evidence in support of that theory, which the student of the paths and byways of history may expect to

find – this must suffice for the present. I do not expect that conversion to the newer doctrine will be rapid, but the more earnestly the problems of money and banking are studied, the more sure it is that the metallic theory of money must before many years be abandoned. There are literally none of these problems which can be explained in the old theory. There is literally no evidence which, when weighed and sifted, supports the theory of a metallic standard. The fact that the monetary unit is a thing distinct from the coinage is no new discovery. It was pointed out by a distinguished economist, Sir James Steuart, who wrote before the days of Adam Smith, and among modern writers Jevons calls attention to the phenomenon. The frequent use of the expressions “money of account” and “ideal money” in older writings shows that the idea was familiar to many. As the middle ages wore on, and the increase of government expenditure brought about a great increase in the quantity of coins, money became, naturally enough, identified with the coinage, which circulated in abundance when trade was good, and which //159// disappeared in times of distress when there was little to buy or sell. Hence arose the popular delusion that abundance of coins meant prosperity and the want of them was the cause of poverty. When the kings tried to supply the want by fresh coinages, the new pieces disappeared in bad times like the old, and the phenomenon could only be accounted for on the assumption that evilly-disposed persons exported them, melted them or hoarded them for private gain, and heavy penalties were decreed against the criminals, who by their act plunged the country into poverty. No doubt a certain amount of exporting and melting took place, when the coins of high intrinsic value (a very small proportion of the whole), the *monnaie blanche*, as it was called in France, rose above its official value, but the absurdity of the popular outcry for more coins was well exposed by that fine old economist, the Sieur de Boisguillebert, who pointed out that the apparent abundance and scarcity of coins was deceptive, and that the amount of coinage was in both cases the same, the only difference being that while trade was brisk, comparatively few coins by their rapid circulation appeared to be many; while in days of financial distress, when trade was, as not infrequently happened in the middle ages, almost at a standstill, coins seemed to be scarce.

The present writer is not the first to enunciate the Credit Theory of money. This distinction belongs to that remarkable economist H. D. Macleod. Many writers have, of course, maintained that certain credit instruments must be included in the term “money”, but Macleod, almost the only economist known to me who has scientifically treated of banking and credit,⁵ alone saw that money was to be identified with credit, and these articles are but a more consistent and logical development of his teaching. Macleod wrote in advance of his time and the want of accurate historical knowledge prevented his realizing that credit was more ancient than the earliest use of metal coins. His ideas therefore never entirely clarified themselves, and he was unable to formulate the basic theory that a sale and purchase is the exchange of a commodity for a credit and not for a piece of metal or any other property. In that theory lies the essence of the whole science of money.

But even when we have grasped this truth there remain obscurities which in the present state of our knowledge cannot be entirely eliminated.

What is a monetary unit? What is a dollar?

We do not know. All we do know for certain — and I wish to reiterate and emphasize the fact that on this point the evidence which in these articles I have only been able briefly to indicate, is clear and conclusive — all, I say, that we do know is that the dollar is a measure of the value of all commodities, but is not itself a commodity, nor can it be embodied in any commodity. It is intangible, immaterial, abstract. It is a measure in terms of credit and debt. Under normal circumstances, it appears to have the power of maintaining its accuracy as a measure over long periods. Under other circumstances it loses this power with great rapidity. It is easily depreciated by excessive indebtedness, and once this depreciation has become confirmed, it seems exceedingly difficult and perhaps impossible for it to regain its previous position. The depreciation (or part of it) appears to be permanently acquired; though there is a difference in this respect between depreciation in terms of foreign money and a depreciation of the purchasing price of the credit unit in its own country.

But while the monetary unit may depreciate, it never seems to appreciate. A general rise of prices at times rapid and at times slow is the common feature of all financial history; and while a rapid rise may be

followed by a fall, the fall seems to be nothing more than a return to a state of equilibrium. I doubt whether there are any instances of a fall to a price lower than that which prevailed before the rise, and anything approaching a persistent fall in prices, denoting a continuous rise of the value of money, appears to be unknown.

