## Chapter IV.

Of Money.
§ 1. The three functions of Money--a Common Denominator of Value, a Medium of Exchange, a "Standard of Value".

Having proceeded thus far in ascertaining the general laws of Value, without introducing the idea of Money (except occasionally for illustration), it is time that we should now superadd that idea, and consider in what manner the principles of the mutual interchange of commodities are affected by the use of what is termed a Medium of Exchange.

As Professor Jevons(220) has pointed out, money performs three distinct services, capable of being separated by the mind, and worthy of separate definition and explanation:

## 1. A Common Measure, or Common Denominator, of Value.

## 2. A Medium of Exchange.

3. A Standard of Value.
F. A. Walker,(221) however, says: "Money is the medium of exchange. Whatever performs this function, does this work, is money, no matter what it is made of.... That which does the money-work is the money-thing."
(1.) [If we had no money] the first and most obvious [inconvenience] would be the want of a common measure for values of different sorts. If a tailor had only coats, and wanted to buy bread or a horse, it would be very troublesome to ascertain how much bread he ought to obtain for a coat, or how many coats he should give for a horse. The calculation must be recommenced on different data every time he bartered his coats for a different kind of article, and there could be no current price or regular quotations of value. As it is much easier to compare different lengths by expressing them in a common language of feet and inches, so it is much easier to compare values by means of a common language of [dollars and cents].

The need of a common denominator of values (an excellent term, introduced by Storch), to whose terms the values of all other commodities may be reduced, and so compared, is as great as that the inhabitants of the different States of the United States should have a common language as a means by which ideas could be communicated to the whole nation. A man may have a horse, whose value he wishes to compare in some common term with the value of his house, although he might not wish to sell either. A valuation by the State for taxation could not exist but for this common denominator, or register, of value.
(2.) The second function is that of a medium of exchange. The distinction between this function and the common denominator of value is that the latter measures value, the former transfers value. The man owning the horse, after having measured its value by comparison with a given thing, may now wish to exchange it for other things. This discloses the need of another quality in money.

The inconveniences of barter are so great that, without some more commodious means of effecting exchanges, the division of employments could hardly have been carried to any considerable extent. A tailor, who had nothing but coats, might starve before he could find any person having bread to sell who wanted a coat: besides, he would not want as much bread at a time as would be worth a coat, and the coat could not be divided. Every person, therefore, would at all times hasten to dispose of his commodity in exchange for anything which, though it might not be fitted to his own immediate wants, was in great and general demand, and easily divisible, so that he might be sure of being able to purchase with it whatever was offered for sale. The thing which people would select to keep by them for making purchases must be one which, besides being
divisible and generally desired, does not deteriorate by keeping. This reduces the choice to a small number of articles.

This need is well explained by the following facts furnished by Professor Jevons: "Some years since, Mademoiselle Zélie, a singer of the Théâtre Lyrique at Paris, made a professional tour round the world, and gave a concert in the Society Islands. In exchange for an air from 'Norma' and a few other songs, she was to receive a third part of the receipts. When counted, her share was found to consist of three pigs, twenty-three turkeys, forty-four chickens, five thousand cocoanuts, besides considerable quantities of bananas, lemons, and oranges. In the Society Islands, however, pieces of money were very scarce; and, as mademoiselle could not consume any considerable portion of the receipts herself, it became necessary in the mean time to feed the pigs and poultry with the fruit."(222)
(3.) The third function desired of money is what is usually termed a "standard of value." It is, perhaps, better expressed by F. A. Walker(223) as a "standard of deferred payments." Its existence is due to the desire to have a means of comparing the purchasing power of a commodity at one time with its purchasing power at another distant time; that is, that for long contracts, exchanges may be in unchanged ratios at the beginning and at the end of the contracts. There is no distinction between this function and the first, except one arising from the introduction of time. At the same time and place, the "standard of value" is given in the common denominator of value.

A Measure of Value,(224) in the ordinary sense of the word measure, would mean something by comparison with which we may ascertain what is the value of any other thing. When we consider, further, that value itself is relative, and that two things are necessary to constitute it, independently of the third thing which is to measure it, we may define a Measure of Value to be something, by comparing with which any two other things, we may infer their value in relation to one another.

