TWO ESSAYS

IN

ECONOMICS

BY

JOHN BORDEN.

CHICAGO.
S. A. MAXWELL & CO.
134-140 WABASH AVE.
1890.

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CONTENTS.

WEALTH.

I.

DEFINITION AND UNIT.

According to the common and general opinion anything is wealth which admits of ownership and has a money value. If a man possesses anything which has no money value; or, in common parlance is not worth a cent, it is not wealth. But if he can sell it, he infers that it is wealth although he may be ignorant of the cause of its value. As for instance, one may gather ginseng and sell it, and therefore regard it as wealth, although he may have no knowledge of its virtues—if indeed it has any. The word wealth as commonly used is the name given to each one of a class of objects, which answer to the above definition separately, and also, to the entire class collectively. As the word is often used it implies abundance, affluence, opulence, riches; but quantities are comparative, and under the definition (Webster) is quoted the expression, I have little wealth to lose (Shaks). Therefore, it is proper to use the word to designate a thing as wealth, or as belonging to a class of objects so called, whether the quantity or value of the article is great or small.

The above definition requires that all objects, which are entitled to be called wealth, must possess a value common to them all, and which is called money value. This definition, although it is directly deducible from the actual use of the word, wealth, demands for its elucidation an explanation of the word value, and especially of money value.

Anything which is either necessary, useful, or agreeable to a man has value to him. It has utility to him—utility being the state or quality of being useful (Webster). The man has a desire, or want (a demand) and the thing has a capacity to satisfy it (a supply). Therefore, the thing has utility to him; it possesses in itself a capacity to satisfy his desire or serve his purpose, and he furnishes the desire or purpose. Utility, therefore, expresses a relation between a person and

an object, or more generally, between a desire or purpose and the capacity to satisfy it. Use value or value in use, are phrases, which, as defined by their inventor (Adam Smith), express or signify the utility of the object or thing referred to. If a thing has utility it has a use value, and vice versa. The two words are synonymous. One expresses the relation objectively and the other subjectively.

In order that utility or use value may exist, there must be a desire or purpose and also the means to satisfy it. Water has no utility to quench thirst unless there is thirst, nor fire to ward off cold unless there is cold. Food has the capacity to appease hunger if it exists—But food has no utility or use value for that purpose if there is no hunger. By chemical analysis a comparison may be made of the nutrition contained in different kinds of food. And thereupon it might be said that one kind had more utility for that purpose than another. But although horseflesh may be as nutritious as beef or mutton, yet to those who want or desire the latter, they have a greater use value. In food, and in everything else, the consumer exercises his choice, and the thing which he prefers has the greater use value to him at that time. The intrinsic properties which a thing has or is supposed to have and which enable it to be useful would continue to exist if mankind were extinct, but in such case the thing would have no utility or use value because there would be no wants to satisfy.

It has been said (Cairnes) that, utility has been understood to mean the quality of being suitable for human purposes generally, and the degree of utility to be measured by the importance of the purposes to which the useful commodity ministered; as, that water is more useful than alcohol; coal than a diamond; and iron than gold. It may be true that water is more useful to quench ordinary thirst, or for washing, cooking, irrigation or navigation than alcohol, yet the latter is more useful than water for many important purposes in the arts and in medicine. Coal may be more useful to generate heat than diamonds, and the latter more useful to cut glass, point a mining drill, or for ornaments, than coal. Iron may be more useful for horse shoes and many other purposes than gold; but gold is more useful to plug a decayed tooth and for many other purposes than iron. About the comparative importance of many of these uses opinions might differ. But

it is obvious that the above meaning loosely given to utility is too indefinite and fails to bring into view the true significance of the word; because "the quality of being suitable for human purposes generally" depends upon the existence, nature, and amount of human wants, as well as upon the capacity to satisfy them.

Since utility and use value depend for their existence upon wants (the demand) and the means to satisfy them (the supply), and both of these vary, then it follows, that utility and use value are variable and not constant quantities.

The capacity to be useful may vary.

1. It may be lost in whole or in part, the food may spoil or decay; the air become foul; the water stagnant; the bouquet may wither; the gem become cracked, broken, or lose its lustre; the watch cease to keep good time; and the goods may deteriorate, get out of style and become old stock. The capacity to be useful may not exist in fact, but be only imputed to the object; the patent medicine may not be a panacea in reality; nor the hair restorer a restorer in fact; and the picture or gem may be bogus.

2. The quality of the article may vary; the cloth may be homespun, shoddy or fine goods. All kinds of articles vary through all degrees of quality.

3. The quantity may vary. The supply may be scant or the contrary. Crops may be short or over abundant. It is sometimes reported that in remote localities Indian corn is, or has been used for fuel. Although the corn had the same nutritive properties and would make as much whiskey, glucose, starch, or food, as if it were in the greatest demand for these purposes, yet situated where it was, the corn had greater utility to its owners for fuel than for any other purpose. The capacity to satisfy a desire or serve a purpose may exist in excess of the desire or purpose which it can satisfy or serve. In such cases the utility of the object becomes reduced in amount as per unit of quantity, because the supply exceeds the demand. If a farmer raises more grain than he can possibly consume, the excess has no utility to him except to sell to others; and if there are no buyers, the farmer may well turn his grain into fuel. Commerce confers or enhances utilities by transferring commodities from one place to another, and thus bringing the supply within the reach of an adequate demand.

The producer receives for his product, on the average, less than one-half of the price paid for it by the consumer. Those engaged in trade and commerce get at least an equal share. Hence the wealth gained by commerce.

And utilities vary as wants vary.

1. They vary as between the same person and the same thing. A man may be more hungry or thirsty at one time than another. Clothing has greater utility to a man who has none, than if he had a sufficient supply already; the surplus quantity would have little utility to him except to sell. Thus a thing may vary in utility in respect of the purpose for which it is wanted. Water has one utility to quench thirst and another for washing or cooking.

2 They vary as between the same person and different things. Either food, clothing, shoes or drink may be more useful to a man at one time than either of the others.

3. They vary as between the same thing and different persons. One may desire food or drink more than another. A commodity has one use value to the producer, maker, merchant or dealer and another to the consumer. If an article is saleable at a profit, that constitutes its utility to the dealer. If the article thus serves his purpose, it is not material to him what use value alcohol, tobacco, opium or any other commodity may have to the consumer.

4. They vary as between different persons and different things One may want shoes more than clothing, and another, just the reverse. And all of them may desire money in different degrees more than any other thing.

Many things as goods, chattels, lands, etc., have a use value to many persons in different degrees both as between the things themselves and also as between the several persons. Hence such things which are capable of delivery or transfer, become exchangeable between those persons to whom they have a use value, because of their greater utility to one or more than to others. Such things, therefore, are said to have exchange value.

From the foregoing, it is inferrable that the phrase, use value, is the proper generic term for value, and that any specific kind must be use value in some modified form or taken in some limited or qualified sense. If, therefore, all kinds of wealth possess a kind of value common to them all and which

may be called wealth value, then the same is in fact use value qualified or limited in some way. The definition of wealth above given asserts that wealth value is the same as money value; and the proof of it is as follows:

Since wealth may be more or less in quantity, different articles and quantities of wealth admit of comparison with each other as to their amounts. Therefore, if a certain article or quantity of a thing which is in fact wealth be denoted by, d; and a specific article or quantity of some other thing be denoted by w; and the two are brought into comparison and it appears thereby that the two articles have the same kind of value, then it follows that the article or quantity, w, possesses wealth value and is therefore wealth also. The result of such comparison is, that the two articles or quantities, w and d, are of equal or different amounts in value, which relation can be expressed algebraically by

$$w = v.d \qquad (1)$$

which is the same as to say that the article or quantity w is worth or possesses a wealth value v times as great as the article or quantity d.

And another article or quantity of some other thing denoted by, z, if wealth, gives rise to the relation expressed by

$$z = v_1.d \qquad (2)$$

and so on, for all other articles or quantities which may be brought into comparison with d and thereby found and proved to be wealth also.

In this manner the article or quantity of wealth, d, furnishes a test whereby all other articles of wealth may be known and identified.

And the article or quantity of wealth, d, also furnishes a unit measure of wealth and wealth value. For if in Eqs. (1) and (2) it be assumed that $w = z = d$. then $v = v_1 = 1$. That is to say, if the specific article or quantity of wealth, d, is taken as the unit of wealth, then its value is unity, or the unit of wealth value.

Now suppose the two articles or quantities of wealth, w and z, were directly compared with each other, and the relation between them were found to be as expressed by

$$w = v_2.z \qquad (3)$$

then the article or quantity, w, as wealth, is v_2 times as great as the article or quantity z. If w denoted a horse, and z a sheep, and if $v_2 = 10$ then the relative wealth value between the horse and a sheep would be as one to ten. And an exchange of the horse for the sheep might take place upon that basis. The owner of the horse would consider the ten sheep to be of greater utility or to have greater use value to him than the horse, and the owner of the sheep would consider the horse of greater utility or use value to him than the sheep. Hence the exchange. In this and every similar case, each party measures for himself the utility or use value to him of the article parted with and also of the one received. And in his opinion he has gained, or at least not lost, by the transaction. Experience might prove that both were correct in their opinions, or that one was mistaken, or that both of them were. So that in exchanges, both parties may gain, or one lose, or both.

An exchange made as above fixes a degree of exchange value or ratio of exchange, between the article exchanged. It furnishes a measure of their relative utility, but only, however, as between the parties to the transaction. Their relative utility might be estimated very differently by others; and indeed the respective use value to two other persons, both of the horse and the sheep might be very different from that to the two former ones. The new or second owner of the horse might refuse to exchange him for less than eleven sheep or more; or, a new or second owner of the sheep might refuse to give more than nine sheep for the horse. And the degree of exchange value or ratio of exchange of the horse or sheep would vary with every other or different article of wealth with which either might be exchanged, and also with every change of owners of each.

Although some one might assert that water is more useful than alcohol; coal, than a diamond; and iron, than gold; yet in an exchange, the bystanders have no part, although they may volunteer their opinions. The parties to the exchange measure the utilities involved for themselves. And each of them may decide that for equal weights or quantities, alcohol is more useful than water, diamonds than coal, and gold than iron; at least, to them in their then condition and circumstances.

It seems therefore, that those things which have utility to more than one person and are transferable, possess exchange value; and that the degree of exchange value or ratio of exchange existing among them is determined by the exchanges which take place between them.

If the quantity, d, be eliminated between Eqs. (1) and (2), the result is

$$w = v_2 . z = \frac{v}{v_1} . z : \qquad v_2 = \frac{v}{v_1} . \tag{4}$$

Thus, the test and common measure of wealth, d, furnishes also a medium of exchange between all other articles or quantities of wealth. For in the case above supposed, if the horse had been parted with for 100 d and the ten sheep acquired for 10 d each, then the ratio between the horse and sheep is the same as that above supposed to exist in a direct exchange made of them.

Anything which is generally conceded to be wealth and which is in common use as a test and common measure of wealth and as a medium of exchange is called money. Such thing need only to be wealth among those who use it, as ornaments, etc., (Wampum), or it may be gold, silver, copper or other metal. All money is composed of something which is wealth among the people who use it, unless for convenience (small change) or by necessity, force, or fraud, something else is substituted as a representative or token for it.

If money were made out of something which had no value and consisted of mere counters, then it could not be said, that wealth consists of all those things whose value can be measured by money. For if the money had no value, how could it measure value in other things? Clearly not otherwise than inferentially by effecting exchanges between them. Such money would in that manner acquire a utility for that purpose merely by reason of its being a forced currency.

The assertion made by Eq. (1) is that w is worth v times as much as d. This could not be unless d had value. And the Eqs. (1), (2) and (4) show that the operation of d as a medium of exchange rests logically upon the averments that the value of w is v times greater than the value of d, and that the value of z is v_1 times greater than the value of d. Therefore all mere counters used as money are representative

of something which is in fact wealth, or if not they are cheats and frauds imposed by force upon an unwilling people.

But if money is made out of something which is itself wealth, and especially out of some uniform and durable material having a great use value to all the world and which remains stable and permanent; as for instance, if the money be made out of gold or silver; then the above proof that wealth value is money value is sound and correct. And if the article or quantity, *d*, were a specific amount by weight of one of the precious metals, then it becomes, as proved by common use and experience, a fair test and unit measure of wealth, and the value of such unit becomes the unit of wealth value. If wealth consists of sundry things possessing utility, or of the utilities themselves, it is obvious that it is measured by measuring its utility or value. Wealth is not measured by measuring its weight, or its superficial or cubic contents. As wealth, gold measures one amount and iron or lead another. As between different quantities of a commodity, all of the same quality, as for instance, grain or cloth, the value would probably increase in proportion to the quantity within certain limits; but not so as to different amounts of the same article, if they all differed in quality. And the precious metals each of which are always uniform in quality when pure, are about the only things whose value increases regularly in proportion to quantity to an unlimited extent. Although wealth may be more or less in quantity, yet its amount does not depend upon area, magnitude or specific gravity; a lump of coal does not measure the same amount as wealth, as a diamond of the same size; and one horse may be worth many times more than another; if faster, stronger, younger, more beautiful, or otherwise more desirable than the other. Also amounts of wealth are not measured by measuring capacities to be useful; as for instance, corn so abundant as to be used for fuel; or fruit so abundant as to be left to rot on the ground; or sheep in Australia when nothing was saved except the fleece and tallow; or cattle in South America and elsewhere when nothing was saved except the hides, horns and tallow. And when Sinbad got into the pit or cave of diamonds their capacity to be useful would have figured small to him, if he had not found a means of escape.

It is said in the law (2 Blacks. Com. 446) "A sale or ex-

change is a transmutation of property from one man to another in consideration of some price or recompense in value; for there is no sale without a recompense; there must be a quid pro quo. If it be a commutation of goods for goods, it is more properly an *exchange*; but if it be a transferring of goods for money, it is called a *sale*; which is a method of exchange introduced for the convenience of mankind, by establishing a universal medium, which may be exchanged for all sorts of property; whereas, if goods were only to be exchanged for goods by way of barter, it would be difficult to adjust the respective values, and the carriage would be intolerably cumbersome. All civilized nations adopted therefore very early, the use of money."

In a sale the sum of money paid is called the price for which the thing is sold. Its money or wealth value is thus measured by the number of times such value is greater or less than the value of the money unit. The difference between the price and the money value of an article, is the difference between a sum of money and its value. If the money is of the right kind, a sale is in substance an exchange, in which each party receives full satisfaction. But if the money were mere counters, then the payment of money, although in point of law it would operate as a satisfaction, in reality only operates as a means to obtain future satisfaction through the redemption of the counters, or by their use in subsequent purchases, provided they were so used in time and before they lost their representative or putative value.

A sale measures the relative utility of the article sold and the price paid for it to the buyer and seller as estimated by each of them for himself. The sale signifies that the sum of money received has as much or a greater use value to the seller in his opinion than the article sold; and also, that the buyer considers the article bought as of equal or greater use value to him than the price paid. Each party works for his own interest in the transaction; and it is a source of grief to the seller to learn afterwards that he might have sold for more and to the buyer that he might have bought for less. The extreme price which a buyer will pay for an article is a sum of money whose use value to him in his opinion is equal to that of the article bought. And he regards all forestalling, regrating, engrossing and combinations to extract a famine

price out of him as unjust and illegal; on the other hand, the lower the price may fall the better it suits him. As to the seller, he will not dispose of an article, unless the use value of the price paid is to him in his opinion, at least equal to that of the article sold. If such article is a surplus product to him, or of no utility to him except to sell he has a wide margin; but the shoe pinches at any price below its cost to him. If a hatter had on hand a stock of hats he could not use more than a few of them himself; the others are for sale. If everybody chose to wear caps or turbans, the surplus stock of hats would have small utility. But if there are buyers, the higher the price the better it suits the hatter. If there is competition in the business, or for any cause the demand falls off, the stock is liable to remain upon his hands and deteriorate in quality, get out of fashion and lose style and polish. As time progresses, he is ready to dispose of the lot on hand at what he calls a bargain. If his entire sales renumerate him to his satisfaction he continues in the business.

From what has been said already, it must be apparent that wealth value is use value as measured in barter by the exchange, and in sales by the value of the sums of money paid. And, since barter is not now in common use, the general practice among all men is to estimate, measure and compute wealth and its value in terms of the money unit and its value.

Wealth values are ascertained by market prices, of which there are two kinds, wholesale and retail; the latter less fixed and greater, often double the former. And there are different prices both wholesale and retail at different times at the same place, and also at different places at the same time. Any article of wealth measures one amount at one time or at one place and a different amount at another time or at another place, although the quantity and quality of the article may remain the same. As for instance, a thousand bushels of grain, regarded as wealth, measures one amount on the farm and another in the market, and also different amounts at either place at different times. The farmer who sells his grain at a railroad station in his locality gets a smaller wholesale price than is paid for the grain in New York, Liverpool or other market. And so in like manner as to all other things. And any specific article is likely to measure one amount in one sale and a different amount at a prior or subsequent one.

A market tends to establish continuously one price at one time and place for every article of a specified grade and quality dealt in at that market. One set of dealers represent Supply, *i. e.* a supply of a commodity and a demand for money; another set represent Demand, *i. e.*, a demand for the commodity and a supply of money. And the market is composed of buyers and sellers.