//160// That which maintains the steadiness of the monetary unit (in so far as it is steady) appears to be what Adam Smith calls the "higgling of the market," the tug of war which is constantly going on between buyers and sellers, the former to pay as little of the precious thing as possible, the latter to acquire as much as possible. Under perfectly normal conditions, that is to say when commerce is carried on without any violent disturbances, from whatever cause, these two forces are probably well-balanced, their strength is equal, and neither can obtain any material advantage over the other. In the quiet seclusion of those peaceful countries which pursue the even tenor of their way uninfluenced by the wars or the material development of more strenuous lands, prices seem to maintain a remarkable regularity for long periods.

The most interesting practical application of the credit theory of money will, I think, be found in the consideration of the relation between the currency system known as the gold standard and the rise of prices. Several economists of the present day feel that such a relation exists, and explain it on the theory of the depreciation of the value of gold owing to the operation of the law of supply and demand, a law, however, which can hardly be regarded as applicable to the case.

We know how it works in ordinary commerce. If the production of a commodity increases at a rate greater than the demand, dealers, finding their stock becoming unduly large, lower the price in order to find a market for the surplus. The lowering of the price is a conscious act.

Not so, however, in the case of gold, the price of which, estimated in money, is invariable; and we must seek another reason. It will, I think, be found in the theory here advanced that the value of a credit on any debtor depends on an equation between the amount of debt immediately payable by the debtor credit and the amount of credits which he has immediately available for the cancellation of his debts.

Whenever we see in a country signs of a continuous fall in the value of the credit unit, we shall, if we look carefully, find that it is due to excessive indebtedness.

We have seen in the Middle Ages how prices rose owing to the failure of consecutive governments throughout Europe to observe the law of the equation of debts and credits. The value of the money unit fell owing to the constant excess of government indebtedness over the credits that could be squeezed by taxation out of a people impoverished by the ravages of war and the plagues and famines and murrains which afflicted them.

If I am not mistaken, we shall find at the present day a precisely similar result of far different causes. We shall find, partly as a result of our currency systems, nations, governments, bankers, all combining to incur immediate liabilities greatly in excess of the credits available to meet them.

We imagine that, by maintaining gold at a fixed price, we are keeping up the value of our monetary unit, while, in fact, we are doing just the contrary. The longer we maintain gold at its present price, while the metal continues to be as plentiful as it now is, the more we depreciate our money.

Let me try to make this clear.

In the previous article I explained the nature of a coin or certificate and how they acquired their value by taxation. It is essential to have that explanation clearly in mind if what follows is to be intelligible. To begin with it will be well to amplify that explanation, and to present the problem in a rather different aspect.

We are accustomed to consider the issue of money as a precious blessing, and taxation as a burden which is apt to become well nigh intolerable. But this is the reverse of the truth. It is the issue of money which is the burden and the taxation which is the blessing. Every time a coin or certificate is issued a solemn obligation is laid on the people of the country. A credit on the public treasury is opened, a public debt incurred. It is true that a coin does not purport to convey an obligation, there is no law which imposes an obligation, and the fact is not generally recognized. It is nevertheless the simple truth. A credit, it cannot be too often or too emphatically stated, is a right to "satisfaction." This right depends on no statute, but on common or //161// customary law. It is inherent in the very nature of credit throughout the world. It is credit. The parties can, of course, agree between themselves as to the form which that satisfaction shall take, but there is one form which requires no negotiation or agreement, the right of the holder of the credit (the creditor) to hand back to the issuer of the debt (the debtor) the latter's acknowledgement or obligation, when the former in his turn becomes debtor and the latter creditor, and thus to cancel the two debts and the two credits. A is debtor to B and gives his obligation or acknowledgement of debt. Shortly afterwards, B becomes debtor to A and hands back the acknowledgement. The debt of A to B and of B to A, the credit of B on A and that of A on B are thereby cancelled.

Nothing else but a credit gives this common law right, and consequently every document or instrument, in whatever form or of whatever material, which gives this right of cancelling a debt by returning it to the issuer is a credit document, an acknowledgement of debt, an "instrument of credit."

Now a government coin (and therefore also a government note or certificate which represents a coin) confers this right on the holder, and there is no other essentially necessary right which is attached to it. The holder of a coin or certificate has the absolute right to pay any debt due to the government by tendering that coin or certificate, and it is this right and nothing else which gives them their value. It is immaterial whether or not the right is conveyed by statute, or even whether there may be a statute law defining the nature of a coin or certificate otherwise. Legal definitions cannot alter the fundamental nature of a financial transaction.

