

CHAPTER I.

OF THE MEDIUM OF EXCHANGE.

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.

Thomas Carlyle.

The earliest form of exchange was that of barter. A man with an extra beaver skin and in need of a pair of moccasins was compelled to seek a man with an extra pair of moccasins and a desire for a beaver skin. In cases where even trade was not feasible the balance, or "boot," was paid in any other available labor-form which might be agreed upon. In the course of time certain labor-forms which are generally desired came to be used as mediums of exchange. Finally, wherever they were available, gold and silver came into use as current barter metals because they were not only generally, but universally desired. Any labor-form which, because of its general or universal desirability, passed freely from hand to hand in the market acquired a distinctive utility as a medium of exchange and became a current trade-form. All current trade-forms more or less completely perform the functions of money.

Any basic medium of exchange naturally and necessarily furnishes a unit for the measurement of values. Mere barter furnishes no unit of value, and this is one of its greatest inconveniences. It is not long, however, in any community where exchange becomes a matter of

any importance before some one article of barter is singled out as a common measuring unit for all exchanges and so becomes the medium of exchange. In that rudimentary state of society in which subsistence is gained chiefly by the hunting and trapping of wild animals the unit of value is usually a skin. The particular kind of skin varies with the locality, but in each case some kind is fixed upon by common acquiescence. In the book of Job reference is made to "skin for skin," which shows that at that early day skins were used as money. In the transactions of the Hudson Bay Company in America the beaver skin was the unit of trade. It is said that after coins came into common use in the transactions of fur gatherers, the Indians continued to make exchanges in terms of "skins" rather than in terms of current coin.

In the early pastoral state of society cattle were used to perform the rudimentary functions of money. From this fact originated the words *pecuniary* and *capital*, the former being derived from the Latin *pecus*, cattle, and the latter from the Latin *caput*, head, cattle being counted and exchanged "by the head."

Aside from the foregoing examples may be cited cases in which wampum, shells, whale's teeth, amber, olive oil, various kinds of grain, tobacco, salt, iron, leather, brass and even pieces of wood have been used as money, and consequently have furnished units for the measurement of values. In the course of time, however, gold and silver became the universally accepted current trade-forms in the principal markets of the world. The tendency now is to confine the common measure of all values to a single

trade-form—gold. This metal in high degree possesses most of the requisites for the performance of the functions of money. Being universally desired, it passes current everywhere; being divisible into coins of various sizes, it readily furnishes a unit for the measurement of current values. In its values can readily be stored in small compass and safely transported from place to place; it is durable and not easily counterfeited; its coins may be reconverted into bullion without any loss of value. As a basis for metallic coinage it has no superior. It covers the traditional requisites of money as set out in standard works on Political Economy well nigh perfectly. These requisites are all based upon the overcoming of the disutility of matter, and distinctively apply to current labor values.

In the development of society, however, other than current labor values soon appear. With the advent of competition for the ownership and use of land-forms, land values appear; and with the borrowing of capital-forms for the reduction of the disutility of time, capital values arise. The gold standard, like any other standard of metallic money, contains no elemental unit of value which distinctively takes into account the disutility of space; nor does it contain any distinctive recognition of the disutility of time.

In the course of the development of the market there arose the elements of debit and credit. A purchaser, not having ready money for use in exchange, was entrusted by the seller with the labor-form desired upon a promise to pay the price at some future time. At first these prom-

ises were oral, but after the art of writing came into common use written promises were made and charges were entered upon books of account. Out of the latter practice grew the custom of charges and counter charges, credits and counter credits between two men with an occasional payment by one or the other, as the case might be, of the balance due. This practice curtailed the actual use of money as a medium of exchange, but all debits and credits were based upon the standard monetary unit.

Out of the practice of giving written promises to pay grew the custom of passing these promises from hand to hand as negotiable paper. This still further curtailed the use of coin as an actual medium of exchange, although the written promises were based upon the standard unit of metallic coinage, and gold or silver was necessary to redeem the promises. The paper debit, the distinctive characteristic of which is a promise to pay, evidenced by a writing either in the form of a book account or of a promissory note, has been developed in modern business to a high degree. It involves not only accounts current and promissory notes between individuals, but a traffic in various forms of indebtedness, or debits, through brokers, banks, clearing houses, with the use of checks, drafts, bills of lading, bills of exchange, warehouse certificates, stocks, bonds, debentures, consols, etc., almost without number.