The market price is arrived at, by an equation between the demand and supply, both of which are continually affected by a variety of causes, real, speculative or imaginary. And the equation is brought about substantially as follows: The amount of a demand has a relation to the price bid; so also, the amount of the supply to the selling price. Hence if the quantity demanded of an article be denoted by D at the price $v^1.d$ per unit of quantity, d being the money unit; then the total cash amount of the demand is $D.v^1.d$. And if the quantity of the same article offered for sale at the price $v.d$ per unit of quantity be denoted by S, then the total cash amount of the supply is $S.v.d$. Now the quantity demanded varies or tends to vary inversely with the price $v^1.d$; and the amount of the supply varies or tends to vary directly with the price $v\,d$. And transactions occur when

$$S.v.d = D.\,v^1.d \qquad (5)$$

The total quantity bought and sold is the same and at the same price. At this point any quantity large or small may change hands. If the demand at that price is in excess of the supply it avails nothing; the only way to increase the supply is to bid up the price. Then the additional supply would satisfy the most urgent demand, whereupon it would become less and the price bid would consequently relapse. On the other hand an excess of supply avails nothing after the demand is satisfied unless the price is lowered. This would excite an additional demand which would reduce the amount of the supply, upon which the price rises and then the demand falls off and the price relapses. Thus the market price continually fluctuates in unstable equilibrium.

Market prices at the leading markets of the world fix approximately all wealth values of the chief or staple commodities for the benefit of all concerned, whether producers,

dealers, or consumers. And the wholesale price of an article is often quoted to the fraction of a cent, penny, etc.

If any one brings an article to market this implies that to him it is a surplus product or that it has a less use value to him than its price. He may have made or manufactured it if a producer, or if a dealer he may have bought it previously in order to sell again. In every case it costs him a certain amount in money or in money's worth. Unless the price realized exceeds this, his livelihood is affected, or at the very least his profits. If the article is not wanted at all or is a "drug" in the market, it is in vain for the seller to expatiate upon its capacity to be useful, or upon its cost to him. The buyer considers in connection with it the use value of his money to him, for that represents his livelihood and his profits made and to be made. If the article is wanted then its price is affected by the quantity of the commodity which is offered for sale and the quantity of money which buyers are ready to invest in it. And a sale takes place.

1. When the seller thinks he cannot obtain more from the the buyer with whom he is dealing, or from any other.

2. When he wants the price more than he wants the article.

3. When the buyer thinks that he cannot buy the article for less from the seller, or any one else.

4. When he wants the article more than he wants the price.

Every sale is a separate transaction, but it is one of many which go to make up what is called the market price, which is an average. The man who sells at the highest price and buys at the lowest is the "smart man," the successful dealer. In a market everyone is on the alert to do the best he can; for success in life or business awaits the final result.

There are not only "sales" but "contracts to sell." A sale occurs where the seller has the article on hand. A contract to sell is where the seller expects to procure the article before the time stipulated for its delivery. As for instance the Government advertises for supplies for the army, navy, etc., to be delivered at certain places at certain times or from time to time, and contractors bid and afterwards, if successful, procure the articles required.

In a market, some dealers sell for future delivery,—sell short; because in their opinion the price will fall in the meantime. These men are the bears; they work in the interest of the consumer. Others buy for future delivery because in their opinion the price will rise; they are the bulls; they work in the interest of the producer. The bears also sell for immediate delivery in order to break down the market price; the bulls buy for cash and sometimes get overloaded; and sometimes they corner the bears:—when the time comes to deliver, "the shorts" find that the other side has monopolized the supply, and put up the price.

The benefit conferred upon the community by a market and especially by the professional dealers therein, may be illustrated by an example. Many years since, a person, then a young man tried farming. The crop was raised and for sale. On enquiring the price he was told that corn was worth from twenty to twenty-five cents a bushel. On looking about for a buyer, he found one at the higher price who would buy on credit. The sale was made and the corn delivered—and it was never paid for. Then there were no boards of trade, nor bulls nor bears. Now the price of corn, or, indeed, of any commodity, is fixed in a market to the fraction of a cent for cash or future delivery. The farmer may sell his grain for cash or at price already well fixed and settled for future delivery and receive cash on delivery for any amount he may have to sell no matter how great. That is to say, the farmer can sell his grain ahead and deliver it afterward. The so called "Farmers' Alliance" is opposed to all dealing in futures. After the farmer is in the market with his products he must sell. And in an early day in Chicago, he sold for truck and trade, and was at the mercy of the buyer. It would be absurd to say that a miller who made thousands or even hundreds of barrels of flour per day should not be allowed to contract ahead for barrels, sacks, grain, etc. The person above referred to, lately asked a farmer located hundreds of miles away from Chicago, how he knew what price he ought to receive for grain, cattle, hogs, etc. And the reply was that we get the Chicago market reports. The "Farmers' Alliance" would have the market consist exclusively of bulls.

If one versed in political economy should propose to operate in a market, as for instance in grain; after he had fixed

upon its natural or just price by a reference to the amount of labor required for its production, or the amount of labor which it would command in exchange, or the amount of labor which it would maintain, or in any manner estimate the cost of its production, it would be necessary for him also, previously to consider the state of the market as to the demand and supply and "facts" like the following taken from a Chicago newspaper of date March 23, 1890.

"Late yesterday, May wheat (No. 2 Spring) sold on the curb at 80½c. "Puts" were quoted at 80⅛ @ 80¼c, and "calls" at 80⅜ to 81c. G. K. & H's. private wire dispatch from New York reported the clearance from four ports for the week at 641,900 bu. of wheat, 2,890,750 bu. corn, 281,600 pkgs of flour, and 417,850 bu. of oats. These figures show an increase for the week in wheat of 82,750 bu.

W. G. McC. & Co. say: Every indication shows that the shorts in wheat are about covered and that the buying of the last twenty-four hours has been almost exclusively for long account. We look for still further reaction Monday, but would buy on all breaks.

C. B. Co.'s, market letter says: Our market closed heavy at bottom prices, with the shorts well covered. New York assures us there is little probability of further large clearances for some time to come, and crop damage reports are contradicted or said to be local and insignificant, while the idea of manipulation is less generally believed; and our own examination into the matter induces us to think that there is no line of long wheat held by any man or any set of men who can, with their present holdings, control prices. The country are quite bullish and have made some money on the up turn, and those who have sold out, will for a time buy back on the breaks, but it looks to us as if the up turn had reached its summit, and the general tendency for the coming week will be in the direction of lower prices.

G. K. & H.'s market letter of Saturday says: Reports of damages to the wheat crop continue to come in, but now that the short interest has covered so freely, they have temporarily less influence. A further downward reaction seems probable for the immediate future. Thereafter we look for renewed buying and improvement based on good cash demand for old wheat, or on crop scares, or both.

The shipments of rye from Russia from Aug. 1 to Feb. 22 were about 21,436,000 bu., against 38,216,000 bu. for the corresponding time in 1888–9.

English farmers' wheat deliveries the last week were 81,271 qrs. the average price being 29s. 8d.

The quantity of wheat in bond in the French ports March 1 was estimated at 4,000,000 bu. as against 11,440,000 bu. March 1, 1889.

Beerbohm of March 7 says: The stock of wheat at Odessa is variously estimated at from 4,000,000 to 8,000,000 bu., but there is no official or entirely reliable return; seeing, however, that the official stock Jan. 1 was 11,328,000 bu., the present stock is probably not far short of 8,000,000 bu.

The receipts of flour and grain at Chicago for the week just closed were equal to 3,804,373 bu. and the shipments equal to 2,877,000 bu.

Statistician Dodge in his March report to the agricultural department says the impoverished condition of American farmers is due to overproduction.

Beerbohm of March 7 says: The crop reports from the Punjab are by no means favorable, and it is now pretty clear, taking into account the largely reduced acreage, that like last season, India will be a comparatively small contributor to the world's wheat supply.

Clearances of wheat from New York Friday were 67,571 bu. to Oporto and 222,902 bu. to Lisbon.

Minneapolis millers complain of the poor demand for flour.

The shipments of wheat from Russia from Aug. 1 to Feb. 22 were about 44,784,000 bu. against 62,192,000 bu. for the corresponding period in 1888–9.

The London Daily Chronicle of March 3, says: The ravages of rust on the wheat crop has been more severe than was at first anticipated. It is estimated that in South Australia, the loss to the farmers amounts to at least $5,000,000; in Victoria, $2,500,000 to $3,000,000; and in New South Wales to $2,500,000.

Bradstreet says: There is a strong point worth noting. July 1, 1889, stocks in the United States were at a low ebb, and not up to the customary average abroad. As a matter of fact, the grand total of available wheat stocks in this country, plus stocks of wheat afloat for Europe, United Kingdom

stocks at Odessa, French ports, Paris, Berlin, Danzig and Stettin amounted on July 1, 1889, to 67,328,000 bu as compared with 83,792,000 on the like date in 1888. March 1, 1890, the grand total of American and European stocks and stocks afloat for Europe were 95,842,000 bu. and had been declining for two months at the rate of 10,000,000 bu. per month. If this rate of decline be continued during the four months ending June 30 next, the indicated total of American, European and afloat stocks at that date is 56,000,000 of wheat, or 11,000,000 bu. less than on July 1, 1889."

If one should decide, from such reports or otherwise, that the relation between the supply and demand would justify either buying or selling he would easily find others ready to accommodate him.

In view of what precedes it appears, that the money test and measure of wealth, in common use everywhere, stands upon correct logical and scientific grounds. And this result is reached by practical men without any abstract speculation or metaphysical inquiry beforehand, into the nature and causes of value, or any search at all into the subtle motives of human desire. After the different kinds of wealth are known, the nature and causes of their value can be correctly investigated.

It is not necessary in order to find a correct definition or test of wealth among civilized men to go back to an age when they were too savage to know the use of money and the different kinds of wealth were ascertained by barter. According to this theoretical mode of defining wealth, it is said to consist of those useful and agreeable things which are exchangeable with each other. Barter is not now in common use anywhere except among savages, and it cannot furnish any units of wealth and value. Since Economics deals with quantity, it requires its units of common measure. Practical men have measured wealth and value by means of the money unit ever since barter was disused and money adopted as a medium of exchange. And this method agrees with the mode generally adopted in mensuration, *i. e.* to take a specific quantity of the thing to be measured as the unit of measure; as, in length, a foot; in weight, a pound; in capacity, a bushel, etc.

It is said (Mill, Book 3, Chap. 1), "The word value when used without adjunct always means in political economy, value

in exchange, or exchange value" * * * "or, the value, or exchange value, of a thing means its general power of purchasing; the command its possession gives over purchaseable commodities in general "

Now—ignoring money—what is the general purchasing power of a bushel of wheat? In the first place there are many kinds and qualities, as, winter and spring: red and white; good and poor of all grades. Wool is said to be sold in London, which is its great market, in over one hundred grades. Coffee may be Mocha, Java, Rio, Santos, etc., of all qualities. Lumber or timber may be sawn or unsawn, and of rosewood, mahogany, teak, oak, pine, etc. Horses and cattle may be of all grades and qualities; and so also of all other commodities. If barter were relied upon, it could be learned that wheat was exchangeable and therefore had exchange value, and little or nothing more. If a large number of horses were exchanged with each other, the ratio of exchange of each horse with each of the others would probably differ in each case, and therefore the amount of boot given and taken in each case would be different. In the absence of money, the boot would consist of sundry articles whose relative values would remain undetermined. Hence the degree of the exchange value of each horse, and the average exchange value of all the horses would remain unknown. And if they were exchanged singly or in lots, for other commodities all variable in kind and quality, nothing could be known of the general purchasing power of any of the articles exchanged. It would be impossible to conduct business upon the basis of exchange value. The adoption of barter would be return to barbarism. Anything in the shape of money is more tolerable than barter.

Where money is in use, by means of a study of the market reports, the ratio of exchange of a bushel of a specific kind wheat, as say No. 2 Spring, with specific amounts of other graded articles might be figured out. A table of these ratios might be said to exhibit the general purchasing power possessed by a bushel of No. 2 Spring wheat. And if the price of an average bushel of wheat were obtained from the prices of all the different kinds which might be quoted; and the same method were pursued, with rye, oats, barley, wool, coffee, lumber, live stock, cloth, tea, etc., etc.. then the general power of purchasing of an average bushel of wheat as com-

pared with an average of other commodities might be ascertained. And, supposing corn in England to mean wheat, rye, barley, oats, pease and beans, and a bushel or a quarter of corn to mean a specific quantity of each, the price of an average bushel or quarter of English corn might be obtained from the market reports, and its general purchasing power thus arrived at. But in barter and in the absence of money, it would not be easy to fix for a quarter of average English corn, or for a specific amount of any other commodity "the command its possession would give over purchaseable commodities in general."

The attempt to ignore money value and to reason in political economy upon the basis of exchange value has not tended toward either certainty or simplicity. It is said (Mill, Book 3, Chap. 1), "When we are considering the causes which raise or lower the value of corn, we suppose that woolens, silks, cutlery, sugar, timber, etc., while varying in their power of purchasing corn, remain constant in the proportions in which they exchange for one another. On this assumption, any one of them may be taken as a representative of all the rest; since in whatever manner corn varies in value with respect to any one commodity, it varies in the same manner and degree with respect to every other, and the upward or downward movement of its value estimated in some one thing, is all that needs be considered. Its money value, therefore, or price, will represent as well as anything else its general exchange value, or purchasing power; and from an obvious convenience will often be employed by us in that representative character; with this proviso, that money itself does not vary in its general purchasing power, but that the prices of all things other than that which we happen to be considering remain unaltered."

Practical men in their actual dealings with wealth, and in "speculating" in it or about it, have found an obvious convenience in selecting money as "a representative of all the rest" in all cases; especially as the relative values of other things are readily deducible therefrom and are not obtainable from any other source. Money, if composed of one of the precious metals, is uniform in the quality of its material, durable, limited in supply, and comparatively stable in its use

value; whereas, woolens, silks, cutlery, sugar, timber, etc., are of all grades and qualities, and continually deteriorating and altering in quantity, quality, and value. Even as to (English) corn, one crop may be of good quality, well harvested, and not grown musty or eaten by the weevil; another crop might be short in quantity and of poor quality, rusty, damaged by wet in the harvest, etc. There are many kinds of "woolens, silks, cutlery, sugar, timber, etc.," and also a great difference between new and old stock; whereas, the currency is all alike and usually is not continually becoming moth eaten, rusty, wormy or rotten. Hence from an "obvious convenience" land, labor, capital, wages, interest, profits and all wealth are estimated and measured in money. Both national and individual wealth are always so estimated and computed for all purposes. And the degree of exchange value, general exchange value or purchasing power of "woolens, etc.," is only known by a reference to prices.

The use value of money is affected by its abundance or scarcity; a great inflation of the currency depreciates its value, while a contraction has the contrary effect. Gold and silver both have a use value in the arts and for ornament as well as for money. Their use value as money has been greatly impaired by the use made of paper money and all the various forms of credit. And their value has been no doubt greatly affected in both respects by their increase in quantity. This was very noticeable lately in the decline in the value of silver from 1873 to 1890; and both of the precious metals are said to have declined greatly in value relative to other things since the discovery of America.

The supply of the precious metals is quite limited and the demand very uniform and their stability in value is sufficient for the great mass of transactions which cover only short periods of time. Therefore it is not material whether gold or silver was worth more or less in the Middle Ages or even a generation ago than now. If the currency and standard are continually tampered with, then the case is altered. Long contracts are very seriously affected by alterations made in the amount of money and the size of the standard.

And from one point of view, it might be said that money is always changing its value. For if a man had money and

no clothes, the money would have less use value to him relative to clothes than if he had an abundance of the latter. And the continual variation in market prices may be regarded as the effect of the continually varying relation in the use value of commodities to buyers and sellers respectively as compared with that of the money paid for them.

Whether the wealth value of the money unit is invariable or not it is in practice assumed to be so and no better measure of wealth has ever been invented or discovered.

Wealth value is not co-extensive with use value; for the latter may exist without giving rise to the former. As for instance, air has great use value, but no wealth value. The quantity of air is unlimited; it is not the subject of ownership and therefore cannot have exchange value. If a thing is wanted or needed and can be had for nothing it has no wealth value. And if a commodity is excessively abundant its wealth value becomes small per unit of quantity. A thing which is not wanted at all, has no value. Wealth therefore does not consist in an abundance of useful things,—unless they are wanted. Some people would not regard a great abundance of wooden shoes as wealth. And any amount of capacity to be useful no matter how great, has no wealth value and indeed no use value in the total absence of all want. If a race of anchorites should go naked, live in caves or holes and subsist upon roots and herbs, their wealth would be small although roots and herbs and holes in the ground might be abundant. If all men were like Diogenes there would be great utility in tubs and small utility in every thing else except sunshine.

Wealth value being the same as exchange value, its quantity and therefore the quantity of wealth is measured by and in terms of the value of the money unit. An abundance of commodities which are wanted and which sell for a high price constitute an abundance of wealth.