In this sense, any commodity will serve as a measure of value at a given time and place; since we can always infer the proportion in which things exchange for one another, when we know the proportion in which each exchanges for any third thing. To serve as a convenient measure of value is one of the functions of the commodity selected as a medium of exchange. It is in that commodity that the values of all other things are habitually estimated.

But the desideratum sought by political economists is not a measure of the value of things at the same time and place, but a measure of the value of the same thing at different times and places: something by comparison with which it may be known whether any given thing is of greater or less value now than a century ago, or in this country than in America or China. To enable the money price of a thing at two different periods to measure the quantity of things in general which it will exchange for, the same sum of money must correspond at both periods to the same quantity of things in general--that is, money must always have the same exchange value, the same general purchasing power. Now, not only is this not true of money, or of any other commodity, but we can not even suppose any state of circumstances in which it would be true.

It being very clear that money, or the precious metals, do not themselves remain absolutely stable in value for long periods, the only way in which a "standard of value" can be properly established is by the proposed "multiple standard of value," stated as follows:
"A number of articles in general use--corn, beef, potatoes, wool, cotton, silk, tea, sugar, coffee, indigo, timber, iron, coal, and others--shall be taken, in a definite quantity of each, so many pounds, or bushels, or cords, or yards, to form a standard required. The value of these articles, in the quantities specified, and all of standard quality, shall be ascertained monthly or weekly by Government, and the total sum [in money] which would then purchase this bill of goods shall be, thereupon, officially promulgated. Persons may then, if they choose, make their contracts for future payments in terms of this multiple or tabular standard."(225) A, who had borrowed $\$ 1,000$ of B in 1870 for ten years, would make note of the total money value of all these articles
composing the multiple standard, which we will suppose is $\$ 125$ in 1870 . Consequently, A would promise to pay $B$ eight multiple units in ten years (that is, eight times $\$ 125$, or $\$ 1,000$ ). But, if other things change in value relatively to money during these ten years, the same sum of money-- $\$ 1,000-$ in 1880 will not return to B the same just amount of purchasing power which he parted with in 1870 . Now, if, in 1880 , when his note falls due, the government list is examined, and it is found that commodities in general have fallen in value relatively to gold, the multiple unit will not amount to as much gold as it did in 1870 ; perhaps each unit may be rated only at $\$ 100$. In that case, $A$ is obliged to pay back but eight multiple units, which costs him only $\$ 800$ in money, while B receives from A the same amount of purchasing power over other commodities which he loaned to him. B had no just claim to ten units, since the fall of all commodities relatively to gold was not due to his exertions. On the other hand, if, between 1870 and 1880 , prices had risen, mutatis mutandis, the eight units would have cost A more than $\$ 1,000$ in gold; but he would have been justly obliged to return the same amount of purchasing power to B which he received from him.
§ 2. Gold and Silver, why fitted for those purposes.

By a tacit concurrence, almost all nations, at a very early period, fixed upon certain metals, and especially gold and silver, to serve this purpose. No other substances unite the necessary qualities in so great a degree, with so many subordinate advantages. These were the things which it most pleased every one to possess, and which there was most certainty of finding others willing to receive in exchange for any kind of produce. They were among the most imperishable of all substances. They were also portable, and, containing great value in small bulk, were easily hid; a consideration of much importance in an age of insecurity. Jewels are inferior to gold and silver in the quality of divisibility; and are of very various qualities, not to be accurately discriminated without great trouble. Gold and silver are eminently divisible, and, when pure, always of the same quality; and their purity may be ascertained and certified by a public authority.

Jevons(226) has more fully stated the requisites for a perfect money as--

1. Value. 2. Portability. 3. Indestructibility. 4. Homogeneity. 5. Divisibility. 6. Stability of value. 7. Cognizability.

Accordingly, though furs have been employed as money in some countries, cattle in others, in Chinese Tartary cubes of tea closely pressed together, the shells called cowries on the coast of Western Africa, and in Abyssinia at this day blocks of rock-salt, gold and silver have been generally preferred by nations which were able to obtain them, either by industry, commerce, or conquest. To the qualities which originally recommended them, another came to be added, the importance of which only unfolded itself by degrees. Of all commodities, they are among the least influenced by any of the causes which produce fluctuations of value. No commodity is quite free from such fluctuations. Gold and silver have sustained, since the beginning of history, one great permanent alteration of value, from the discovery of the American mines.