It matters not at all what object the government has in view in issuing their tokens, whether its object is to pay for a service rendered or to supply the "medium of exchange." What the government thinks it is doing when it gives coins in exchange for bullion, or what name the law gives to the operation—all this is of no consequence. What is of consequence is the result of what they are doing, and this, as I have said, is that with every coin issued a burden or charge or obligation or debt is laid on the community in favor of certain individuals, and it can only be wiped out by taxation.

Whenever a tax is imposed, each taxpayer becomes responsible for the redemption of a small part of the debt which the government has contracted by its issues of money, whether coins, certificates, notes, drafts on the treasury, or by whatever name this money is called. He has to acquire his portion of the debt from some holder of a coin or certificate or other form of government money, and present it to the Treasury in liquidation of his legal debt. He has to redeem or cancel that portion of the debt. As a matter of fact most of the government money finds its way to the banks, and we pay our tax by a cheque on our banker, who hands over to the treasury the coins or notes or certificates in exchange for the cheque and debits our account.

This, then—the redemption of government debt by taxation—is the basic law of coinage and of any issue of government "money" in whatever form. It has lain forgotten for centuries, and instead of it we have developed the notion that somehow the metallic character of the coin is the really important thing whereas in fact it has no direct importance. We have grown so accustomed to paying taxes or any other debt with coins, that we have come to consider it as a sort of natural right to do so. We have come to consider coins as "money" par excellence, and the matter of which they are composed as in some mysterious way the embodiment of wealth. The more coins there are in circulation, the more "money" there is, and therefore the richer we are.

The fact, however, is that the more government money there is in circulation, the poorer we are. Of all the principles which we may learn from the credit theory, none is more important than this, and until we have thoroughly digested it we are not in a position to enact sound currency laws.

One may imagine the critics saying: "There may be something in what you say. It is rather curious that the government should take gold coins in payment of a debt and should not undertake to accept any other commodity. Perhaps, as you say, the stamping of the coin does give it a special character, perhaps the issue of a coin may be regarded as the creation of an obligation, however contrary the theory may be to what //162// I have hitherto been taught. Still, I cannot altogether see things in your way. In any case, whatever may be the effect of the stamping of a coin, it does not alter its value in any way. When I present you with a sovereign or a \$5 piece, I really pay my debt to you, because I am giving you something that is intrinsically worth that amount. You can melt it and sell it again for the same amount, if you wish. What then is the use of making such a point of the obligation which is undertaken by the issue of a coin?"

A similar criticism was made in somewhat different language in a review of my previous article. The author wrote as follows: — "Mr. Innes says that modern governments have conspired to raise the price of gold, but in this he errs. No legislation of the present time fixes the price of gold or attempts to do so. England has enacted that a certain weight and fineness of gold shall be called a pound, the U. S. that a certain weight and fineness shall be called a dollar. But a pound or dollar are mere abstract names and have no connection or relation with value of price. * * A like quantity of gold by any other name will have the same value — as, for instance, bullion."

Now let us see on whose side the error lies. If it were true, as my critic says, and as many economists hold, that all the governments of the world do is to enact that certain weight of gold shall be called a pound or a dollar, it is certain that such a law would produce no effect on the market price of gold. No one would pay any attention to so futile a law. But, as I have already said, the government invests a certain weight of gold when bearing the government stamp with extraordinary power, that of settling debt to the amount of a pound or a dollar. This is a very different thing from merely calling it by a certain name. As history however conclusively proves, even this would not suffice to fix the price of gold in terms of the monetary unit if the government confined itself to buying only so much gold as was required for the purpose of the coinage. But the English government has taken a far more important step than this. It has done what medieval governments never did; it has bound the Bank of England (which is really a government department of a rather peculiar kind) to buy all gold offered to it at the uniform price of £3 17s 9d an ounce, and to sell it again at £3 17s 10 1/2 d an ounce. In other words, the bank is bound to give for an ounce of gold a credit on its books for £3 17s 9d, and to give gold for credit, at a small profit of 1 1/2 d an ounce. If this is not fixing the price of gold, words have no meaning.

The United States government achieves the same result by a somewhat different method.