Besides value, there is another element in wealth, and that is ownership. There must be an exclusive right to possess and enjoy the object of desire. Water, air and sunlight have utility, but ordinarily no wealth or money value. Mineral water, gas-light and electric light have such a value, because they are property and admit of exclusive ownership. If a

man could get water and light by simply turning them on without any charge, their utility would be the same as if they had to be paid for. It is of the essence of wealth to be a monopoly. The seller has a supply of capacity to be useful, viz, a commodity, and his want is money; this belongs to the buyer who wants in lieu of it, the commodity. Every sale or exchange implies a right to make the transfer. The buyer would give nothing for an article which he could take without pay. The employer would not pay wages if the laborer was compelled to work for nothing. No one would pay interest, if capital could be had for nothing; nor would land produce rent if everybody was free to occupy it. Wealth value is a monopoly value; for nothing is wealth unless it is also property; and the exclusive command or possession of a thing is of the essence of property or ownership. In fact, the word wealth, is often used as synonymous with possessions and property (Webster). An article of property may lose its capacity to be useful, by use and wear, or decay, or other loss of its intrinsic properties; or it may become old stock, out of fashion, or otherwise lose its value by a change in wants or desires. In all such cases the article would still be property, but it would cease to be wealth if for any cause it entirely lost the element of value.

And the value of an object sinks unless it can be enjoyed in peace and security. Utility vanishes if a sword is suspended over the head of its possessor by a hair. It is related of the philosopher, Aristippus, that once he was at sea, and seeing a pirate ship at a distance he began to count his money, and then he let it drop, as if unintentionally, into the sea, and began to bewail his loss; but others say, that he said besides, that it was better for the money to be lost for the sake of Aristippus, then Aristippus for the sake of his money. Experience proves that a well regulated society is necessary for the existence of any considerable amount of wealth.

Such would seem to be a correct exposition of the meaning of wealth, utility, use value, exchange and money value as understood and in fact acted upon by men generally in their dealings with one another.

But in the science of political economy the true meaning of the above words or some of them has been a matter of dispute. Ricardo held that the value of a thing depends entirely

upon the "quantity of labor" employed in its production. He says, "Value essentially differs from riches; for value depends not on abundance, but on the difficulty or facility of production. The labor of a million of men in manufactures will always produce the same value, but will not always produce the same riches." * * * "It may be said, then, of two countries possessing precisely the same quantity of the necessaries and comforts of life, that they are equally rich, but the value of their respective riches would depend on the comparative facility or difficulty with which they were produced."

According to this idea a gold mine might be a bonanza and contain great riches, but, if easily worked, would be of little value, while a poor one found and worked with great labor, would contain a small amount of riches but a great amount of value.

And this writer also says "Many of the errors in political economy have arisen from errors on this subject, from considering an increase of riches and an increase of value as meaning the same thing, and from unfounded notions as to what constitutes a standard measure of value. One man considers money as a standard of value and a nation grows richer or poorer, according to him, in proportion as its commodities of all kinds can exchange for more or less money. Others represent money as a very convenient medium for the purpose of barter, but not as a proper measure by which to estimate the value of other things; the real measure of value according to them is corn, and a country is rich or poor according as its commodities will exchange for more or less corn." * * * "That commodity alone is invariable which at all times requires the same sacrifice of toil and labor to produce it. Of such a commodity we have no knowledge, but we may hypothetically argue and speak about it as if we had; and may improve our knowledge of the science, by showing distinctly the absolute inapplicability of all the standards which have been hitherto adopted. But supposing either of these standards to be a correct standard of value, still it would not be a standard of riches; for riches do not depend on value. A man is rich or poor according to the abundance of necessaries and luxuries which he can command; and whether the exchangeable value of these for money, corn, or

for labor, be high or low, they will equally contribuse to the enjoyment of their possessor."

Another author of great authority (Malthus, Chap. 2, Sec. 5) takes issue with Ricardo upon his proposition that the quantity of labor which a thing has cost in its production is a measure of real and relative value. And he also criticises another great authority (Chap. 2, Sec. 4) as follows: "Adam Smith in his chapter on the real and nominal price of commodities, in which he considers labor as a universal and accurate measure of value, has introduced some confusion into his enquiry by not adhering strictly to the mode of applying the labor which he proposes for a measure. Sometimes he speaks of the value of a commodity as being determined by the quantity of labor which its production has cost (Ricardo's view) and sometimes by the quantity of labor which it will command in exchange." (Malthus' view).

According to these views, if a thing cost its owner no labor but would exchange for something which cost great labor,—as for instance, if a man found a diamond and exchanged it for a large sum of money—then according to Ricardo, the diamond would have no value because it cost no labor; but according to Malthus the diamond would have great value because it would command in the exchange the great amount of labor represented by the sum of money exchanged for it. On the other hand, Ricardo would consider the sum of money exchanged for the diamond as having great value, because it cost a large amount of labor to produce it, whereas, Malthus would say that the sum of money had no value, because the thing for which it was exchanged, *i. e.*, the diamond, cost no labor.

Adam Smith (Book 1, Chap. 5) says, "Labor is the real measure of the exchangeable value of all commodities; the real price of everything is the toil and trouble of acquiring it; also, labor never varying in its own value is alone the ultimate and real standard by which the value of all commodities can at all times be estimated and computed; also, equal quantities of labor are always of equal value to the laborer."

Hence, a pair of shoes made by a shoemaker for himself which pinch his feet, or a coat made by a tailor for himself which binds under the arms and wrinkles in the back, or a pair of pants which are too short and bag in the seat and in

the knees, depend solely for their value to the laborer or maker, upon the quantity of labor bestowed upon them. The amount of utility to the maker embodied in the above shoes, coat and pants, in each case, is measured by the number of units of labor, *i. e.* of toil and trouble, laid out upon them respectively. And the exchangeable value of a thing badly made, is or ought to be the same as if well made, provided, equal quantities of labor were expended in the two cases. And also, of two farmers, if one by absence of cheat, blight, rust, flies, insects, or by good luck, superior skill, or better quantity of land, raised forty bushels of wheat per acre, and the other with the same amount of toil and trouble raised only twenty bushels per acre, then by this ultimate and real standard, the twenty bushels, although of an inferior quality, would be of equal value with the forty. Or, in mining, if one man produced twice or any number of times as much gold, silver, copper, iron, or coal as another by the same amount of labor, then the smaller quantity is of equal value with the larger. A lump of gold, or other valuable, casually found and picked up would be rated at one price, and the same quantity obtained after great toil and trouble at another. Hogs fattened upon grain would be worth more, although the pork was no better, than if they had run in the woods and fattened themselves upon acorns, beech nuts, etc. Furs would be worth more, if the animals were raised by hand, then if shot wild in the woods. Water ought to be worth less to a thirsty man if it burst spontaneously from the earth, then if distilled drop by drop out of some solution. A great invention or discovery would be worth nothing, if it were the result of a lucky accident, or of a sudden and happy stroke of genius, but would be of great value, if it were the result of the labor of a lifetime. The more labor expended upon a thing the greater its value.

According to this theory, in order to measure the real and relative value of all commodities, a unit of toil and trouble is required. What are equal quantities of labor? How much of the unit would be toil and how much of it trouble? How do they compare with each other? The more it troubled a man to work, the more trouble would be undergone in a unit of time. This might arise from the sun shining hotter at one time than at another, or from sickness or ill health, physical

or mental weakness, laziness or hardship peculiar to the occupation.

It has been thought that labor, or toil and trouble, may be regarded as having two dimensions or modes of varying in regard to quantity: its duration and its intensity. Therefore, if a laborer began work at sunrise, the amount of toil and trouble undergone for the first hour of labor would be a certain quantity which might be represented by the area of a rectangle of which one side would represent duration, *i. e.* the unit of time, one hour; the other side would represent the intensity of the toil and trouble for the first hour as above. As the sun rose higher and higher and shone hotter and hotter the intensity of the toil and trouble undergone for each succeeding hour would increase. This would increase the area of the rectangle for each succeeding hour by the continual lengthening of the line representing intensity. This line would also increase in length if the dust began to fly, and also it would increase as the day wore on, from weariness from the continuance of the toil. Hence it is evident, geometrically, that the amount of toil and trouble would increase continually. And hence the value of the labor would be much less for the first hour when the sun was low, the weather cool and the laborer fresh and unwearied, than it would be at mid-day or during the heat of the afternoon. The more toil and trouble, the more value produced

In constructing the rectangles, a unit of length, say one foot, could be taken to represent the unit of time, one hour, and such line might be made the base of the rectangle, then its altitude would be the line representing intensity. How long shall this line be? It has no definite relation to the one representing duration: Therefore, suppose it is also assumed to be of a certain length for the first hour of labor, as say one foot. Then a square foot of area represents the amount of toil and trouble undergone by some specified laborer for the first hour of labor, and therefore also represents the "ultimate and real standard" of value. Now for the second hour if the laborer exerted the same amount of energy as for the first hour, it would hurt him more, the same amount of toil would cause more trouble, as above indicated. Therefore the altitude of the rectangle for the second hour of labor would be greater than for the first hour, owing to the increase in intensity.

But how much? No one could say. Nor could physical and mental labor be compared, and the rectangle of each constructed. And yet if labor, or toil and trouble, is the ultimate and real standard of real and relative value, economics fails as a science, unless a unit of toil and trouble can be constructed so as to measure the quantity of toil and trouble undergone by a man physically strong and mentally weak, or the contrary, or strong in both respects, or weak in both; and also as between men, women and children; and in different occupations involving different degrees of hardship.

In socialism, the unit of wealth and value, is labor for the period of one day of social labor time. The total annual production divided by the total number of social labor days required to produce it, gives the product due for the labor of one day. A certificate issued for one day's work draws the proper amount of product due therefor from the public warehouses. These certificates are the money of socialism (Shaffle, Quintesence of Socialism). The unit of labor or toil and trouble, is measured only by duration, and not at all by intensity. It is arbitrarily assumed, that work for one day of social labor time always covers an equal amount of toil and trouble, and therefore is always of equal value. Consequently all are paid alike, men, women and children. This unit of toil and trouble is an average. No allowance is made for superior ability, physical or mental, nor for superior knowledge, skill, diligence, dexterity, etc. Idleness, ignorance and stupidity are at a premium. Only the average worker gets his deserts. The man or boy who blows the bellows and pounds on the iron with the sledgehammer, draws the same pay as the skilful blacksmith who turns the metal into shape. One pair of shoes badly made by an idle, careless and unskilled workman has the same value in socialism as two pair well made in the same time by a diligent, careful and skilled workman. Stale vituals, decayed fruit, spoiled meat, mouldy shoes and moth eaten clothing have greater value in socialism than fresh stock produced and warehoused with less labor measured as above.

But if wealth consists of utilities, its amount is measured by the amount of utility; and therefore, it is immaterial to the existence of wealth and its amount, what may be the source of the utility, and if derived from any source or process in which labor took a part, the amount of utility determines the value

of the labor and not the contrary. Labor no matter how great, which produces no utility, is of no value. And the common practice is to measure the value of labor by measuring the value of its product. If the quantity of toil and trouble expended upon the pyramids could be measured, it would furnish no measure of their value. But "quantities of toil and trouble," if of any practical value, have not yet been measured or found measurable. Therefore, socialism proceeding upon the theory that labor is the sole source of value, adopts an arbitrary unit. Whereas it hurts a lazy man much more to work than one who is naturally industrious, and also it hurts a child more to work than a grown person; yet socialism would pay a lazy man or a child, no more than one who would rather work than not. And labor unions are imbued with a similar idea; the unpopular man is the one who can "best" the average worker.

If equal amounts of utility are produced by the same operative, or by different ones, during equal periods of time, then, and in such cases only, equal quantities of labor as measured by equal periods of time may be said to be of equal value. If any labor exerted, produced value, then it might be created by carrying a pile of stones back and forth, and enterprises which end in failure ought to end always in success. Any labor which is so ill directed that it produces only a small amount of utility, is only of small value. The laborer who makes an excavation by carrying out the dirt in a basket upon his head, cannot expect the same pay as one who is expert with the wheelbarrow. And the farmer who is a bad manager will not reap the same profit as another who never makes a stroke amiss.

Also, it is the consumer who measures the utility after it is produced. The producer cannot compel him to pay more for homespun, because it cost more labor, than for fine goods, which cost less. If the supply of an article is in excess of the demand, its value declines, because there is a dearth of want. And the laborer who would insist upon producing a commodity which is no longer wanted, needs either a factory for the production of wants, or a law to compel others to use the article, whether or no. Perishable articles as fruits, flesh, fish, etc., if in excessive supply, are forced upon buyers only

at their own price. And old stock and goods out of style, or not wanted, share the same fate.

The doctrine that equal quantities of labor are always of equal value to the laborer might apply, if he were his own customer. Then he could measure the amount of his toil and trouble and the value of the product to suit himself. On one side he might figure up the pain and sacrifice caused by the toil and trouble, and on the other side the zest and relish which labor gives to appetite. But he cannot sell his product upon the basis of his own keen appetite, nor upon that of the toil and trouble which conferred it.

II.

DIFFERENT KINDS OF WEALTH.

Since nothing is wealth unless it is also property, therefore, wealth consists of all kinds of property which have a money value.

Property consists of things and rights to things; and the things may be corporeal or incorporeal. The word property is applied not only to the thing, but also to the right to it. As for instance, a horse may be property, and so also the right to it, whether absolute or qualified. The right to use the horse for a limited time is property, as well as the entire ownership.

The word wealth has been loosely used after the same manner. As commonly used it refers to the things which have or possess utility, but it has also been defined as consisting of utilities.

By referring to the law of property, it is to be noticed in the first place, that there are certain personal rights which are of great value and are either essential or very material to the enjoyment of wealth, but which are not ordinarily classed under that head. These are:

1. The right of personal security, which consists in a person's legal right to his life, limbs, body, health, reputation and opinions.

2. The right of personal liberty, as defined by law.

3. Sundry other personal rights, such as to have the benefit and protection of the laws, bear arms, vote, etc.

Some of these are of inestimable value to the possessor, as the right to life. And the law awards as an equivalent for a loss or injury to any of them, damages in money against the

wrongdoer. The usual remedy at law is damages estimated in money. All property is valued in the law for all purposes in terms of the money unit; legal value is money value.

And any person has the right to labor at any lawful calling, if he sees fit to do so. Time and labor expended therein is wealth, if it has a money value. And an action lies for work and labor done for another at his request, to recover its money value. In this country, provided a man supports himself and his family, he may work or not, as he chooses. If he prefers poverty in ease and idleness to any degree of opulence which might be won by industry and frugality, he is in no way bound to spend his life in the pursuit of wealth, or to mount any treadmill, socialistic or otherwise, organized for its production.

At the same time it is provided in the statutes that vagabonds, idle and dissolute persons who go about begging, persons who use any juggling or unlawful games or plays, runaways, pilferers, common drunkards, common night-walkers, lewd wanton and lascivious persons in speech or behavior, common railers and brawlers, persons who habitually neglect their employment or calling and do not provide for themselves or for the support of their families, and all other idle and disorderly persons, including those persons who neglect all lawful business and habitually misspend their time by frequenting houses of ill fame, gaming houses or tippling shops, may be confined in the county jail, or in the workhouse if there be one, or house of correction if there be one, or fined, etc. Society is not at present organized in favor of any such persons.

In addition to the above, there is also:

4. The right of property, which consists in the free use, enjoyment and disposal of a man's lawful acquisitions without any control or diminution save only by the laws of the land.

These lawful acquisitions are:

a. Land.

b. Personal chattels in possession, as goods, movables, moneys, etc.

c. Things incorporeal, as offices, franchises, annuities, patents and copyrights, credits, just claims, etc.

Not only lands and goods, but also gainful offices, valuable franchises, such as the right to construct and operate a rail-

road or telegraph line, valuable patents and copyrights, stocks, bonds, negotiable paper, bank accounts, just claims for money due and the like are all wealth in common estimation. Offices of trust not gainful, worthless franchises patents and copyrights, bad debts and other items of property of no money value are not accounted as wealth. Some things so considered may not be assignable at law, as balances due on open account, just claims unsettled, offices, etc., but their money value can be estimated by other modes than transfer.

The rights of personal liberty, personal security and private property are defined in the law with great detail and precision. Every person is required to so conduct himself and use his own as not to injure another. Everyone is entitled to pursue any lawful calling upon his own terms, and all combinations to dictate by force or threats either wages and who shall earn them, or the prices of products and who shall produce them, are alike unlawful.

But the law sanctions and protects the monopoly which every man has in his lawful acquisitions. And wealth invested in land is equally entitled to protection with wealth invested in any other kind of property. And the man of property is equally entitled to protection as if he were poor. Poverty, if honestly come by, is no disgrace, but it merits no reward. Indeed, both human and divine law favor the diligent and frugal man, whether he be rich or poor.

It is said (2 Kent's Com. 331) "Every person is entitled to be protected in the enjoyment of his property, not only from invasions by individuals, but from all unequal and undue assessments on the part of the government. It is not sufficient that no tax or imposition can be imposed upon citizens but by their representatives in the legislature. The citizens are entitled to require that the legislature itself shall cause all taxation to be fair and equal in proportion to the value of property, so that no one class of individuals and no one species of property may be unequally or unduly assessed." And in Lowell v. Boston, 111 Mass. 454, after the great fire in Boston, the power of the state to tax in order to lend out the moneys to persons who had suffered by the fire was denied.