Great attention is paid to this phase of modern exchange in all treatises on money and political economy, and it is currently stated that more than 90 per cent of all exchanges are now made through the use in some form or other of "promises to pay." But all these promises to pay

are based upon the standard unit of metallic coinage and their only function in exchange is still further to reduce the mechanical friction of exchange—to overcome still more completely the distinctive disutility of matter. The metallic coins must exist for the purpose of redemption. The use of written promises to pay, or paper debits, simply avoids the necessity of constantly handling and transporting the coins. In such a monetary system the use of current paper promises to pay constitutes a labor saving device of great effectiveness, but it is nothing more than this. The distinctive disutilities of space and time are not in any wise reduced. They are changed, it is true. But the change is a mere shifting of relative values as between individuals—some profiting and others losing by the process, as when the monetary standard appreciates or depreciates in value from time to time. But in the aggregate, the disutilities of space and time remain the same.

There is another form of paper promise, however, of which we hear but little. It is seldom used, and seems to be but little understood. It is that form in which the written promise is not a promise to pay but to receive. The distinction is simple but extremely significant. Its significance lies in the fact that the promise to receive furnishes a means of securing a medium of exchange involving the three elemental units of the economic standard of value.

Suppose that upon an island dwelt a community under a system of law and land tenure similar to that in vogue in England and America. Suppose, further, that all the land of the island was owned by one man, and that all

land-forms, except those of the lowest grade, were necessarily occupied and used in order to supply the wants of the community. The owner would receive ground rent from every land user except those who might occupy land-forms upon the margin. Practically every man upon the island would be his debtor in some amount every year. On the other hand, let us assume that the owner lived upon the island and spent all his income there every year, employing all grades of labor from common labor up to the most skilled professional service. In such circumstances there would be no need of gold or silver or other precious metal as a medium of exchange or as a standard of values, current or future. The daily wage which he would pay to a common laborer would equal the daily earnings of the man who, without capital, cultivated the economic margin. The laborer would take no less because of the opportunity open to his labor at the margin; the laborer could get no more, because, if he did, the man at the margin would be induced to leave his land-form and compete for employment at the hands of the owner.

Such a people so circumstanced might well adopt the economic standard of value—a day's common labor upon the economic margin. The owner could employ laborers, and land users could pay their rent upon that basis. For instance: to his day laborers let the land owner give a written instrument promising therein to receive such instrument from any person at any time in payment of ground rent or other indebtedness, in lieu of one day's common labor. This instrument, or scrip, would pass current for one day's common labor anywhere upon the island,

and all prices would be based upon one day's common labor as a unit or standard of value. To all other persons furnishing him with labor, or service, or labor-forms, let the owner give similar written promises, or scrip, according to their respective values, up to the amount of his annual income from ground rent. All such scrip would pass current upon the island and metallic money might be unknown. Within the year all these promises would be "redeemed" by being received as ground rent, as we have assumed the owner's annual rents and expenditures to be equal. Inasmuch as all material progress upon the island would be reflected in ground rents, no better index of the volume of business or of the "necessary volume of currency" could be found.

We are so accustomed to think of something tangible, as gold or silver coin of a given shape, weight, and fineness, as the standard of value that it is difficult to conceive of a standard composed merely of certain labor-power exerted for a certain time at a certain place. Yet we know that a given amount of labor-power exerted under given conditions will result in the production of a given labor-form. There is no reason in nature why we should not adopt the given labor-power, so conditioned, as a standard of value, as well as its concrete result—as when it produces the weight of gold or silver contained in the unitary coin. It can not be said that the value of a day's labor upon the margin is variable while the value of a piece of gold is constant, for both are variable. For the measurement of current values the variations of the one may be neither better nor worse than the other. But for the measure-

ment of future values the difference is perceptible and material. To illustrate:

Suppose that A borrows of B \$1,000 to be repaid at the end of 20 years at 5 per cent interest per annum. If the monetary standard be gold, then principal and interest must be paid in gold or its economic equivalent. Suppose, further, that at the time of the borrowing, a common day's labor is of the value of \$1 in gold; while at the end of 20 years it is of the value of \$2 in gold. Then, whereas A borrowed the economic equivalent of 1,000 days' common labor, he can repay the principal with the equivalent of 500 days of such labor. Or, suppose, upon the other hand, that at the expiration of the 20 years, common labor is worth but fifty cents per day in gold. Then it will require the economic equivalent of 2,000 days' labor to repay the principal sum instead of the equivalent of 1,000 days' labor. In the one case the disutility of repayment is diminished by half; in the other, doubled. These are extreme variations, it is true, but they illustrate the principle, and it is a well known fact that the value of the gold dollar with reference to a day's labor does vary. The amount and the direction of the variation is not material to our argument. The same variations which affect the principal sum borrowed will apply to the interest also.