The Government of the United States does not profess to buy gold. All it professes to do is to accept it on deposit, make it into bits called standard dollars, stamp them with a guarantee of weight and purity, and hand them back to the owner, or, if he wishes it, he will be given a certificate or certificates in place of the gold. Now I again wish to emphasize the fact that it is not what the government professes to do that matters, but what it actually does. The fact that the law regards this transaction as a deposit does not make it so. The transaction is not really a deposit, but a sale and purchase. In exchange for each ounce of gold the owner receives *money*. If the gold were merely taken on deposit, or for the purpose of stamping it without giving to the owner of the stamped metal any special right to pay his taxes with his gold, that is to say without investing the gold with the character of an obligation, without making it into money, the transaction would be a deposit, but not otherwise; and the fact that the law holds the transaction to be a deposit, merely shows that the legislature acted under the influence of erroneous views on the subject of money. It could hardly have done otherwise, because the whole world had for long been a slave to the most absurd notions on the subject, and indeed England was one of the few countries in which the word *silver* did not come to mean money. By the seventeenth century the idea that gold and silver were subject to the ordinary laws of purchase and sale had become, if not extinct, at least so beclouded as to be as good as dead. Gold and //163// silver² did not seem to be the object of sale and purchase, being

themselves, it was supposed, that for which all commodities were sold. It is only by keeping before our mind's eye a truer view of the nature of money as deduced from known facts that we can realize the real effect to the government's action. Let me give an illustration of the position of a modern government.

When a farmer disposes of his corn to a merchant in return for money, he is said to have sold it. He may have received bank notes, or a cheque or coin or the merchant's bill or note—it matters not which. The transaction is a true sale. Now let us suppose that the farmer took the merchant's note for the value of the corn and that the latter, instead of selling the corn for his profit, declared that it was not his intention to buy the corn, but merely to keep it on deposit for the owner, and that he would keep it till the owner or the holder of a bill presented it to be exchanged for the corn again. This situation of the merchant would be precisely similar to that of the Government to-day with respect to the purchase of gold. The farmer would deposit the money with his banker and would get a credit on the banker in exchange for it. There, so far as the farmer was concerned, the matter would end. The note would eventually find its way to the merchant's banker and would be set off against his credit in the bank books. If he was in a very large way of business, like the government, and great quantities of his notes were on the market, there would be no difficulty in getting the corn in exchange for a note, if any one wanted it at the price at which the merchant had received it. If no one wanted it at that price, it would remain on the merchant's hands and he would lose the whole price paid. It does not in the least matter to the farmer what view the merchant takes of the transaction. He has disposed of his corn, and never wants to see it again. He has got for it what he wanted, namely money, and that is all he cares about. The same is true with reference to the relations between the government and the gold miners or gold dealers. They dispose of their gold to the mint and in return they get money, and that is all they care about. What the government does with the gold, or what view they take of the transaction is immaterial.

Now if we can conceive our merchant acting as the government does, he might, instead of keeping the corn and issuing his notes or bill, sew the corn into sacks of various sizes, print on the sacks the amount of money he had paid for the corn contained in them and then hand them back to the farmer. These sacks would then be money, and if such awkward money could be used they would circulate just as the notes would and just as our coins do. Debtors to the merchant would have the option of handing them back to him intact in payment of their debts or, if they wished to do so, they could use the corn, and the merchant's obligation would then be automatically cancelled by their action. The only difference between the sack of corn and the gold coin is one of convenience, the one being large and unwieldy, the other small and portable.

Now what consideration would influence the holder of the sack of corn in his decision - whether to use the corn or keep the sack intact and pay his debt with it? Obviously he would be influenced by the market value of the corn as compared with the amount of debt which could be paid with the obligation. If the market price of corn were superior to the amount of the debt, it would be at once used as corn. If the market price were equal to the debt, part would be used as corn and part would, perhaps, for a time, be used in payment of debt; but all would before long find its way to the mill. If, however, the amount of the debt, as printed on the sack, were superior to the market value of the corn, then the sack would be kept intact and it would be used for paying debt.

It would thus be easy to see from the number of sacks in circulation whether our merchant was buying corn at or above its market price. If he continued buying, and the sacks in circulation continued to increase, it would be a sure sign that they were worth more as money than they were as corn; and when the time came, as it would inevitably come — be he never so rich — when he would no longer be able to provide credits //164// for the redemption of the sacks, their value would fall by the amount which he had paid for the corn in excess of the price at which the market could absorb it for consumption.