The exercise of the right of eminent domain is in the nature of a compulsory purchase, and the property taken, must be paid for. Usually in such cases, when the public use

ceases, the property reverts to the private owner. But the absolute title may be taken if the statute so provides.

For the taxes which one pays, and the other public burdens which he assumes in common with the rest of the community, he receives from the government the protection and benefit of its laws. Cooley's Const. Lim. 559.

To attempt to confiscate any private property under the form of a tax would be evidently illegal and void.

III.

FALSE DEFINITIONS.

As the money test of wealth is evidently the true one, it might be reasonably supposed that the science of wealth would accept of it as a basis, and thereupon treat of the different kinds and their quantity, and of the nature, causes and amount of their value. But this science is usually called political economy, and properly so, for its aims are more political than economic. One inference derived from it has been that dynamite is needed here as well as abroad; and its advanced teachers propose "to dress the commonwealth and turn it, and put a new nap on it."

This science ignores the proper meaning of the word wealth as above given, and adopts one of its own. Thus (Mill, Book 1, Chap. 3) "Productive labor means labor productive of wealth. We are recalled, therefore, to the question touched upon in our first chapter, what wealth is and whether only material products or all useful products are to be included in it." * * * "I shall, therefore, in this treatise, when speaking of wealth, understand by it only what is called material wealth, and by productive labor only those kinds of exertion which produce utilities embodied in material objects." According to this author, wealth alone consists of "utilities embodied in material objects as the product of labor." And this definition is taken as the basis for a treatise, assumed to be scientific and exhaustive, upon the "Principles of Political Economy with Some of Their Applications to Social Philosophy." Another treatise, less covert in setting forth its object and purpose, and styled "Progress and Poverty," expresses the above definition as follows: "Wealth is labor impressed upon matter in such a way as to store up, as the heat of the sun is stored up in coal, the power of human labor to minister

to human desires." The same definition, in substance, is adopted in various standard works upon this science, by treating the subject under the heads of the production, distribution and consumption of wealth; or of production and distribution. This method of treatment implies that wealth consists only of such things which are produced, distributed and consumed, or at least produced and distributed. This is the definition actually adopted in such treatises, although another or others may be mentioned, only to be afterwards disregarded and cast aside.

According to the above definitions, all corporeal property having any utility or value which is not the product of labor is not wealth in respect of any such utility or utilities; also, all incorporeal property having utility or value, whether it be the product of labor or not, is not wealth. The result is that the following items of property are not wealth, according to the above false definitions, although commonly supposed to be so:

1. Land in its natural state (*i. e.* unimproved, or, if improved, then exclusive of the improvements thereon), even if located adjoining to or in the heart of a great city.

2. All natural products, as diamonds and other gems, lumps of gold, silver, copper or other metal, mines or deposits of any of them or of their ores, or of coal, petroleum, natural gas, slate, marble, etc.; also grass, timber, wild fruits, etc.

3. All useful products not material; all incorporeal things and rights to things; all bonds, stocks, bank accounts, credits, offices, franchises, annuities, patents and copyrights. Any paper or other material evidence of any of these rights is not to be confounded with the rights themselves. The right to receive fifty thousand dollars a year as president of the United States is not wealth, as above defined.

None of the above items are the material products of labor; they are not produced, distributed and consumed. An inventor or author may create a useful product, but it is not a material product, and therefore is not wealth; it is a figment of the brain and immaterial. The laborer who makes, as directed, the newly invented machine, or who embodies, as directed, a utility in a material object by employing the new process, is the productive laborer; his product is wealth, the

patent right is not; and so also, the printed book is wealth, the copyright is not.

Now there are not two kinds of wealth; one as above defined and which might be styled political economy wealth, and another which would include everything considered to be wealth in general and legal estimation. The things above specified as being excluded by the definition from being political economy wealth, are exchangeable with the material products of labor and are assessed and taxed along with them; therefore the distinction attempted to be made between political economy wealth and other kinds is not perceptible to the common mind. Only those who propose to make the laborer the sole source of wealth, and especially the wage laborer, and to denounce all kinds of property excepting the material products of labor as spurious or false wealth, would adopt a definition so manifestly untrue.

It has been already stated that it would seem to be immaterial to a correct definition of wealth whether it was applied to the things having or possessing the utilities, or was applied to the utilities themselves. As commonly used the word wealth is understood to refer to the things, and their utilities are referred to under the head of value. Used in this way the word would include all utilities possessed by material objects, whether embodied by labor or not, and also all utilities possessed by things incorporeal, as already stated. As to political economy wealth, or those utilities only which are said to be embodied in material objects by labor, it becomes necessary to define labor.

The ordinary meaning of labor is (Webster) "Physical toil or bodily exertion, especially when fatiguing, irksome, or unavoidable, in distinction from sportive exercise; also intellectual exertion, mental effort." And in political economy (Mill, Book 1, Chap. 1), "Labor is bodily or mental; or, to express the distinction more comprehensively, either muscular or nervous; and it is necessary to include in the idea not solely the exertion itself, but all feelings of a disagreeable kind, all bodily inconvenience or mental annoyance connected with the employment of one's thoughts or muscles, or both, in a particular occupation." This seems similar to what is called by Adam Smith, toil and trouble. Another author (Cairnes, Chap. 4) says: "Considering labor as an element of the cost

of production, the principal remark that seems called for, is that in estimating it in this character, three circumstances and three only, must be taken account of, namely, the duration of the exertion, the degree of its severity or irksomeness, and the risk or liability to injury of any kind attending it. As commodities differ greatly more in the duration of the exertion, or the quantity of the labor required for their production, than in the severity of the labor or the risk attending it, the former is obviously the most important circumstance in the case, and it was to it alone that Ricardo, in his analysis of cost, had regard; but manifestly his exposition was in this respect defective. The labor employed in producing different commodities differs in severity and in liability to accident, as well as in mere quantity, and, in proportion as it is more severe or more liable to accident, implies other things being the same, a greater sacrifice, and therefore a larger cost. This greater sacrifice will require greater compensation, which, as in other cases, can only be furnished from the value of the product. Commodities, accordingly, will exchange—if we confine our attention to the labor element of cost—not simply in proportion to the quantity of labor employed in their production, but in proportion to this multiplied by the severity of the labor or the risk attending it. When, however, we have taken account of the quantity, irksomeness and risk, we have taken account of every incident in virtue of which labor is an element of cost of production, and affects through this principle the value of commodities."

It thus appears that labor in political economy is taken in its ordinary sense, as being simply human exertion, physical or mental, or both, and it includes nothing else. The author last quoted, in measuring its value would take into consideration its duration and intensity, and the risk attending it.

And it is also to be observed that labor exerted, no matter how great its quantity or duration, its intensity and the risk attending it, goes for nothing unless a utility is embodied by it. For wealth as above defined consists of utilities embodied. Therefore no matter how great the sacrifice, if there is no resulting utility, the labor has earned no reward. Mere labor is not wealth, but the utility embodied by it, if there is any. In the early days of gold mining in California, a party of men

carried a large ditch for many miles and found at last that the intended outlet was higher than the source.

Labor signifies merely the human machine exerting its energy in work. If well fed and cared for, it would exert its maximum power in a certain period of time. Therefore the same man, if savage or entirely ignorant, can exert as much labor in a specified time as if he were the most knowing and skilful of men. Different men and different races of men, equally ignorant, would differ in the amount of work done by them, in consequence of the difference existing between them in physical and mental powers.

Now labor by itself cannot create wealth, for it does not know what utilities to embody, nor how to do it. These require knowledge and skill either in the laborer, or in his employer or director. To know what utilities to embody and how to do it requires knowledge. Skill or familiar knowledge united to readiness of performance enables labor to embody the utility as directed by knowledge. Labor is one thing and knowledge and skill another, and the two are to be kept separate and separately considered, for the labor may be furnished by one person, and the knowledge and skill by another, or others.

Labor knows nothing; it is simply force exerted by the human mechanism. "He (man) has no other means of acting on matter than by moving it. Motion and resistance to motion are the only things his muscles are constructed for. By muscular contraction he can exert a pressure on an outward object, which, if sufficiently powerful, will set it in motion, or if it be already moving, will check or modify or altogether arrest its motion, and he can do no more." * * * "Labor, then, in the physical world, is always and solely employed in putting objects in motion; the properties of matter, the laws of nature do the rest," (Mill Book 1, Chap. 1). Labor has the same relation to utilities as other forms of energy. The man or the machine that can create, modify or arrest motion and do no more, stand upon an equal footing. Both require an employer and director to set them in motion in the right direction and for the right purpose and arrest their motion at the right time. Labor, which of itself does not know what to do or how to do it, is not the source of all wealth.

Knowledge directs labor to put the seed into the ground and how to produce and gather the crop; how to make the axe and use it; how to separate the tree into planks and convert them into a table or house; how to apply fire to fuel, cook food, soften or melt iron, convert into beer or sugar the malt or cane juice, to generate steam, and generally to take command of the powers of nature and make them the servants of man.

The steam vessel, the workshop or manufactory with all its tools and appliances, the railroad, bridge, house, and even the simplest tool, must all exist in idea before they do in fact. In order that a house may not be a heap of rubbish, it must have a designer. He furnishes the plans and specifications to the smallest detail. These skilled labor, under the direction of an employer and waited upon and assisted by common labor, follow, and the house becomes a fact. But although perfect in every part, it must be suited to its locality and to the purpose intended. A business house built in some secluded spot or even on the wrong street in a city, might be worth less than the original value of its materials. The bridge, if well made and strong enough to sustain itself and its load, must not be too short for the span. If a tunnel is to pierce a mountain, it must be of the proper size and run in the right direction. If work were carried on at both ends and the two parts failed to meet each other, where would be the utility? Labor alone could not have built the Brooklyn Bridge if it had had an unlimited command of land and capital. Among the requisites of production are knowledge and skill. They lift the savage into the civilized man. They know how to run the machinery of production and how to make the machinery and the machine that makes it. They can endow the machine with almost supernatural intelligence and power. The telephone reproduces the voice of the absent; the phonograph calls up the voices of the dead. The locomotive finds its way in darkness as well as daylight and steers itself. The power loom weaves carpets, cloth, shawls and lace in beautiful and complicated designs. Knowledge includes the knowledge of wants as well as of the means to gratify them. It varies the product and avoids the production of unsaleable goods. It preconceives the designs and aided by skill adorns the goods with beautiful

colors and figures, and gives to them a style and finish which commands the customer.

It is said (Progress and Poverty), wealth is labor impressed upon matter in such a way as to store up the power of human labor to minister to human desires. Hence the labor must be so stored up as to answer to the desires. This requires an educated and directing mind, either in the laborer himself, or in some other person who is his employer. In the latter case, the employer is the author of the utility and the laborer is merely one of his tools. Ignorant labor cannot decide whether electric wires should be strung overhead or put under ground, nor how much current they can safely carry, nor whether it ought to be alternating or continuous.

In a common text-book of political economy (Wayland-Chapin) it is said, "The original source of wealth is the bounty of God in nature, and the secondary source is human labor exerted to bring forth the bounty of nature in form, in time in place suited to the desires of men. This gives the right of possession, which controls the gift of nature and the added utility imparted by labor." Without knowledge and skill, human labor can do nothing of the kind. It is only under their direction that the bounty is brought forth in form, time and place so as to be suited to the desires of men. Before the entire title to wealth is vested in labor it needs a precise definition. And when correctly defined, human labor stands in the same category with that of other machines, unless it is combined with enough knowledge and skill to run the senseless machine.

The most important product is educated and skilled labor. It can be its own employer. It is sought after and paid high wages, and it often dictates its own price. Not so with ignorant labor; it must advertise for work and do what it is directed to do. Among laborers, so called, there is no equality; first, are the inventors and discoverers who enlarge the bounds of knowledge, alleviate toil and heighten or multiply enjoyment; next are all kinds of educated and skilled labor; and as labor becomes more physical and less mental, it sinks in the scale. The skilful carver in wood and stone stands below the designer, but above the carpenter or stone mason, and the latter above the man who mixes the mortar or carries the hod. A utility, being a relation between a want

and a capacity to satisfy it, is not the result merely of toil and trouble, sweat and sacrifice; nor is its amount measured by them alone. In socialism, however, ignorance expects to bear sway and put knowledge and skill at a discount. The former proposes to average up and to average the latter down. In that state of society, the employees propose to employ their employers upon a level basis of equality and fraternity.

The father of the science of political economy says (Adam Smith, Book 1, Chap. 8), "The produce of labor constitutes the natural recompense or wages of labor. In that original state of things which precedes the appropriation of land and the accumulation of stock the whole produce of labor belongs to the laborer. He has neither landlord nor master to share with him."

But labor, if ignorant and unskilled, may starve upon its entire product.

In the original state of things, the North American Indian was always upon the verge of starvation when he had about two square miles of land for himself and each member of his family and the sea to fish in besides. The African savage pays gold and ivory for glass beads; he could not make them if all the materials lay heaped together at his feet. The English take cotton from India to England, manufacture it into cloth at wages many times greater than the rate in India return the goods and undersell the native workman who labors for a mere handful of rice per day. The Hindoo, working for eight cents a day and boarding himself, executed earthwork by carrying out the material in a basket upon his head. When furnished a wheelbarrow, he sought to put it upon his head also. Labor, of itself, does not know enough to trundle a wheelbarrow. And indeed it seems that the human mind was too stupid to invent one until its invention by Pascal (E. About).

When New England was first settled, the total number of Indians within its limits were from thirty to fifty thousand divided into a number of hostile tribes. They could have hardly subsisted at all, without the possession of a certain amount of knowledge and skill. They lived in huts (wigwams) made of bark or mats, laid over a frame work of branches of trees stuck in the ground. Their habitations were removed from time to time when the location became too filthy even

for an Indian. Their furniture was vessels of basket work, baked earth, hollowed wood or stone, with mats and furs for hangings and for couches. Their food was fish, game, nuts, berries, roots, Indian corn, squash, pumpkin, a species of bean and one of sunflower having an esculent tuberous root. They had no salt, nor bread, and no drink except water and in its season the sap of the rock maple tree. They had tobacco. Their tools for husbandry were a hoe made of a clam shell, or a moose's shoulder blade fastened to a wooden handle. Fish were taken with lines or nets made of the twisted fibers of the dogbane or of the sinews of the deer. Hooks were made of sharpened bones of fishes and birds. The axe, hatchet, chisel, and gouge were of hard stone brought to an edge by friction upon another stone. The helve of the axe or hatchet was attached either by a cord drawn tight around a groove in the stone, or being cleft while still unsevered from the tree, it was left to grow until it closed fast around the inserted tool. Bows were strung with the sinews and twisted entrails of the moose and deer. Arrows and spears were tipped with bone, with the claws of the larger species of birds, or with artificially shaped triangular pieces of flint. Besides the stone hatchet, as a weapon of offense, was the tomahawk which was merely a wooden club two feet or more in length, terminating in a heavy knob. Boats were made of birch bark, or of a log, hollowed out by fire and by the application of rude stone tools acting upon the charred surface. Their clothing was undressed skins of deer or other wild animals for winter attire; in summer, the men wore about the middle only a piece of deerskin from which the hair had been removed by friction. Moccasins reaching above the ankle, of thin dressed deerskin or of the moose's skin, afforded protection to the feet. Their personal ornaments consisted of greasy paint laid in streaks upon the skin; of mantles and headgear made of feathers; of earrings, nose rings, bracelets and necklaces of bone, shells, and shining stones, and pieces of copper, sometimes in plates sometimes strung together. (Palfrey, His. of New England.)

Such is the inventory. The Indian had no landlord nor master to share with him, and paid no taxes. But they were liable to be killed and sometimes eaten by their enemies.

In contrast with this, in 1880 another race of people in-

habited New England and their numbers were 3,810,523. Their wealth pro rata would compare very favorably with that of their predecessors. This latter population and wealth grew up under the rules of order and law, the appropriation of land, the accumulation of stock and the payment of agreed wages The afflicted together with the dependent paupers supported by public charity equaled the total number of the Indians as above given. And if any pauper had been dressed in summer with a strip of deerskin, a pair of moccasins, a headdress of feathers and a coat of earthy paint, and had been fed on corn and beans without salt, it would have been a case for the Humane Society. The Indian belonged to the stone age. He lacked civil institutions, personal rights and property rights limited and protected by law; and also, he lacked knowledge and skill. Without these, labor is naught. It took him over three weeks to make his boat out of a log of wood by the aid of fire and tools made of stone. And in that rocky soil a hoe made of a clam shell was of little avail.

In 1834, Mr. Murray, a Scotchman, visited America and after reaching Fort Leavenworth on the Missouri, he there joined a band of Pawnees who were going out upon the plains to hunt buffalo. He describes these Indians and their habits at length. His account of an Indian dandy, the son of a chief, may be summarized as follows: When there was no buffalo hunt, he began his toilet by greasing and smoothing his whole person with fat, which he afterwards rubbed perfectly dry, leaving the skin slick and glossy; he then painted his face vermilion, with a stripe of red also along the crown of his head; he then proceeded to dress his scalplock which was plaited into two pigtails; he then filled his ears, which were bored in two or three places, with rings and wampum, and hung several strings of beads around his neck, then sometimes painting stripes of vermilion and yellow upon his breast and shoulders, and placing armlets above his elbows and rings upon his fingers, he proceeded to adorn the nether man with a pair of moccasins, some scarlet leggings fastened to his waist belt and bound around below the knee with garters of beads four inches broad. Then having thoroughly examined himself and his toilet being arranged to his satisfaction, one of the women or children led out his horse before the tent, etc., etc.