Let us now suppose that A borrows of B \$1,000 for the same term and at the same rate, and that at the time of borrowing the amount of gold now called one dollar and one day's labor are economic equivalents. If, in such case, the economic standard of value is used, then at the end of 20 years the lender is entitled to receive, and the borrower

must pay the economic equivalent at the time of 1,000 days' common labor, regardless of the value of gold or of any other labor-form. If at the end of 20 years one day's common labor will purchase twice as much gold as at the beginning of the term, this fact will make no difference whatever to either of them, as it will also purchase twice as much of everything else in the market, other things being equal. The borrower expected to return 1,000 days' labor or its economic equivalent, and he returns this and no more; he knew in advance just what the disutility of his task would be, measured in common labor, and this disutility is unchanged. The lender had parted with the stored up utility of 1,000 days' common labor, and this is exactly what he receives back as principal. At the time of the loan both could form accurate conceptions of what the disutility of exerting a day's common labor-power would be 20 years thence; but neither could then accurately determine what, in 20 years, would be the disutility of obtaining a piece of gold of given weight and fineness. The disutility of the latter might be doubled or it might be cut in half—neither could tell as to that.

The matter of the standard of value, whether the gold standard or the economic standard, would affect not only the borrower as to the relative disutility of repaying the loan, but it would also equally affect the lender as to the relative utility of his loan after repayment. If under the gold standard common labor was cheaper by half than when the loan was made, so also would be all labor-forms which he might desire to purchase. This would double the utility of his money in the market. With it he could

then purchase the fruits of 2,000 days' current common labor. But if the value of labor should double in the 20 years, so also would the prices of all labor-forms, and his money would buy but half as much as formerly. With it he would buy only the fruits of 500 days' current common labor.

On the other hand, if the economic or labor standard of value was used, the values of all labor-forms would remain relatively unchanged. However prices may have changed absolutely, the borrower could pay his debt with the fruits of 1,000 days' current common labor; and with the money so repaid the lender could purchase the fruits of 1,000 days' current common labor. No standard of value can be absolutely constant; and the only standard which can be relatively constant is the economic standard—a standard based directly upon all the elemental units of disutility.

If the owner of all the land upon the island in the illustration we have used were also its absolute ruler, politically as well as economically, and held the land as sovereign instead of citizen, the ground rent received by him would be public, instead of private revenue. In such case his expenditures would be expenditures of State, and his promises to receive would be government paper. Ground rent would be paid as a tax, and the paper money paid out by the government to its employes and other creditors would become current credit-forms redeemable in payment of taxes—the amount of each man's tax or ground rent being computed in terms of common days' labor.

The greenbacks issued by the United States government, being promises to pay coin, are evidences of public indebtedness, and are, therefore, current debit-forms. In the hands of the holder they mean that he is entitled to receive labor-forms—gold and silver coins—from the government. In the hands of the holder the promises to receive which we have described, if such were issued instead of greenbacks, would mean that he is entitled to receive credit to that amount upon his taxes or other indebtedness to the government. If he had no personal indebtedness to the government, he could readily pass his current credit-forms in the course of business to some one who had.

From this brief discussion we learn that a medium of exchange may exist under any one of three forms: current trade-forms, current debit-forms, and current credit-forms. The first has been defined, but we repeat the definition:

A **Current Trade-Form** is a trade-form which passes current as a medium of exchange.

A **Current Debit-Form** is a written evidence of debt which passes current as a medium of exchange.

A **Current Credit-Form** is a written evidence of credit which passes current as a medium of exchange.

The United States employs current trade-forms in its coinage, and current debit-forms in its greenbacks and treasury notes of various kinds. National bank notes are also current debit-forms. If this government should pay its employes and creditors in promises to receive, redeemable in payment of taxes—or other indebtedness to the government—in lieu of gold, such credit-forms would pass current, but gold would be the monetary standard, and such

a system would not distinctively recognize in its standard of value the disutilities of time and space. The disutility of matter would be greatly lessened by destroying the necessity for a universal struggle for gold, or gold and silver, for use as money. If the United States should go farther and adopt the economic standard of value, instead of the gold standard, as the basis of its promises to receive it would recognize in its standard the disutilities of both matter and time; and in so far as its taxes are levied upon bare ground values, irrespective of improvements, its standard would also recognize the disutility of space. By levying all its taxes upon such ground values, the economic standard of value would be made complete.