This is one of the most important corollaries to the credit theory. A coin will only remain in circulation for any length of time if its nominal value exceeds the intrinsic value of the metal of which it is composed, and this is true not only theoretically but historically. Indeed, it is so self-evident that it might be received as axiomatic, and would be, had we not involved ourselves in a maze of false ideas.

To apply this corollary to a country like America, where little gold circulates and the bulk is held by the Treasury against certificates, it may be stated thus: - Gold cannot be held for any length of time against outstanding certificates, without being redeemed, unless the official price at which it is taken exceeds the market value of the gold. Thus stated, the principle cannot be submitted to the test of history, because the hoarding of gold through government action is of modern growth, and since the practice has been adopted, the price has been ruled by law, and we do not know what the market price is. But once we accept the principle (which can be proved historically beyond any reasonable doubt) that the monetary unit is not a weight of metal, and that the word "price" applies equally to gold as to any other commodity, it is obvious that gold against which there are outstanding certificates could no more be held, if required by the market, than can corn or pig-iron against which there are outstanding warehouse certificates. The very expression "market price" means the price at which the "market" will absorb the whole available supply; and it is evident that if the market were calling for gold at the current price, the certificates would soon be presented for redemption. There is at present stored in the United States Treasury nearly a billion dollars' worth of gold held against outstanding certificates, and the stock is increasing at the rate of about a hundred million dollars a year. It is obvious that if the official price of gold, the "mint price" as it is called, were not higher than its market value as a commodity, such a situation could no more arise than it could with any other commodity. It is just as if the government bought all the eggs in the country at a given price and kept them in cold storage rather than sell them at a lower price. Of course, a certain amount of the gold is withdrawn for consumption, because it cannot be bought for less than the government price, but, if gold were left to be governed by the ordinary laws of commerce, there can be no question but that the price would fall, to the great loss of shareholders in gold mines and the great benefit of the rest of humanity.

Hence I said in my last article that the governments of the world were holding up gold at a prohibitive price.

If we believed in eggs as we now believe in gold, eggs might now be selling at a dollar a piece. They would pour into New York by the shipload from all parts of the globe. Their arrival would be hailed with delight by the financial papers, and the Secretary of the Treasury, in his annual reports, would express his satisfaction at this visible sign of the sound financial condition of the country. Visitors would troop through the icy corridors of the great government vaults where the precious objects were stored, and would gaze with admiration on the prodigious wealth of the United States. Custard would be a delicacy for the tables of the rich.

Now let us return for a moment to our eccentric corn merchant, and see whether the peculiarity of his situation can throw any more light on the financial position of the United States. We shall, I think, find that it throws a flood of light on the problem of the rise of prices, a problem so grave that no statesman of to-day can afford to ignore a theory which explains simply and naturally how the phenomenon arises, and indicates the means of arresting its progress.

If our merchant persisted in his singular method of business and paid a higher price for the corn than other merchants were willing to pay, corn would pour into his warehouses, and the market would be flooded with his paper or with sacks of corn bearing his obligation for the amount of the purchase price. However rich he might be, his obligations would soon exceed the amount of his credits; the bankers would refuse to take his paper or his sacks at their nominal value, and they would fall to a discount. //165// In vain he would protest that his bills and sacks were good, so long as the sacks were of full weight and that his warehouses contained enough corn to cover the bills at the price at which he had bought it. The bankers would reply that the corn was not salable at his price and that he must meet his obligations in credits, not in corn.

If this is true with reference to our merchant, it must also be true with reference to government issues. If the government is really buying gold at an excessive price, and if, in consequence, it is issuing its obligations which are immediately payable in excess of its credits which are immediately available, then, its obligations must be falling in, value. Owing to the immense power of the government, partly through its legislative power and partly through the enormous extent of its commercial and financial transactions,

it may be possible more or less to conceal the fact. But the fact must be there, if we can discover it. *And the fact is there in the shape of rising prices.*

First let us see, whether the government is issuing obligations in excess of its credits.

From what I have said in those two articles follows the important principle that, a government issue of money must be met by a corresponding tax. It is the tax which imparts to the obligation its "value." A dollar of money is a dollar, not because of the material of which is made, but because of the dollar of tax which is imposed to redeem it.