Among the Pawnees, soap was an unknown quantity, and the use of water limited to drinking and cooking; therefore, where filth and lousiness (of two kinds) were extreme the utility of grease applied to the skin met a corresponding want, while red paint served for ornamental purposes, and a pocket mirror stuck in the belt which held up the warrior's breech clout and leggings, enabled him not only to admire his own beauties but also to locate his parasites.

Another definition has been given to natural wages, and apparently the opposite of that already given, namely, (Ricardo, chapter 5). "The natural price of labor is that price which is necessary to enable the laborers, one with another, to subsist and perpetuate their race without increase or diminution." This means labor as properly defined—not labor combined with knowledge and skill. It means labor proper, such as regards tools and machinery as its rival and enemy. This definition is in fact the same as the former one. Doubtless the North American Indian had inhabited the continent for ages: and the limit of their numbers had been reached. No more than a few thousand could subsist under the regime of natural wages, whether regarded as covering the entire product of labor or as only enough to enable the laborer to exist and perpetuate his species. The existence of a large amount of wealth implies the existence of a large amount of wants and of the means to satisfy them. These are the results of knowledge. The Pawnee's knowledge of wants was limited; he felt hunger and satisfied it by gorging himself with raw buffalo liver or meat; but he failed to know that he needed a fine toothed comb, soap, and many other things commonly thought useful.

IV.

THE SUM OF WEALTH.

In making out a tax list, the usual method is to set down the property of every person and corporation with its value in money and the aggregate is considered as the sum of wealth. Such an aggregate would be the sum of the national wealth, unless the public lands and other public property are also to be included. The climate, the rivers and harbors, the public highways, the character of the people, the laws and institutions of the country and the like, are sources of wealth; only property having a money value is wealth.

The quantity of the different kinds of property may be measured by weight, length, number, superficial area, or cubic contents, but their value is not measured in that way. Two acres of land, two yards of cloth, two cows, two pounds of tea, &c., may or may not be of equal value. One acre of land may be fertile, near market or otherwise very valuable, while the other might be wholly different. And so also different kinds and qualities of commodities may differ in value. And as to articles of the same kind and quality, the more abundant they become, the less is their utility per unit of quantity. If the supply of a useful object should exceed the demand, wealth would not continue to increase as the supply became more and more excessive. In the early days in Australia, mutton was worth nothing; the sheep were only valuable for their wool and tallow. And elsewhere cattle have been of no value except for their hides, horns, and tallow. In some parts of this country, when first settled, farm products have been so abundant as to bear nominal prices, and fruit left to rot on the ground. During the Mexican war, the country between the Nueces and the Rio Grande was full of wild horses, so that a horse was worth only a nominal sum. Gen. Grant, then a young officer lost three at one time; whereupon another officer remarked, when the fact was mentioned, "Yes, I heard Grant lost five or six dollars worth of horses the other day."

Things are measured, as wealth, by measuring their value. One thing is worth so much more or less than another; and, therefore, as wealth, is that much more or less than the other. This being true it is not correct to say (De Laveleye). "It is the abundance of commodities, and not their money value, which constitutes wealth. The greater the abundance of useful objects, the less will be their price and money value; but meanwhile wealth is increased." If the abundance is such as to exceed the demand, or if a thing whether abundant or not is not wanted at all, such abundance does not increase wealth. The increase would take place if the demand kept pace with the supply, otherwise not. It often occurs that a moderate crop measures more as wealth than a very abundant one. A superfluity loses its use value even to the consumer. Useful objects, so called, are not useful unless they are wanted; and the more they are wanted the more useful they become.

The author above quoted, also says: "The number and nature of rational wants varies with the climate and the state of civilization. It may be good to satisfy more and more wants, in proportion as the means of producing useful commodities are improved. Still it is not true, that the progress of civilization must be measured by the number of wants satisfied." "Ancient philosophy, as well as the Christian code, preached the moderation of wants, in accordance with the fine maxim of Seneca. "If you would make a man rich, you need not increase his wealth, but rather diminish his desires." This, in economic terms is the same as to say, if you would make a man or community rich, you need not increase the supply, but rather, diminish the demand. According to another view, (About, Say) "the most civilized man is he who produces and consumes the most." This requires a proviso; that he consumes less than his income. In the slave States wealth did not accumulate as it did in the free States, because there was no large body of consumers. If the mass of the people are educated and skilled laborers, then wealth abounds, because high wages cause a great demand. The Chinese in the Pacific States have had a similar effect upon their prosperity to that of slavery. Their industry is great, but their frugality is excessive; and enterprise languished for the want of an adequate demand.

Under the head of "false wants" and "false wealth" De Laveleye calls attention to the use of alcohol, opium and tobacco, and from the facts, says, "The highest part of the human race spends annually some £400,000,000 to poison itself in large or small doses." Also, "According to calculations made in the United States, in ten years, alcohol imposed on the country a direct expenditure of about £300,000,000, and an indirect expenditure of a similar sum. It has sent 100,000 orphans to the asylums, it has brought 138,000 persons to the prison or work-house, it has led to 10,000 suicides and has made 200,000 widows and 1,000,000 orphans." Alcohol and tobacco are largely consumed by those who make loud complaints about their poverty and about the unequal distribution of wealth.

In addition to the idiots, insane, paupers and criminals made so by the use or abuse of alcohol and the narcotics, if it were also known how much other poverty has been caused

by them and also by idleness, extravagance and other vices, some part of the tears shed by sentimental political economy over poverty and the unequal distribution of wealth might be saved. The science of wealth has been much studied; but the science of poverty has been neglected. There is no virtue in poverty, unless it was honestly come by. The feast to the prodigal son was a pure gratuity.

Since everything which the law tolerates and protects as property—whether it be poison or not—is wealth, if it has a money value, the sum of wealth includes all the different kinds of property estimated in money.

But it is said in political economy, (Walker) that property is a word with which it has nothing to do. This assertion implies that the right to possess and enjoy an object of desire is not an essential element in wealth, and also, that it consists of capacities to be useful regardless of the corresponding wants and desires and irrespective of the persons to whom the things may be useful. Following up this idea it is asserted (Progress and Poverty): "By the enactment of the sovereign power, debts might be cancelled and land resumed as the common property of the whole people without the aggregate wealth being diminished by a pinch of snuff." And in illustration of this doctrine it is said (Mill), "A mortgage for £1,000 on a landed estate may be wealth to the mortgagee but it is not wealth to the country. If the engagement were annulled the country would be no poorer nor richer. Speaking nationally, the mortgage is not itself wealth, but merely gives A. a claim to a portion of the wealth of B. It is wealth to A., but in fact is a joint ownership to the extent of £1,000 in the land of which B. is nominally the sole proprietor; also, stocks held by citizens in the funds of foreign countries and other debts due to them from abroad may be national wealth, but it forms no part of the collective wealth of the human race."

It is thus asserted that debts form no part of the "sum of wealth" or the "collective wealth of the human race," and that their cancellation would not alter the sum of wealth by a pinch of snuff. And the statement is illustrated and supposed to be proved by the case of a mortgage from B. to A. for £1,000. Now a mortgage is a mere incident to and security for a debt which is the principal thing. A mortgage

for £1,000 gives no joint ownership to A. in the land of B. to the extent of £1,000. Any tyro in the law knows this. So that at the inception of this debt there was £1,000 in money in the hands of B. and in the hands of A. there was a promise by B. to repay the money with interest at maturity, together with the mortgage as a security. The only two items, therefore, to consider in this typical illustration are the debt, and the sum of money loaned. Now the fact is that each of these two items are worth £1,000. The note or bill broker makes merchandise of such negotiable paper and it is readily saleable at par, and yet B. has the £1,000 in money. The present value of a debt due in the future bearing the customary rate of interest is worth its face, if certain to be paid; if uncertain, it is worth so much less down to nothing. Such is the fact, and if the debt were cancelled there would be a loss as great as if B. cast the money into the sea or otherwise destroyed it.

A man's credit is defined to be his reputation derived from the confidence of others (Webster); he is reputed to be a man worthy of trust and confidence. If his credit is great he need not give a mortgage or other security. Bankers are trusted with millions without security. In commerce, the freight or cargo is shipped and bills are drawn against the proceeds. The banker cashes these bills and other shipments are made. Without credit, the banker would not be trusted by his depositors, the shipper would not trust the consignee, nor the banker trust either of them. Without credit, the producer would not be trusted with any part of the means or machinery of production, and capital would not pay labor in advance nor labor wait for its pay until the work was done; without credit all the wheels of industry and commerce would stop at once. In this country the credit transactions done annually through the banks, amount to about sixty thousand millions of dollars. The credit transactions carried through clearing houses for the year ending Sept. 30, 1889, amounted to $54,494,754,586.00; of which only five per cent. was paid as balances in money. Add to this all other credit transactions done among the people.

The annulment of all debts would be the instantaneous and total destruction of all credit. And instead of the cancellation of all debts making no alteration in the sum of wealth, it would knock the bottom out of the collective wealth of the

human race. The word panic wholly fails to express the idea.

If wealth consisted only of "material objects," or utilities embodied in "material objects" as possessing capacities to be useful, then such things would be as much wealth in one place as in another; food contains as much nutrition and clothing as much warmth in the hands of the producer as in the hands of the consumer; coffee in Brazil or Java, tea in China, cotton in America, sugar in Cuba, wheat in Dakota, Australia &c., would measure as much as wealth, as they would in the hands of the consumer. And if wealth consists only of "material objects" then no debts are wealth, the above debt to A. for £1,000 secured by a mortgage was not wealth at all, not even to A. It was not a material product of labor; it is not distributed or consumed.

Credit exerted, gives rise to credits or debts; the credit being the right to demand payment at maturity; and the debt, the duty to pay at the time agreed upon. These cannot be balanced off against each other and the result called zero. Debts due in the future are not debts due now; they bear no weight upon the debtor until they mature. In the meantime events happen; the sun shines; the seasons follow one another; the crop ripens; the product is produced; the train arrives; the ship comes home; and wealth is created or enhanced while the debt is running to maturity. It is said (Mill, Book 3, Chap. ii.) "it (credit) cannot make something out of nothing. How often is an extension of credit talked of as equivalent to capital or as if credit were actually capital." Neither credit nor any human agency can create matter; but by his own definition wealth consists of "utilities" and credit can create and enhance them as well as any other form of capital. Credit can bridge over the time between seed time and harvest; the time between the raw material and the finished product; and the time and distance between the producer and the consumer.

Debts consist of "rights" and so also as to other "utilities." Of what utility is food without the right to eat it, or of clothing without the right to wear it?

In order to illustrate the nature of credit, instead of the above imaginary case of £1,000 between A. and B., take a real one. Dr. Franklin, when young and poor, having learned

the printer's trade, started a printing house with one Meredeth, whose father agreed to furnish the capital. But he failed to do so; and one hundred pounds becoming due they were sued and ruin was impending. Then two friends of Franklin offered to him all the money needed, but objected to Meredith. He was seen often drunk in the streets and playing low games in ale-houses. He was bought out, and Franklin installed as sole proprietor. The loans made to him were not even a lien upon the printing house; it was the sole property of Franklin. The debts, which could not affect Franklin until maturity, were worth their face, because they were paid in full; and yet Franklin had the printing house as his own property. His credit was "actually capital" to him, and it made him "something out of nothing." And it added to the sum of wealth; without credit the printing house would have been closed up and the types, &c., would have figured small in the sum of wealth when knocked into pi under the Sheriff's hammer. The rich bankers make millions out of their credit; and every man in business finds his credit as much a source of wealth to him as his monied or other capital.

It is asserted without proof and probably regarded as an axiom (Mill, Book 3, Chap. ii) that, "the same sum cannot be used as capital both by the owner and also by the person to whom it is lent; that all capital (not his own) of which any person has really the use, is and must be so much subtracted from the capital of some one else." Banks receive money on deposit payable on demand; they keep the money safely, take all the risk of counterfeits and all the trouble of counting and handling the money, and often pay interest upon the deposit in addition. Thus the depositor has a better use of his money than if it were deposited in his own till. He pays it out by checks upon his banker. At the same time the money has a great use value to the banker. He lends out a large per cent. of his deposits and thereby makes a great profit. The New York banks out of deposits amounting to about four hundred millions of dollars all payable on demand, lend safely as that much additional capital about three hundred millions of dollars and make a profit out of it at the rate of banking discount prevalent there. Credit enables "the same sum to be used as capital both by the owner and the person to whom it is lent." The element of time cuts a figure in a mass of

money all payable at once. It is not all demanded at once, and the new deposits counterbalance the sums paid out.

Credit is an engine of great power. In former times money was weighed, counted, and examined; credit has changed this. Money is paid out, deposited and handled in the form of checks and other instruments of credit. Who could otherwise count and pay over annually sixty thousand millions of dollars? Credit enables the bank of circulation to make a great profit by lending its own notes payable on demand without interest for the notes of others bearing interest; and the people have made a great profit by the use of their own notes (greenbacks) as money.

Production properly consists in bringing a capacity to be useful (a supply) within the reach of a want (the demand). And in every step of the process credit is an important element. It is quite essential in commerce, and commerce has enriched nations in all ages. The integrity of the honest and successful business man which makes his word as good as his bond and gives him credit often amounting to vast sums is a source of wealth to him and hence to the community. Credit is a potent factor in production whether it be called capital or not. If the word, capital, is restricted in its meaning to the material products of past labor, in order to furnish a basis for the assertion (Marx.) that capital consists of surplus labor value filched from the laborer, nothing is gained by it. Credit still continues to be an element in production, in spite of definitions. And credit, no matter how great, is a possession which was filched from nobody.

In this country, it is useless to assert that credit is not a source of wealth, or that bonds, stocks, bills of exchange, notes, and bank accounts, and other credits, patents, copyrights, land exclusive of the improvements thereon, mines or deposits of metals, minerals, coal, petroleum and natural gas, growing timber, grass, wild fruits, &c., are not wealth; or that nothing is wealth excepting the material products of labor. And it does not prove the correctness of such a definition to assert contrary to the fact, that if all debts were annulled and all credit destroyed and, indeed, all private rights wiped out, except as to such material products, that such a cataclysm would not alter the sum of wealth or the collective wealth of the human race. Utilities only exist in the pre-

sence of rights to possess and enjoy them, in the absence of which the utilities vanish and disappear.

If the existing state of society should be overthrown, it would be necessary to make out a new schedule of the items of wealth, based upon the subsequent and new order of things. And then, as now, the question whether a thing was wealth or not, would not depend upon a definition framed contrary to the truth. Nor could it be proved then, nor can it be proved now, that the rights of persons and of property as established by law are unequal, unfair and unjust by a false definition of wealth intentionally adopted for the purpose of an attack by stealth upon the settled order of things. What is in fact wealth now is one thing, what ought to be wealth is another.

In a state of anarchy, or barbarism the items of wealth and the number to share it are liable to be small.

And in the pastoral state two pious kinsmen, Abraham and Lot, were compelled to separate for the sake of peace and to find scope enough for each.

In any system of socialism or communism where all the land and capital may be owned by the State and everybody its tenant and hired laborer upon some fixed basis of rent and wages, the items properly included in the sum of wealth might amount to more or less than the total wealth existing under the present state of things. It is claimed (Progress and Poverty Book 9, chap. 4.) that land confiscation alone would bring about an enormous increase of wealth.

V.

THE OWNERS OF WEALTH.

Since wealth consists of property having a money value, its acquisition, enjoyment, and disposal are governed by the law of property; which law is an expression of the general opinion, founded upon experience, that the method or system thereby adopted is the one best suited to promote the general welfare.

But the science of political economy having defined wealth as consisting of utilities embodied in material objects by labor, when it comes to treat of distribution, sets up a tribunal of its own to try all titles to property and decide upon their merits.

As the material objects (land, raw material) exist before any labor is bestowed upon them, the laborer must acquire his title to them from some other source than his labor. In short, mankind did not make the earth, therefore, what title have they or any of them to it, or any part of it.

It is asserted in political economy (Mill, Book 2. chap. 2). "The essential principle of property being to assure to all persons what they have produced by their labor and accumulated by their abstinence, this principle cannot apply to the raw material of the earth. If the land derived its productive power wholly from nature and not at all from industry, or if there were any means of discriminating what is derived from each source, it not only would not be necessary, but would be the height of injustice to let the gift of nature be engrossed by individuals. The use of land in agriculture must indeed, for the time being, be exclusive; the same person who has plowed and sown must be permitted to reap; but the land might be occupied for one season only as among the ancient Germans; or, it might be periodically redivided as population increased; or, the State might be the landlord and the cultivators tenants under it either on lease or at will."

Since the raw material of the earth is not the product of human labor, a title to it must be derived from some other source. "Who is entitled to the raw material of the earth? The producer of it, without doubt. Who made it? God. Then, laborer, begone." If, however, a material object were a gift to the first taker or occupant as a reward for his labor in taking possession, then such title would be good as against all others having no title whatever.