In the present age the opening of new sources of supply, so abundant as the Ural Mountains, California, and Australia, may be the commencement of another period of decline, on the limits of which it would be useless at present to speculate. But, on the whole, no commodities are so little exposed to causes of variation. They fluctuate less than almost any other things in their cost of production. And, from their durability, the total quantity in existence is at all times so great in proportion to the annual supply, that the effect on value even of a change in the cost of production is not sudden: a very long time being required to diminish materially the quantity in existence, and even to increase it very greatly not being a rapid process. Gold and silver, therefore, are more fit than any other commodity to be the subject of engagements for receiving or paying a given quantity at some distant period.

Since Mr. Mill wrote, two great changes in the production of the precious metals have occurred. The discoveries of gold, briefly referred to by him, have led to an enormous increase of the existing fund of gold (see chart No. IX, Chap. VI), and a fall in the value of gold within twenty years after the discoveries,
according to Mr. Jevons's celebrated study,(227) of from nine to fifteen per cent. Another change took place, a change in the value, of silver, in 1876, which has resulted in a permanent fall of its value since that time (see chart No. X, Chap. VII). Before that date, silver sold at about 60 d . per ounce in the central market of the world, London; and now it remains about 52d. per ounce, although it once fell to $47 d$., in July, 1876. In spite of Mr. Mill's expressions of confidence in their stability of value--although certainly more stable than other commodities--the events of the last thirty-five years have fully shown that neither gold nor silver--silver far less than gold--can successfully serve as a perfect "standard of value" for any considerable length of time.

When gold and silver had become virtually a medium of exchange, by becoming the things for which people generally sold, and with which they generally bought, whatever they had to sell or to buy, the contrivance of coining obviously suggested itself. By this process the metal was divided into convenient portions, of any degree of smallness, and bearing a recognized proportion to one another; and the trouble was saved of weighing and assaying at every change of possessors--an inconvenience which, on the occasion of small purchases, would soon have become insupportable. Governments found it their interest to take the operation into their own hands, and to interdict all coining by private persons.
§ 3. Money a mere contrivance for facilitating exchanges, which does not affect the laws of value.
It must be evident, however, that the mere introduction of a particular mode of exchanging things for one another, by first exchanging a thing for money, and then exchanging the money for something else, makes no difference in the essential character of transactions. It is not with money that things are really purchased. Nobody's income (except that of the gold or silver miner) is derived from the precious metals. The [dollars or cents] which a person receives weekly or yearly are not what constitutes his income; they are a sort of tickets or orders which he can present for payment at any shop he pleases, and which entitle him to receive a certain value of any commodity that he makes choice of. The farmer pays his laborers and his landlord in these tickets, as the most convenient plan for himself and them; but their real income is their share of his corn, cattle, and hay, and it makes no essential difference whether he distributes it to them directly, or sells it for them and gives them the price. There can not, in short, be intrinsically a more insignificant thing, in the economy of society, than money; except in the character of a contrivance for sparing time and labor. It is a machine for doing quickly and commodiously what would be done, though less quickly and commodiously, without it; and, like many other kinds of machinery, it only exerts a distinct and independent influence of its own when it gets out of order.

The introduction of money does not interfere with the operation of any of the Laws of Value laid down in the preceding chapters. The reasons which make the temporary or market value of things depend on the demand and supply, and their average and permanent values upon their cost of production, are as applicable to a money system as to a system of barter. Things which by barter would exchange for one another will, if sold for money, sell for an equal amount of it, and so will exchange for one another still, though the process of exchanging them will consist of two operations instead of only one. The relations of commodities to one another remain unaltered by money; the only new relation introduced is their relation to money itself; how much or how little money they will exchange for; in other words, how the Exchange Value of money itself is determined. Money is a commodity, and its value is determined like that of other commodities, temporarily by demand and supply, permanently and on the average by cost of production.