But what do we see? The United States government issues its obligations up to any amount in exchange for gold, without the imposition of any corresponding taxation; and the result is that there is an enormous and constantly increasing floating debt, without any provision whatever being made for its extinction. It is true that all the government paper money is convertible into gold coin; *but redemption of paper issues in gold coin is not redemption at all, but merely the exchange of one form of obligation for another of an identical nature.* This debt at present amounts to nearly three billion dollars, and, of course increases as more and more gold is brought to the mint and returned to the owners stamped with the government obligation, or deposited in the Treasury against certificates. Of this amount, about one-third is normally in circulation. As regards the coins and notes in circulation, the public stands to the government in precisely the same relation as does the holder of a banknote to the bank. The public are depositors with the government. But as regards the bulk of the coins and certificates, which are not normally in circulation⁸ the public would, if the government were in the same position as a commercial company or a bank, clamor for payment of the debt, and if it were not properly paid, the debtor would be declared a bankrupt. But because we do not realize that the financial needs of a government do not differ from those of a private person, and that we have just as much right to "payment" of a gold coin as we have to "payment" of a banknote, it does not occur to us to make any such demand on the government, and the coins and certificates accumulate with the banks.

Such being the situation, there can, if the Credit Theory is correct, be no question but that the money of the American Government is depreciating. But it will readily occur to those who have read so far that, if this is the case, we should find, in accordance with the principles here laid down, that there would be today the same phenomenon as there was in the middle ages when a similar situation arose: - namely two monetary standards, the higher standard being the undepreciated standard of the banks, and the other, with the same name as the former, being the depreciated standard of the government. We might, in short, expect to find two dollars, a "bank dollar" and a "current dollar," and we would then have, just as in the middle ages, two prices for commodities, the bank price being used by wholesale dealers and the current price, which would be the standard of the coinage, being used for the retail trade. We should then probably see the difference, between the two gradually increasing, and retail prices rising while wholesale prices in terms of the bank money remaining more or less stationary.

//166// But we see nothing of all this. On the contrary, there is apparently no special depreciation of the government money, but a gradual rise of prices, a rise which, if it implies the depreciation of any money, implies evidently the depreciation of all money, by whomsoever issued; and there is nothing in the credit theory, if considered by itself, which would lead the student to think that a general fall in the value of bank money or merchants' money would follow an excessive indebtedness on the part of the government.

Assuming then, that the rise of prices does indicate a general depreciation of money, an explanation which is accepted by most writers, and assuming that, so far as the government money is concerned, the depreciation is satisfactorily explained by the credit theory; to what are we to attribute the fact that this depreciation is not confined to government money, but is shared by all the money of the country.

It must be at once admitted that much difficulty surrounds this question. The workings of the forces of commerce that control prices have always been obscure, and are not less so than they formerly were - probably, indeed, more so. The great combinations which are such powerful factors in the regulation of prices in America, and the great speculative financial interests whose operations affect the produce

markets, do not let the public into their secrets, if they have any. Though we may talk vaguely about the rise of the cost of production, increase of home consumption, tariffs, trusts, etc. the fact seems to be that we have very little accurate knowledge of how a rise of price of any particular article starts, and until we can get exact concrete information covering in minute detail a great number of transactions both large and small, we shall remain a good deal in the dark as regards the forces behind the rise of prices, whatever theory we cling to. Having made these prefatory remarks, I now proceed to give what seem to me cogent reasons for believing that a depreciation of government money, as distinct from bank money, must, under present circumstances, be followed by a general depreciation of all money throughout the country, that is to say, a general rise of prices, and not by a mere rise of prices in terms of government money, prices in terms of bank money remaining stationary.

Throughout history there seems to have been a general tendency for bank money to follow the downward course of government money sooner or later, and the difficulty of drawing a sharp line between the two would necessarily be greater now than formerly, both owing to the fact that the depreciation of government money in our day is more gradual and therefore more insidious than it formerly was, and because the enormous quantity of government money on the market makes it a much more dominant factor in trade than it was in the middle ages. There are at present as I have just said, nearly three billion dollars of government money in the United States, and the addition of a hundred million a year, though a large amount in itself, is less than four per cent of the whole. Moreover, while the "mutations" in old days took place in a single day, when the coins might be reduced by as much as fifty per cent, in a single edict, the inflation of the government money at the present time takes place gradually day by day, as the gold is brought to the mint. Thus we do not realize that a depreciation is going on.