But it is asserted that the raw material of the earth is the gift of nature to all men alike, and that it is the height of injustice to let such gift be engrossed by individuals. What are the evidences of such a gift? Why have not the rest of animated nature as good a right to live and enjoy the above gift as man? If to be born into the world implies a gift from nature of a right to life and the means to support it, why are so many kinds of animal life preyed upon by others? If every deer and rabbit that is born is entitled to life and a livelihood, what rights belong to the carnivorous animals? And if a lion, tiger, or crocodile, in order to sustain life, eats men or infants, is such food a gift of nature to them? Ac-

cording to nature, all her gifts are the reward of superior force and cunning. And the man who claims the live animal, fish, or reptile as the gift of nature to him, or as the product of his labor, has no better title than the man eating tiger to the captured Hindoo. By reason of his superior cunning man captures the fishes, who inhabit another element: not only for food, but also for mere sport. The gifts of nature do not appear to be based at all upon love, mercy, or any sort of sentimentalism. Well may the little bird sing in the tropical forest when daylight appears, and the hell beneath him has no longer, for that day at least, any further power to destroy him.

If man has a title to the earth as against the rest of animated nature, because of his superior force and cunning, then those who are superior to the rest in these respects have the best title. The red man, the negro, and all other savage or inferior races must and ought to give way to their superiors. And men of the same race are endowed by nature with very unequal powers both physical and mental, hence the so called "gift" was not made to all of them jointly and equally. If nature had otherwise intended, she would have made her gift effectual. She may have intended that every one should have the benefit of such natural or acquired powers as he, may possess; but there is no evidence that nature "gifted" the person who is physically or mentally weak, lazy, shiftless, improvident, extravagant, &c., with a right to demand from others an equal support and maintenance.

And the Scriptures fail to show that the dominion given to man over the earth and all its contents was made to all men equally or jointly. God promised to Abraham to give to his seed the land of the Canaanites; and after the flood an effort to proceed upon a communistic basis was defeated by the confusion of tongues. And later on it was said: Thou shalt not covet thy neighbor's house. For the imagination of man's heart is evil from his youth, and he would prefer to rob his neighbor of his house then to go out upon wild land and build one of his own. It was to furnish a pretext for such coveting that the above idea of a gift of nature to all men in common, was invented.

If, however, the earth really belonged to all men alike, and a tribe or race of men could by the implied or express consent

of all others, take and occupy a certain territory as their own, and as and for their share in the whole, then one man might do the same. Or, if such tribe or nation by force and fraud seized upon and held as their own a certain portion of the earth, and a division were once made among them, then the honesty which is supposed to reside among thieves, would require that such division should be ever afterwards acquisced in by the whole gang, including all new comers; for a society is a continuing body and remains the same although its members change continually. If a re-division were made every time there was a new number, no other business could be transacted. If that gang all died at once or were dissolved, then the next one could make any new or different arrangement which might be agreeable to them.

If every person, as soon as born, owned a life interest in an equal share of the earth, or only in that part of it which was held or claimed by his people, his share in every material object would be very small; and if he attempted, without the consent of the rest, as evidenced by some fundamental rules adopted by them, to appropriate to his own use any material object, as a diamond, gem, horse, cow, sheep, or any other thing, under the pretext that he wanted to embody in it utilities as the product of his labor or any other pretext he would probably be treated as a thief or robber. He would be compelled to conform to the scheme which had been already adopted and live according to it, until it was changed by the act of the majority, or of those who had the power to change it. It would avail him nothing to sling dynamite or otherwise express his disgust.

As to the scheme which ought to be adopted in such case, opinions have differed. Some have thought that everything should always lie open and subject to a general scramble where each one would have all he could obtain and retain. Something of this kind is seen in a new mining camp where every man goes fully armed and there is no other law, until certain rules are adopted in a miners' meeting to violate which afterwards is certain death. In such a rush for the grand bonanza, killing is a two handed game. Another scheme is to hold everything always in common. This is especially favored by those who have nothing, and love idleness. The case of Ananias and his wife is an authority against it.

Another plan would be "to nationalize the earth" or some certain part of it, lease it out in parcels to the highest bidder, and divide the net proceeds over the expenses of management, if there were any. This method is in practice in India where the people are kept by it at the starvation point, and the tax on land has to be supplemented by a tax on salt and perhaps other essentials, in order to raise enough to cover expenses. The plan adopted in socialism would be entirely inadmissable. According to that scheme nobody is entitled to anything unless he is a productive laborer; the usufruct of the earth and all production is divided among them exclusively. If all men are joint owners of the earth, each one is entitled to his share whether he works or not.

It is said by the social philosopher above quoted that "the person who has plowed and sown should be permitted to reap." Why so, if the field were not his own? If his labor necessarily absorbed as wages the entire product, then he might, for the field would be of no value to its owners. And if it took as much labor to raise the crop, as it was worth, whether it was large or small, then the tiller of the field might well be left to raise all succeeding crops. There would be no reason to oust him in order to let in another to undergo great toil and trouble, unless there was a profit in the land over and above all expenses And so also, as to any other kind of capital as well as land. What was the product of the man's labor, who cleared and prepared the field for cultivation? How could he receive anything therefor, if "the produce of labor (*i. e.*, the crop) constitutes the natural recompense or wages of labor" in raising it? If the field had been originally covered with valuable timber ought the man who cleared the field to be held liable for destroying such timber or converting it to his own use? The schemes suggested, by the above quoted economist, of occupying the land in succession for one season only, or by the cultivators as tenants of the State on lease or at will have never been practiced except among barbarians, or by despots ruling over serfs.

The father of political economy (Adam Smith) follows a different doctrine from the one above considered. He says (Book 1. chap. 8). "The produce of labor constitutes the natural recompense or wages of labor. In that original state

of things which precedes the appropriation of land and the accumulation of stock, the whole produce of labor belongs to the laborer. He has neither landlord nor master to share with him."

According to this doctrine, the earth, in the original state of things, belonged to nobody, neither as landlord or master, but belonged to the first occupant or possessor as "the gift of nature" to him, provided he could hold it The laborer measured the quantity of labor, which gave to him a title, in his opinion, to the produce of his labor. He claimed that he could cut down the finest tree in the forest, cultivate the most fertile spot, select the most eligible situation for his habitation, gather the best wild fruit, fish in the best place, kill or capture the best game, and generally appropriate everything which he could lay his hands upon. Taking possession, making his claim or otherwise spending toil and trouble about them to any extent no matter how small made all material objects his as his natural wages. But other laborers objected and raised disputes which were settled by the law then in force, to wit, that of the strongest and most cunning. In that original state of things, the right to life, liberty, and property all rested upon this law. Those who survived its operation were by way of natural selection considered to be the fittest.

In natural wages as above, the laborer is entitled to the whole produce whether the labor is great or small. Hence the act of taking possession and holding the material object was sufficient for the purpose. A runaway sailor picked up in Australia a gold nugget weighing twenty three pounds five ounces. That was enough to make the nugget his, as the natural recompense or wages of his labor. He brought its capacity to be useful within the reach of a want, and thereby embodied utility in it by his labor. All natural objects having a capacity to be useful when brought within the dominion of a want, whether by great or little labor, acquire a utility or use value; as, trees in the forest, wild fruit, grass on the plains, wild cattle, ore in the mine, &c. Otherwise a man's breakfast has no utility until he eats it; his clothes no utility until he puts them on: and his drink no utility until he pulls out the cork.

It thus appears to be the fact, that originally the laborer

acquired his title to the raw material of the earth and all material objects, either by a first possession, or by the robbery or theft of them from their first possessors, or, failing these, then by purchase. The survivors of such a state of things, after ages of cannibalism, slavery, and all kinds of violence and misery, gradually adopted certain rules whereby material objects became lawful acquisitions, which might be possessed, enjoyed and disposed of in the mode prescribed. Things became private property and their ownership a monopoly in the hands of their possessors and could be transferred from one to another by gift, grant, purchase or inheritance. As to things without an owner property can be still acquired in them by finding or a first possession; as, in hunting, fishing, &c. For the sake of peace, robbery and theft are no longer allowed as between private persons; it is piracy on the water and felony on land. That form of natural wages is now only tolerated among nations. America was discovered by, or for, the Spaniards; who claimed the whole of it upon that ground and also upon a grant from the Pope. The fact that the Indians had previously discovered it, was ignored. The title of the Spaniards to the parts still undiscovered, derived from the Pope, was disputed by other nations, although not heretics. The English soverign acquired a title by discovery deemed good as against other nations, to a large part of North America. And the British nation has been discovering additional territory nearly ever since, as, India, Burmah, Australia, Egypt, and the islands of the sea. The English, French and Germans have lately discovered nearly the whole of Africa.

Assuming the title of the United States to its territory to be good, since the Indians are nearly all dead, and the grant from the Pope the only outstanding title, it would seem that a patent for a quarter section of land to an individual, either as a homestead or for its price paid in money, ought to confer upon the grantee a title reasonably good, especially as against the grantors.

As mankind did not make the earth nor any part of it, no one had any title thereto, originally, except through a prior possession. Law, when established, recognized such title, and establishes and guards the bounds of private property. When its owners become the weaker party they will be liable

to be ousted by those who are stronger. In Africa the savages enslave and eat one another, and so it was also, in the matter of diet at least, among the aborigines in America. The Spaniards annihilated some races by subjecting them to a cruel slavery: and other nations were kidnappers and slave dealers more or less. At this time it would be considered among civilized men more humane to merely confiscate a man's property, by driving him off or killing him, than by reducing him to slavery or eating him. The English in Africa are wholly opposed to slavery, but are determined to have the land and other property.

If the earth belongs to all men alike, or to the stronger party only, then if one attempts to seize upon his share and is resisted by a previous possessor, the practice is to kill him. If one does a lawful act and is resisted, it becomes a case of self defense, which is always lawful. If this is not so, then it is not clear what right Europeans have in Asia, Africa, or indeed anywhere out of Europe.

If a laborer acquired a useful object in any way, his possession of it would enable him to exhaust it of all its utilities, natural or acquired. If he should cut down the finest fruit or other tree and use it for fuel, or to make his tools and weapons, or to build his habitation, he would exhaust it of all its utility; so also, if he gathered wild fruit and ate it. And if any one found or otherwise acquired gold, silver, copper, or other valuable and claimed it because of the labor exerted in picking it up and rubbing off the dirt, or other labor exerted in acquiring it, there would be no difference between owning its utilities and owning the thing itself. Therefore, no valid distinction can be drawn, upon the matter of title, as between natural utilities and those conferred upon an object by labor. If a man plucked an orange and squeezed it, all its natural and acquired utilities would come out together. Therefore nothing is gained in favor of the laborer, as to title, by defining wealth as consisting only of utilities conferred on material objects by labor; especially as the amount of labor whether great or small, or the kind of labor, whether physical or mental, or both combined, cuts no figure in the validity of the title to the product. If one laborer sold his labor to another for wages, then the former would have no claim whatever upon the product.

The land holder makes the land his natural wages by the labor of occupying and holding it, and his claim is to retain the land until he has exhausted it of its utilities. Any laborer needs not only one, but a constant supply of material objects; as, if he were making iron, he would be continually in want of ore, coal, fluxes, &c. If he derived them directly from their places of deposit, such places would become his, as his natural wages, by means of the labor exerted in taking, holding and working them. Every laborer can only acquire material objects by a first possession, or by robbing the possessor, or by purchase from him. The law says that robbery is not now allowable. Both labor and material objects are now bought and sold.

The appropriation of land and the accumulation of stock gave rise to agreed wages; and civilization became possible. The state of anarchy came to an end. What has been the result? "A village carpenter employs his days labor in planing boards and making tables and drawers. He grumbles at his lot. He dresses himself in the morning. In order to put at his disposal his simple attire, Americans must have produced cotton; Indians, indigo; Frenchmen, wool and flax; Brazilians, hides; and all the materials must have been transported to various towns where they have been worked up, spun, woven, dyed, &c. Then he breakfasts. In order to procure him bread, land must be cleared, enclosed, manured, sown; the fruits of the soil must have been preserved with care from pillage, and security must have reigned among an innumerable multitude of people; the wheat must have been cut down, ground into flour, kneaded and prepared; iron, steel, wood, stone must have been converted into instruments of labor. In the course of the day this man will have occasion to use sugar, oil and various materials and utensils. He goes out; he finds the streets paved and lighted. If he takes a journey, he finds that other men have removed and levelled the soil, filled up valleys, hewed down mountains, bridged rivers, diminished friction, put wheeled carriages on bars of iron and brought the power of animals and steam into subjection to human wants, I venture to say that in a single day this man consumes more than he could produce himself in ten centuries" (Bastiat, Economic Harmonies). Under the rule of order and law, every man engaged in some

lawful calling according to his inclination and abilities and working solely for his own interest, at the same time thereby best promotes the interest of all others. Under the regime of natural wages, the entire product was not equal to that now enjoyed by the civilized pauper. Under the regime of agreed wages, the wage laborer can buy the tool he works with cheaper than he could make it, if he were given the materials, and fed gratis; the blacksmith can buy iron and steel cheaper than he could make them if all the raw materials were dumped down ready for him in front of his shop; the tailor can buy cloth cheaper than he could make it if he owned the sheep, &c. This system, which is the result of ages of practical experience, gives property and wealth, as a reward, to the wise, industrious and frugal man, and organizes society in the interest of the able and willing, and not of the unable and unwilling. The unable being regarded as objects of charity, and the unwilling as unworthy of any reward. This system has worked well. If all property were now confiscated for the public benefit and society established upon the basis of a universal poor house, whether such a scheme would do better is unknown, for it has not yet received a trial. The drift of political economy is in its favor. According to its leading author (Mill), the practice which has been always followed in this country, of putting the lands into the hands of the people in fee simple and in severalty is the height of injustice; for it has not only allowed the gift of nature to be engrossed by individuals but has aided and assisted in the operation. Whereas, according to him, everybody ought to be tenants of the State on short leases, or mere tenants at will; or for a season only as among the ancient Germans or other barbarians, or, as among the poor and abject Hindoos, or the serfs of Russia. And some of his followers and imitators would have all grants and patents of land from the Government nullified by a tax made large enough to confiscate the land thereby granted and the same "resumed as the common property of the whole people." And all the poverty caused by idleness, extravagance, drunkenness, and all the vices is charged to the present state of society in which private property exists as a fact. And it is taught, as science, that land is a peculiar and odious monopoly. It is said that its area and productiveness are limited;

that after a certain point is reached its product will not increase in proportion to the labor expended upon it, for otherwise, infinite labor would produce an infinite crop and a few acres would be enough for cultivation—the remainder might be used for standing room: that population tends to increase continually and cause an increased demand for subsistence and thereby increase its price, and to cause an increased supply of labor and thereby decrease its price, and therefore, the land owner by means of his monopoly will continually get more and more and the laborer less and less. The price of subsistence and labor, being fixed by the relation between the supply and the demand, if the supply of subsistence is limited and the demand for it liable to an indefinite increase, and the supply of labor is capable of an unlimited increase and the demand for it is limited, subsistence will go eventually to famine prices and labor to nominal ones. Hence the land owner, especially, ought to be wiped out and the net product of the land equally enjoyed by all, so that when the world becomes over populated, the whole race might starve and stink out all together and at the same time.

The above condition of things is not impending just now in this country. For in January 1890 in Chicago, wages were per hour for common labor, $0.22; carpenters, $0.32½; masons $0.45 and the wholesale prices were per bushel, wheat, $0.76⅝; corn, $0.29; oats, $0.20¼, &c; and the wages of farm laborers in the country, including Nebraska, $18.00 to $20.00 per month, with board, while farm products were on the basis of $0.17 per bushel for corn in Nebraska. And it is said that according to the Bureau of Labor statistics for North Carolina for 1888 the average price of lands in that state is $6.50 an acre while the best farms bring less than $10, that 229 representative farmers reported for the year 1887 an actual loss of three and one half per cent. on their capital. Also, that according to the report of the Labor Bureau of Connecticut for 1888, 693 representative farms after deducting the cost of hired help, feed, fertilizers, repairs, insurance, taxes and interest on capital, left a balance of $178,605 for the remuneration of the 969 males and 769 females belonging to the families of the proprietors who spent their whole time at work upon the farm; and taking no account of the women who actually do a large share of the work, the average re-

ward of the 969 farmers for their work of superintendence and manual labor was $184.31 for the year, while the annual wages of the average hired man was $386.36. At the same time the average wages of the operatives in ninety manufacturing establishments in the State was for each operative $441 per year, of the superintendents and overseers $1.052, and of an owner $4.943. In Massachusetts the average farmer received as his reward for labor and superintendence $326.49 and the average farm laborer or hired man $345. And in connection with the above facts the question is asked: "When the average farmer of New England receives less for his superintendence and manual labor combined, than the average mill hand, and less even than his own hired man, is it strange that he offers to sell his farm for less than the cost of the buildings, and, failing that, abandons the old homestead."

Man has been on earth at least six thousand years and a large part of it is still a wilderness, such as the valleys of the Amazon, Orinoco, La Plata, Congo, &c., and other large parts of the earth are very thinly peopled. So that, in fact, the area of land is still practically unlimited and the world large enough for the present and for some time to come. Also, in very recent times, the productiveness of land has been greatly increased and the powers of chemistry still remain almost wholly unknown. Under the present state of knowledge, the earth can support many times more than its present population. And in the future, it may be possible to convert the forests, the seams of coal and even the nitrogen of the air directly into food; and even now certain things are already known which lubricate the human machinery, arrest waste and render less food necessary.