Again in old days the financial straits of the governments were well known to the bankers and merchants, who knew too that every issue of tokens would before long be followed by an arbitrary reduction of their value. Under these circumstances no banker in his senses would take them at their full nominal value, and it was easy to draw a sharp distinction between government money and bank money. To-day, however, we are not aware that there is anything wrong with our currency. On the contrary, we have full confidence in it, and believe our system to be the only sound and perfect one, and there is thus no ground for discriminating against government issues. We are not aware that government money is government debt, and so far from our legislators realizing that the issue of additional money is an increase of an already inflated floating debt, Congress, by the new Federal Reserve Act, proposes to issue a large quantity of fresh obligations, in the belief that so long as they are redeemable in gold coin, there is nothing to fear.

//167// But by far the most important factor in the situation is the law which provides that banks shall keep 15 or 20 or 25 per cent, (as the case may be) of their liabilities in government currency. The effect of this law has been to spread the idea that the banks can properly go on lending to any amount, provided that they keep this legal reserve, and thus the more the currency is inflated, the greater become the obligations of the banks. The importance of this consideration cannot be too earnestly impressed on the public attention. The law which was presumably intended as a limitation of the lending power of the banks has, through ignorance of the principles of sound money, actually become the main cause of over-lending, the prime factor in the rise of prices. Each new inflation of the government debt induces an excess of banking loans four or five times as great as the government debt created. Millions of dollars worth of this redundant currency are daily used in the payment of bank balances; indeed millions of it are used for no other purpose. They lie in the vaults of the New York Clearing House, and the right to them is transferred by certificates. These certificates "font la navette" as the French say. They go to and fro, backwards and forwards from bank to bank, weaving the air.

The payment of clearing house balances in this way could not occur unless the currency were redundant: It is not really payment at all, it is a purely fictitious operation, the substitution of a debt due by the government for a debt due by a bank. Payment involves complete cancellation of two debts and two credits, and this cancellation is the only legitimate way of paying clearing house debts.

The existence, therefore, of a redundant currency operates to inflate bank loans in two ways, firstly, by serving as a "basis" of loans and secondly by serving as a means of paying clearing house balances. Over

ten million dollars have been paid in one day by one bank by a transfer of government money in payment of an adverse clearing house balance in New York.

Just as the inflation of government money leads to inflation of bank money, so, no doubt, the inflation of bank money leads to excessive indebtedness of private dealers, as between each other. The stream of debt widens more and more as it flows.

That such a situation must bring about a general decline in the value of money, few will be found to deny. But if we are asked to explain exactly how a general excess of debts and credits produces this result, we must admit that we cannot, explain. Or, at least, it must be admitted by the present writer that he cannot explain; though others with more insight into the phenomena of commerce may probably be able to supply his lack of knowledge.

It is easy to see how the price of any particular commodity rises, when the demand exceeds the supply. It is easy to see how the money of any particular country or bank may depreciate, if it is known to be in financial difficulties owing to excessive indebtedness. We can see the machinery at work.

But how are we to see the machinery by which prices are raised, owing to a general excess of debts and credits, where no one recognizes that such an excess exists, when no one realizes that there is any cause for the depreciation of money?

I am inclined to think that the explanation may be found in the disturbance of the equilibrium between buyers and sellers to which I have already referred. Money is easier to come by than it would be under ordinary circumstances, and, while the power of the buyer to obtain the highest possible price for his goods is not diminished, the desire of the buyer to pay as little as possible is lessened, his resistance is weakened, he loses in the tug of war. A general spirit of extravagance is engendered, which enables the seller to win as against the buyer. Money really loses its value in the eyes of the buyer. He must have what he wants immediately, whether the price is high or low. On the other hand, the excessive ease with which a capitalist can obtain credit enables him to hold up commodities speculatively, for a higher price. It puts a power into the hands of the speculator which he would not normally have.

These, however, are mere suggestions on my part and I do not pretend that they supply a completely satisfactory explanation of the mechanism by which prices are raised. Sellers are also buyers, and buyers are also sellers, and it is by no means clear //168// why a man, in his capacity as seller should have more power one way than as a buyer he has in another.

The whole subject, however, of the mechanism of a rise of prices is one which merits a careful study on the part of those who have a more intimate knowledge of the workings of commerce than the present writer can lay claim to.