But, of course, if population increased continually, a time would finally come, when the numbers would be so great, that, even if socialism, land confiscation, or some other scheme should supply enough subsistance, there will be a lack of standing room and a deficiency of fresh air to sustain life.

In the savage State, the tendency of population to increase was not checked by the limited area of land or of its productiveness, yet there were checks enough, of which famine was one. Order and law, knowledge and civilization have removed or mitigated many of them, such as famine, human sacrifices, infanticide, public and private war and the old forms of

epidemics and plagues, and population has greatly increased in some parts of the world. But wealth and knowledge bring in other checks; the stock becomes sterilized and also influences moral and prudential are brought to bear to check the increase. The original American stock, once so prolific, is now believed to be fading out and Protestant New England promises to become Catholic in time. Even under the very moderate condition or state of wealth and knowledge existing in this country now, a large amount of ignorance and poverty, and therefore fecundity, is annually imported. The cities and manufacturing centers are said to be also continually recruited from a stalwart stock of men raised in the country, and therefore, the breeding of men on the farm ought to be encouraged. Perhaps, the farmer might be kept poor, and therefore sufficiently prolific, by taxing his land away from him, or by some mode of land confiscation, the State made the universal landlord and the cultivators tenants under it on lease or at will. Those who refuse to accept of half a mile square of fertile land as a gift, and prefer to crowd into the cities and towns and by combination and intimidation demand and insist upon small work and high pay will soon become too rich and intellectual to have large families. It is asserted by and for them that the land belongs to all men alike; hence they refuse to take their share out in the wilderness. If the site of a city belongs to all men alike, it is great impudence on the part of its present possessors to require others to accept of land elsewhere, even if it lay in the suburbs. Besides an offer of a homestead in the west, amounts to a bribe to the new comers to join in the present scheme of land monopoly and thereby finally exclude the future immigrants.

There is said to be an unearned increment in land which does not justly belong to its possessor. This as to farming lands seems to be chiefly due to the railroads and the foreign consumers of farm products. The charms of a city life and the benefits derived from a crowded state of society seem to belong to the class of unearned increments. If those who enjoy them would forsake the city and retire to the solitude of the country they would probably find that the value of land at a great commercial center was not due to their presence but to the trade and business of the world.

The argument brought against the land owner founded upon the small size of the earth and its limited productiveness is quite premature and too far fetched for this country, where land is of small value and vast regions are offered to be given away to actual settlers. Land here is merchandise. It is held by simple forms of title and stands substantially upon the same footing with goods and chattels. Everywhere land is for sale, and throughout the public domain is offered as a free gift. If any one desires to share in any increment or profit from land, let him save a part of his earnings and invest them in real estate, or go west and take up a homestead. The man or woman, who means to win, saves something. Dr. Franklin saved money out of his wages while at work in London learning the printer's trade. The Chinaman saves money, no matter how small his wages. There is spent annually in Chicago in smoke and drink more than fifteen millions of dollars—a large part of it by the wage laborers. A part of this might be saved.

In this country, wealth is offered as the reward of industry, frugality, temperance and knowledge; and, barring misfortune is attainable by everyone to a moderate and quite sufficient extent by the practice of even a part of the cardinal virtues. And also here, any man can be his own landlord and master, if he chooses, and thus earn natural wages, *i. e.* the entire product, less taxes.

Mr. Benton (Thirty Years, &c., Vol. 1, Chap. 35) in a speech in the United States Senate in favor of gifts of land to actual settlers related the story of Granny White. At the age of sixty, she had been left a widow in one of the tide water counties of North Carolina. Her poverty was so extreme that when she went to the County Court to get a couple of little orphan grand children bound out to her, the Justice refused to let her have them, because she could not give security to keep them off the parish. This compelled her to emigrate and she set off with her two little boys upon a journey of eight or nine hundred miles to what was then called, the Cumberland Settlement. And there this aged widow with her two little grand children of eight or nine years old, advanced herself to comparative wealth by her industry and raised up the little children to honor and independence.

If a poor old widow could do this, no man need sit down and whine. Instead of crowding into the city and posing as an object of charity, and demanding in the name of ethical and sentimental political economy a confiscation of land and capital on his behalf, if he would take to the country and especially go west, he might in time by the practice of industry and frugality, become almost as much of a man as Granny White.

When the Pilgrims first landed in New England they tried communism; but it failed. And thereupon a certain portion of land was annually alloted to each house holder for the cultivation of corn. Then the community began to thrive. The authority of the Governor and assistants were no longer needed to enforce industry; and those who had previously professed themselves unable to work now toiled zealously for the benefit of their own families. Wives were no longer compelled to act as public servants and cook and wash for any members of the community the government might appoint. Yet this was not enough. The industrious man saw the plot of ground he had laboriously cleared and manured pass after the expiration of the year to another, it might be an idle and improvident neighbor. Then application was made to the Governor for permanent holdings, the request was granted and one acre was alloted in severalty to every freeman. (Doyle, Puritan Colonies.)

Communism taught even these pious and industrious people to feign sickness and become idle and improvident. They had fled from their homes in England and sought for liberty in Holland. They faced the wilderness and its hardships in order to enjoy liberty on English soil. And when each one was allowed out of a broad continent to plant his foot upon one acre of land as his own soil and freehold, the American home took root in the rocky and barren soil, and the American system of land ownership, liberty, and free government was its legitimate consequence.

The plan above adopted finally became the general practice and has been continually pursued. And now vast regions still remain to be given away in tracts of half a mile square to every man who wants a homestead. And on forefathers day, the sons of the pilgrims by descent or adoption, get together and rejoice, for sundry reasons, and among others, because

they consider the above mentioned one acre and other acres adjoining and thereto annexed, justly belong to them, together with all the increment which has accummulated thereon during the period of two hundred and seventy years.

The manhood that brought the pilgrim to his home here, enabled him in due time to stand up and say, I am the State. And all the coheirs of American liberty and free government worthy of the name subscribe to that doctrine. And the question is, whether a man is fit to be a ruler, who, being of good health and sound body, feels unable or unwilling to take care of himself and his family and wants to rely upon "fraternity" for a subsistence.

If any one acquires property lawfully, he thereby acquires an exclusive command or possession of it: ownership, therefore, is a monopoly. A man's labor in a free country is his monopoly. In the original state of things, (savagery) he became the owner of the entire product, whether it was a wigwam, field, tree. or any other material object. In this country, if a man works for himself he owns the entire product; if he sells his labor for wages, then he owns his wages. His savings are his, whether invested in land, or any other property. If a man has no property or monopoly in his savings, he has none in his wages. If a man has any property he can either use it himself, or allow another to use it for a consideration. If it is capital he may charge lawful interest; if land, rent; if labor, wages. Hence it fails to weaken the just claim to call either rent, or interest, the effect of monopoly, or the price of monopoly. Wages is the price of the monopoly which a man has in his labor; interest, the price of the monopoly which he has in his capital: and rent, the price of the monopoly which a man has in his land.

Land on the plains pays no rent for pasturage because it is public domain and open to all, land in the Cherokee strip pays rent for pasturage because of the Indian title. Land which is too elevated, dry, or rocky, to be fit for cultivation will produce pasturage and therefore rent; or fruit or forest trees, and, therefore, rent. According to the method of coppice growth, the wood is cut off at stated periods and a new growth allowed to spring up from the roots and stumps. By another method, the large trees are cut out leaving the smaller ones to grow. In 1876, fifteen acres of Scotch fir

timber, eighty years old, near Perth, Scotland, sold for £132 per acre. A handsome revenue had been previously obtained from the thinnings (Hough, Elements of Forestry). Swamps will raise cranberries, rice, willows, &c. If a man owned the desert of Sahara, the rent might be small per acre or per square mile without irrigation.

It is said in political economy, (Mill, Book 2 Chap. 3.) "Private property being assumed as a fact, we have next to enumerate the different classes of persons to whom it gives rise, whose concurrence, or at least, whose permission is necessary to production, and who are, therefore, able to stipulate for a share of the produce." "The three requisites of production are labor, capital and land; understanding by capital the means and appliances which are the result of previous labor; and by land, the materials and instruments supplied by nature. Since each of these elements may be separately appropriated the industrial community may be considered as divided into land owners, capitalists and productive laborers. Each of these classes, as such, obtains a share of the produce, no other person or class obtains anything except by concession from them. The remainder of the community is, in fact supported at their expense, giving, if any equivalent one consisting of unproductive services. These three classes, therefore, are considered in political economy as making up the whole community."

If private property were not a fact, the land owners and capitalists would be wiped out and the above three classes would be reduced to one. If, however, the productive laborers had property in their earnings, some might and probably would save a part of their shares of production; and thus the capitalists would reappear. In order to prevent this, such a scheme requires that nothing should be divided except consumable and perishable commodities. Also all loans made should bear no interest. And so it is in socialism.

If the earth belonged to all men alike, and not to the productive laborers only, it would seem to follow that every one ought to receive something whether he worked or not, viz., a share of all spontaneous products or pure gifts of nature, such as clams, oysters, fish, game, eggs, herbs, grass, fallen timber, &c. But if wealth is the sole product of labor, then the earth furnishes no usufruct or profit in excess of the just

wages of labor, and therefore no one is entitled to anything unless he is a productive laborer. Who then are the productive laborers?

One great authority (Adam Smith, Book 2, Chap. 3) excludes from the ranks of productive labor all officers of the government, all churchmen, lawyers, physicians, nurses, teachers, men of letters, menial servants, musicians, players and buffoons. They are said to be tax eaters, tithe eaters and feeders off of revenue. All such persons, therefore, fall into the class who are supported at the expense of the productive laborers, "giving, if any equivalent, one consisting of unproductive services." But the other great authority, (Mill, Book 1, Chap. 3) has essentially modified this; for he says, "I shall not refuse the appellation productive to labor which yields no material product as its direct result, provided, that an increase of material products is its ultimate consequence." This lets down the bars and admits everybody. It lets in the woman who cooks the victuals of a productive laborer and mends his clothes; those who nurse and heal him when sick, or make him healthy and strong, wiser and more skillful, more industrious and efficient, more honest and lawabiding, and more cheerful and happy. Even the buffoons might get in under this proviso. Still its author has cast a doubt over its application by saying that, saving souls is not productive labor, nor saving a man's life unless he is a productive laborer and produces more than he consumes. Perhaps he would have allowed that the act of procreation is productive labor, if the result as its ultimate consequence was a productive laborer who produced more than he consumed. All labor which is socially necessary must be productive, when socially considered.

It is laid down by the authority last quoted that labor is not productive unless it produces an increase of material products directly or remotely. Hence if by labor and sacrifice a less amount of utility was produced than consumed, such labor is not productive, and is entitled to nothing in distribution. And for a stronger reason, all labor no matter how great, which ends in failure, or produces nothing of value, is not productive labor and therefore entitled to nothing. But this is measuring labor by utility, instead of the latter by the former. In any fair system of distribution, the things to be

distributed, the persons entitled, and the respective shares of each ought to be accurately ascertained. Unless wealth is correctly defined the subject of distribution remains uncertain. And if correctly defined shall it be measured by a unit of toil and trouble, or a unit of utility?

Instead of considering the subject from a socialistic point of view and regarding wealth as produced, collected and warehoused, and awaiting distribution, the matter might be looked at from the individual standpoint. From this point of view the total wealth is the sum of the wealth of the individual members of the community, and distribution is made to everyone who pursues a lawful calling and obtains a reward therefor, whether he makes or cobbles a shoe, cures the jumping toothache, sets a broken bone, heals the sick, or saves souls. And every one who pursues his own personal interest in a lawful manner is productively employed both individually and socially, if he earns a reward. In this way wealth is naturally distributed, or tends so to be, among those entitled according to their several gifts and merits. Experience has caused mankind to adopt this method of distribution and while it may operate to some extent unequally and the lame and the lazy may get left out altogether, yet this is an imperfect world in which the tendency is for the early bird to get the worm.

Even if it were desirable to confiscate the land and capital, one or both, yet it cannot be done in this country now, because the property owners are in the majority. Until recently the community consisted chiefly of those who combined the three classes into one. They owned the land and capital and performed the chief part of the labor themselves, physical and mental. The professional wage laborers as a numerous and powerful class are comparatively newcomers. If a person owns both land and capital and performs all the labor himself, are any others entitled to share in the proceeds? If he hired another person to work for him, ought the latter to have more than his wages? If the industrial community be divided into two classes, viz., those who work for themselves, and those who work for hire, then the thing to prove is that the latter are entitled to the entire product. All labor is not manual labor; nor is all productive labor, hired labor.

Since the wage laborers are in a minority and therefore cannot at this time confiscate the land and capital directly, the same result is attempted to be brought about indirectly, by means of labor unions backed by intimidation and force. Their point is gained if they can make the legal owners of the land and capital merely trustees holding for their benefit. The farmers still own their own farms and cultivate them chiefly by their own labor; consequently it is not easy to reach them. But in the other industries the wage laborers by unions and the capitalists by syndicates, concur in raising the price of their products as against the farmer. As the wage laborer treads upon the toes of the manufacturer he cries out for more tariff legisation. In order to get even, the Farmers' Alliance ought to adopt into their platform the eight hour day, and the prohibition of the importation from abroad of all subsistence. If this is not done, then some of the farmers in the piney woods of North Carolina and on the barren and rocky soil of New England ought to seek other employment, or else change places with the hired man.

If the officers of the government are merely tax eaters, then their numbers ought to be reduced to a minimum, and not allowed to multiply like maggots in an old cheese. According to this idea government is an incubus and at best, merely a necessary evil. In taxation the most important question would be, whether all the taxes levied, or proposed so to be, were necessary: the question who should pay them would be a secondary matter. Contra, however, if the people can be taxed rich, and the community also benefited by distributing the money in pensions or dividing it among the States so as to give their legislatures a whack at it.

Still the army and navy might claim to be productive laborers, because they spent their time and risked their lives in keeping off other nations who might rediscover this country and claim it under the pretence that the earth belonged to all men alike and that its present occupants had possessed and enjoyed it as their own quite long enough. And the executive and judiciary might assert that they enabled the productive laborer to enjoy in peace and security such utilities as were lawful acquisitions on his part and that ownership in security was an essential element in wealth. And the legislators might insist that in legislation they had

a panacea for all hard times, poverty, and all the ills which continually afflict the body politic. And in proof of their claim they might point to the fact that they had benefited the manufacturer, ex-soldier, &c., by taxing the consumer, and could enrich the farmer by making the dollar smaller.

If the business of production were conducted after the manner of running a mill, into which material objects (raw material) were dumped by labor as into a hopper at one end and the "utilities embodied &c." tumbled out at the other, then the productive laborers would be well fixed, provided they owned the means and machinery of production and knew how to run the mill.

If utilities consisted merely of capacities to be useful and did not depend at all upon the varying and capricious wants of the consumers, then production might assume the form of routine work and any one might soon learn enough to feed the mill. If people dressed in feathers, greasy paint, and moccasins, or even in skins, or homespun and wooden shoes, the machinery of production would not be very complicated. But the fact is, that in a civilized state of society, the case is entirely different. It is not every "productive laborer" who can build "the machinery of production" or even run it unless instructed. And it is also necessary to know what utilities to embody and how to do it. All this requires knowledge and skill and business capacity. And since these may be furnished by one man or set of men and the labor by another or others, they are to be separately considered. And this gives rise to another and important class, to-wit, the employers; who are not to be confounded with and put into the class of productive laborers at present, and not at all, until the employees reach the point of employing their employers.

It was said by an acute writer (Jevons) "Economics must be founded upon a full and accurate investigation of the conditions of utility, and to understand this element we must necessarily examine the wants and desires of men. We, first of all, need a theory of the consumption of wealth. J. S. Mill, indeed, has given an opinion inconsistent with this." "But it is surely obvious that economics does rest upon the laws of human enjoyment. We labor to produce with the sole object of consuming, and the kind and amount of goods produced must be determined with regard to what we want

to consume. Every manufacturer knows and feels how closely he must anticipate the tastes and wants of his customers; his whole success depends upon it." It is not for the producer to dictate the nature and style of the product to the consumer. A Canadian tried to induce an English manufacturer to make an axe in a certain way: the only answer was an axe made according to the ideas of the maker with a reply that, that was the way to make an axe (Yeats.) The Mexicans say that the lack of trade with them on the part of the United States is owing to the failure to supply them with the articles they desire or require. And the late ex-Governor English of Connecticut is authority for the statement that the English and Germans monopolized the trade on the Rio Grande of certain cotton goods which were sold to the Mexicans by the bolt. The Americans put too many yards of cloth in a bolt to be able to compete; they were powerless to dictate to the Mexicans as to how many yards of cloth ought to be put into a bolt. A certain person desiring an ornamental clock for his parlor mantel and being disposed to favor home industry applied at the store of the Seth Thomas Clock Company. He objected to the clocks shown to him as having no beauty of design, whereupon the seller in a rage took down an ordinary clock quite suitable for a kitchen or barn and shoved it at the customer, saying here is what you want, do you think that you can teach people who have been fifty years making clocks how to make a clock? The result was the buyer bought elsewhere. A baker might starve people into buying rye bread, if he could prevent them from getting other kinds; otherwise, he would be compelled to comply with the tastes and wants of his customers, or quit the business.