Before closing this paper, it may be useful to summarize the principal points which it has been the aim of the writer to bring before students of this most interesting and little understood branch of political economy.

There is no such thing as a medium of exchange.

A sale and purchase is the exchange of a commodity for a credit.

Credit and credit alone is money.

The monetary unit is an abstract standard for the measurement of credit and debt. It is liable to fluctuation and only remains stable if the law of the equation of credits and debts is observed.

A credit cancels a debt; this is the primitive law of commerce. By sale a credit is acquired, by purchase a debt is created. Purchases, therefore, are paid for by sales.

The object of commerce is the acquisition of credits.

A banker is one who centralises the debts of mankind and cancels them against one another. Banks are the clearing houses of commerce.

A coin is an instrument of credit or token of indebtedness identical in its nature with a tally or with any other form of money, by whomsoever issued.

The issue of money is not an exclusive privilege of government, but merely one of its functions, as a great buyer of services and commodities. Money in one form or another is, in fact, issued by banks, merchants, etc.

The depreciation of money in the middle ages was not due to the arbitrary debasement of the weight and fineness of the coins. On the contrary, the government of the middle ages struggled against this depreciation which was due to wars, pestilences and famines - in short to excessive indebtedness.

Until modern days, there never was any fixed relationship between the monetary unit and the coinage.

The precious metals are not a standard of value.

The value of credit does not depend on the existence of gold behind it, but on the solvency of the debtor.

Debts due at a certain moment can only be off-set against credits which become available at that moment.

Government money is redeemed by taxation.

The government stamp on a piece of gold changes the character of the gold from that of a mere commodity to that of a token of indebtedness.

The redemption of paper money in gold coin is not redemption at all, but merely the exchange of one form of obligation for another of an identical nature.

The "reserves of lawful money" in the banks have no more importance than any other bank asset.

Laws of legal tender promote panics.

The governments of the world have conspired together to make a corner in gold and hold it up at an excessive price.

The nominal value of the dollar coin exceeds the market value of the gold of which it is made. Coins can only remain in circulation for any length of time if their nominal value exceeds their intrinsic value.

The issue of coins in exchange for gold at a fixed and excessive price, without providing taxes for their redemption, causes an inflation of government money, and thus causes an excessive floating debt and a depreciation of government money.

Large reserves of "lawful money" in the banks are evidence of an inflation of the government currency.

The inflation of government money induces a still greater inflation of credit throughout the country, and a consequent general depreciation of money.

The depreciation of money is the cause of rising prices.

1. Readers are warned that it is essential to bear constantly in mind the definition of credit, as laid down in the first article. Those who are not accustomed to this literal use of the word "credit," may find it easier to substitute in their minds the word "debt." Both words have the same meaning, the one or other being used, according as the situation is being discussed from the point of view of the creditor or the debtor. That which is a credit from the point of view of the creditor is a debt from the point of view of the debtor. ↵
2. Modern governments unfortunately do not limit their issues of money to the payment of purchases. But of this later on. ↵
3. I do not wish to be understood as saying that the retail trade followed the standard of the coins, except to the extent that they shared the fate of the king's *livre*. Owing to the abuse of the system of "mutations" and the attempted monetary reforms, it is probable that the coins often suffered not only the depreciation of the king's *livre*, but had their own independent fluctuations. ↵
4. Like the *livre* in France, the *mark* was both a measure of weight and a monetary unit. But while the *livre* was never used for the weighing of the precious metals, the *mark* was the unit of weight for these metals, and this has caused German historians to confuse the two. How the same word came in many counties, though not in all, to be used for two such different purposes, we do not know. Possibly it originally only signified a unit of any kind. Another instance of the use of the same word for the two different kinds of measurement is found in the word "inch," a measure of length, and the word "ounce" a measure of weight. Both these words are etymologically the same. ↵
5. Goshen's "Theory of Foreign Exchanges" must be included among scientific treatises on credit. Hartley Withers's recent works, "The Meaning of Money" and "Money Changing" are practical rather than scientific treatises. They are indispensable to the student. ↵
6. Even when the coins that once were silver were most debased, they were still regarded as silver in theory, though not in practice. ↵
7. The views on the subject of gold were, however, rather mixed. ↵
8. Owing to the government policy of monopolizing the issue of money in small denominations, the amount in circulation increases largely at certain seasons of the year. ↵