It is knowledge which preconceives the utility and points out the way to embody it. Mere labor or toil and trouble is not adequate to the purpose. The wealth of the savage is on a level with his knowledge. As man acquires the latter, his wants multiply and also the means to satisfy them. If a race of savages knew of the existence of iron and its uses, generations of them might exhaust all their resources of land, labor, and capital in order to produce iron; but in vain, until some one taught them the process. Afterwards, another might teach them how to convert the iron into steel; but ages might intervene before a Bessemer would show how steel could be

made by wholesale. It was said, or fabled, that the man who first taught the use of fire was worshipped as a demigod; but thereafter, a long period elapsed before the lightning was made to weld iron, furnish light, carry messages, draw the street car, &c.

The author of Utopia, lived about three hundred and fifty years ago. Then England supported about two millions of people. The plague was always present in London and during every generation broke out and killed off a large part of the population. Sir Thomas More lived in days of comparative ignorance and squalor. The plague and sweating sickness were attributed by Erasmus to the clay floors of the houses which were strewed with rushes under which lay a purtrid mixture of beer, stinking fragments of food, and all sorts of nastiness. According to the state of knowledge then existing, it was the opinion of Sir Thomas More, as expressed in his Utopia, that if all the land and capital were owned in common and everybody worked nine hours a day, they could all have plenty to eat, and could have a woolen cloak to throw over their ordinary apparel of skins and hides, when they went abroad or saw company. And yet this was affluence as compared with what labor could do, if it had not a master and instructor. Without knowledge, it was always upon the verge of starvation when the world was occupied by only a few people.

In Utopia every man worked from 6 A. M. until noon, and after resting two hours then worked from 2 P. M. until 5 o'clock. "Now, sir, in their apparel, mark (I pray you) how few workmen they need, first of all, being at work they be covered homely with leather or skins that will last seven years; when they go forth abroad they cast upon them a cloak which hideth the other homely apparel." Everyone worked under the eye of a master, and no one could go out of his precinct or bounds without a pass, under penalty of slavery for the second offense; nor could he walk abroad within his bounds without the consent of his father and his wife. "Now you see how little liberty they have to loiter; how they have no cloak or pretence for idleness. For there be neither wine taverns, nor stews, nor any occasion of vice or wickedness; no lurking corners; no places of wicked counsels or unlawful assemblies; but they be in the present

sight and under the eyes of every man." And although their cities were dull, the country was duller, and therefore, they were drafted out of the city to work at farming in the country at that hard and sharp kind of life for two years, every man in his turn.

Since the time of Sir Thomas More, knowledge has improved agriculture; the average crop has been greatly increased and the necessary labor much reduced. Rotation of crops has abolished fallow, and the farmer may raise root crops instead of weeds; something has been learned also about manures and fertilizers. Agricultural chemistry, although in its infancy, teaches much; of which, however, the average farmer knows but little. Also farming tools have been greatly improved; and some knowledge of machinery has become necessary even to the farmer: for now—on the right kind of land—he that by the plough would thrive, may, if he likes, both ride and drive. And now instead of using a clam shell for a hoe, or even the sickle and the flail, he can run a reaper, or a header and thresher. Thomas Jefferson, in his day, strove in vain to induce the southern planter to cultivate the olive; and by a little wisdom America might in time become the land of the vine, and made not only a land flowing with milk and honey, but also oil and wine and all kinds of abundance. In manufacturing, knowledge and skill have made the labor of one man assisted by machinery equal to that of a hundred or hundreds laboring without it. And if a tariff operates as a school of knowledge, which cannot be taught cheaper, then pile it up mountain high, if necessary. In farming it may be true that any dunce can wear out a rich and virgin soil by raising cotton and tobacco at the South: and hogs, hominey, and whisky at the North. But to embody utilities with machinery in large quantities and at low prices requires knowledge and skill, at least, in the manufacturing industries.

If knowledge and skill as well as physical power are behind the simplest tool its efficiency is greatly increased. And progress involves the handling of complicated tools, instruments and machinery; also, of subtle and powerful agents, such as light, heat, electricity, and chemical affinities. Ignorant labor is unfit to deal with electric wires, dynamos, steam engines, &c. Schools of industry are needed, so or-

ganized as to keep up with the progress of science and invention. The youth ought to be taught knowledge, skill and dexterity by competent masters so that their labor will be educated and skilled labor. The practical arts and their kindred sciences ought to be taught by trained and competent men. To know some of these is not inconsistent with a liberal education. And instead of a limitation of apprentices, every boy, no matter how poor or worthless his father may be, ought to have a show, and learn how to live. Then he would not be compelled to wander about seeking an employer to tell him what to do. It is a wonder, how the need for bosses and employers of other men is supplied. They are often called, self made men, because they seem to produce themselves without assistance and at their own expense. All the schools of industry which could be started would be cheap, if in a generation they would produce a Bessemer, Siemens, or Edison. It is hardly fair to allow him to start as a newsboy and graduate himself out of a railroad car.

An obituary notice in a newspaper of Sept. 13th, 1890 is as follows:

ALBANY, N. Y., Sept. 12.—[Special.]—Robert Johnston died at his home in Cohoes this morning.

[He had been connected with the cotton industry for seventy-six years. He was born in Dalston, England, near the Scottish border, Feb. 2, 1807, commencing work as a bobbin boy in Dixon's cotton mill, Warwick Bridge, Northumberland, England, when he was only seven years of age. The wages paid to bobbin boys at that time was sixpence a week. In 1830 Mr. Johnston came to America and hired out as a spinner in a mill in Providence, R. I. He did all the spinning for the mill on a pair of hand mules. In 1834 Mr. Johnston went to Valaties, N. Y., and took charge of a cotton-mill. While there he produced the first muslin delaine ever made in this country. The warp was spun in Valaties and the filling was imported from England. In 1850 he accepted the management of the Harmony Mill, and from that date the cotton industry in Cohoes has been a success. Since Mr. Johnston's management, which continued up to the time of his death, the concern has grown and developed until it is now one of the largest cotton plants in the world. The company operates between 6,000 and 7,000 looms, and makes

over 80,000,000 yards of cloth per annum. Four thousand hands are employed.]

The carpenters of Chicago struck for forty cents an hour, an eight hour day, the limitation of apprentices, the recognition of their union and the discharge of all non union men. This strike implied that among so many thousand men combined together in a union for their common benefit, there was not the necessary knowledge and skill to enable them to bid upon jobs and execute them, themselves. If they had had the capacity to execute the work alone, they could have dismissed their employers and obtained the whole profit. But union and co-operation fail in the absence of the requisite ability. By their strike, these carpenters admitted that their proper position was to be hired men, and that they were incompetent to be their own employers.

Education may be no cure for stupidity, but it is for ignorance. And any man ought to blush who would combine with others to promote ignorance. Instead of a limitation of apprentices, every boy ought to have a chance to become the employer of such men. He ought to be taught how to embody utilities of some kind or other. There ought to be no premium put upon ignorance, at least in this country. The employers replied to the striking carpenters, among other things, that there was a great difference in the abilities of men working at carpentry and therefore a uniform rate of wages was out of the question. In the time of the handicrafts, the guilds required every man to serve an apprenticeship and otherwise qualify himself as a master of his trade before he could practice it. Then, it was not enough to make a man a carpenter or a mason for him to join a union and swing a broad axe or whack a brick or stone with a trowel and call himself a mechanic. Such men demand that no skillful man shall "best" anybody, and that all shall be paid alike.

As to mere labor its value cannot be measured by any unit of time or of toil and trouble. If a small amount of utility is embodied by it, its reward must be small, although the toil and trouble, time and sacrifice may be great. If labor duplicated the tower of Babel it would not be entitled to pay in proportion to the sacrifice. Labor ought not to claim more than its entire product. And in the original state of things it

was very liable to starve upon such wages. But when labor fell under the direction of knowledge and skill a change took place which converted savagery into civilization and poverty and starvation into wealth and abundance. Knowledge has stripped off from the common laborer the skins of animals and clothed him in decency and comfort. Knowledge and skill enables a diamond cutter in Amsterdam to earn five dollars a day, when a common laborer only obtains twenty-five cents. And the man who can point out what utilities to embody and how to do it gets large pay, although he may sit in the shade, and see that common labor performs its alloted task.

Although mere labor could not support and perpetuate itself after population had at all multiplied, yet on economic grounds, the share allowed to it in distribution ought to be enough to keep the human machine up to its maximum efficiency and pay for its reproduction. If it gets any more, it is because of competition among employers, or of a corner in the labor market brought about by strikes.

And there is, no doubt, a period of daily toil, varying with the occupation, during which the human mechanism would on the average exert its maximum of energy. If this were ascertained to be eight hours per day, then, an employer ought to pay more for an eight hour day than for one of ten. And also, it would be against public policy to permit the wage laborer to injure himself by over work, since it produces nervous and physical exhaustion, which causes him to seek relief in smoke and drink and other vices. Although a certain amount of exercise is just as necessary to keep the mind and body in a healthy state as food, clothing and shelter, no deduction from the proper wages of labor could be made on that account, because the amount allowed as above is all required to keep the laborer up to the mark.

In any system of production suited to the wants of civilized men, whatever may be a fair rate of wages for labor, considered by itself and as duly separated from the possession of knowledge and skill, it is quite evident that mere labor is not the sole author of the product and the wage laborer not entitled to it all. The men who need employers to tell them what to do are not the sole authors of all wealth.

AMERICAN MONEY.

I.

THE STANDARD.

Wealth is measured by money and in terms of the money unit. If such unit be called a dollar, whatever represents it in circulation, as for instance a certain quantity by weight of gold or silver, is the standard unit of common measure of wealth, and its value the unit of wealth value. If a horse were worth one hundred such dollars; then the horse, as wealth, is one hundred times more than one dollar; or, its value is one hundred times greater than the value of one dollar. If a debt calls for the payment of one hundred dollars its value is rated in terms of the value of one dollar. And if before payment the value of the dollar is altered artificially by either debasing or enhancing it, a wrong is done to one of the parties. Any unit of common measure may expand or contract, or otherwise alter from natural causes; but any artificial alteration has always been considered by the party or parties injured to be an injustice.

Such being the case, the first thing to consider is the standard or money unit of common measure.

By the Federal Constitution, power was conferred upon Congress: To coin money, regulate the value thereof, and of foreign coin, and fix the standard of weights and measures.

The first coinage act (April 2, 1792) provided that the money of account of the United States should be expressed in dollars or units, decimally divided into, dimes or tenths, cents or hundredths, and mills or thousandths; and that all accounts in the public offices and all proceedings in the courts should be kept and had in conformity thereto. And this regulation has remained unaltered ever since. The next step was to specify what should represent the dollar or unit and its multiples and submultiples. The coinage was based upon Troy weight, which is still in use; and a double standard was adopted. Theory requires that a unit of common measure

should be single. And if a double standard signifies two standards of different sizes, it is wrong in theory. If a gold dollar and a silver dollar were always of the same value, then the unit of value is single, otherwise not. In July, 1864, the gold dollar was worth $2.85 in greenbacks, therefore a horse at that time worth one hundred dollars in gold was worth two hundred and eighty five dollars in greenbacks. The paper dollar and the gold one did not agree as a unit of value.

By the first coinage act the silver dollar was required to contain 371.25 grains of pure silver with enough alloy to make its standard weight 416 grains. In estimating coins the alloy is not valued, Collector v. Richards, 23 Wall, 246; probably because the precious or pure metal would be worth as much without the alloy. The smaller silver coins were in proportion to the dollar. A gold eagle ($10) half and quarter eagle were also authorized. The standard weight of the eagle was fixed at 270 grains, of which 247.50 grains were to be of pure gold; the other gold coins to be in proportion. This act, therefore assumed that 371.25 grains of pure silver and 24.75 grains of pure gold were of the same value and would always remain so; otherwise, two different units of value were adopted instead of one. At that time the mother country had a double standard, and it was no doubt considered the correct thing to have. The above statute assumed the relative value or ratio of silver to gold, for equal weights of each, to be 15 to one—since $371.25=15\text{x}24.75$. Such was the case in 1793, but never at any time afterwards. After that date gold appreciated until in 1813 the ratio was 16.25 to 1; after which there was a decline until the ratio in 1859 was 15.19 to 1; after which time the relative value of silver depreciated until in 1888 the ratio was 21.99 to 1. The appreciation in the value of gold made the gold coins worth more than their nominal value in silver dollars, and they ceased to circulate. In regulating the value of money, a law may assign a value to a coin less than that of the metal contained in it and declare it to be a legal tender at that rate, but such a law is nugatory; all such money is exported or hoarded. During the late civil war, when a paper dollar was the standard, all the coins disappeared from circulation and all current money even to five cents was in paper.

By the act of June 28, 1834, the gold coins were debased both in weight and fineness; the standard weight of the eagle was reduced to 258 grains, of which 232 grains were to be pure gold, the other gold coins to be in proportion. This adopted a ratio of 16+to 1, the actual ratio between the two metals in 1834 was 15.73 to 1. Hence the gold coins were debased too much, and the silver coins became more valuable pro rata than the gold ones.

Afterwards by the act of January 18, 1837, a uniform standard of nine-tenths fine was adopted for both gold and silver bullion. This reduced the standard weight of the silver dollar to 412.50 grains—one-tenth deducted from this for alloy left 371.25 grains of pure silver as before. The standard weight of the gold coins was not altered, but a little more gold was added—one-tenth of 258 grains deducted for alloy left 232.2 grains of pure gold. This act assumed the relative value of silver to gold to be $\frac{371.25}{23.22}$=15.988+to 1; and this has been the legal ratio ever since. The actual or market ratio then was 15.83 to one, and the value of silver remained above the legal rate until 1874. This caused the silver coins to disappear. And in order to retain the fractional silver coins in circulation their weight was debased in 1853; the standard weight of the half dollar was reduced to 192 grains; the others in proportion. The silver dollar disappeared and became unknown in circulation until 1878, prior to which date the total number coined was $8,031,238.

If the ratio as to value between silver and gold had always remained the same, as for instance at the rate of 15 to 1, as adopted by the first coinage act, then the two standards would have been continually the equivalents of each other and thus tantamount to a single standard. But the market ratio would vary and all attempts to make the two standards agree, proved to be futile. Similar experience elsewhere led to the adoption of a single standard by England, Germany and other nations. Each of the precious metals has a use value of its own in the industrial arts, for ornament, &c; and the supply of each is independent of that of the other; so that when both were freely used in coinage the varying relation between the supply and demand as to each metal caused its value to vary from time to time. Hence the relative value of the two metals

would not remain invariable under a very general free coinage of both. In the report of the director of the mint for 1889 is given a table exhibiting the ratio of silver to gold from 1687 to 1888 both inclusive. In 1687 the ratio was 14.94 to 1; in 1859 it was 15.19 to 1; between these dates the ratio fluctuated back and forth, being lowest in 1760, 14.14 to 1, and highest in 1813, 16.25 to 1. After 1859 the gold price of silver declined and rapidly after 1871, until the ratio in 1888 was 21.99 to 1. This was due to a great decrease in the demand for it for coinage and a great increase in the supply. The annual silver product of the United States increased from 31,550,000 fine ounces in 1879 to 50,000,000 fine ounces in 1889; and the world's product increased nearly twenty per cent. from 1885 to and including 1888. In spite of the great increase in trade and business it is likely that the use value of the precious metals for money has been much impaired by the greatly increased facilities for doing business resulting from the effects of steam and electricity, the use of paper money and of all the various forms of credit. And it is not demonstrable that the adoption of a single gold standard by Germany and other nations enhanced the value of money relative to land, labor and other things. It also remains to be seen whether all the gold and silver, less the quantity used in the industrial arts, is actually needed for use as money. If all credit currencies were abolished there would be a greater demand for coin.

The next alteration in the money unit was the adoption of a paper (greenback) dollar as the standard of value. In 1861 the Southern States attempted to secede from the Union and civil war ensued; and in December 1861 specie payments were suspended and not resumed until January 1, 1879. The war was of colossal magnitude and from necessity it was prosecuted upon credit. A national currency was required. The effort to furnish through the mints a hard money currency had failed; the paper money issued by state banks continually drove out the specie. The United States notes (greenbacks) were first authorized by the act of February 25, 1862. They were made lawful money and a legal tender for all debts public and private, except duties on imports and interest upon the public debt. Except for these purposes the greenback dollar furnished the unit of value from its first issue in 1862 until January 1, 1879. The gold dollar was worth in paper, in 1862

from $1.01⅛ to $1.34; in 1864 from $2.85 to $1.51½; in 1878 from $1.02⅞ to $1.00. When the gold dollar was worth $2.85 in paper, the paper dollar was worth $0.35+ in gold. When brought to face the necessity, Congress found authority for this paper money among its implied powers. Under the power to borrow money, bills of credit in a form fit for circulation as money could be issued, and this power, and other express powers justified making the bills lawful money and a legal tender in payment of debts. It became manifest during the civil war and afterwards, and it was also quite evident before, that Congress could not regulate the value of money unless it took exclusive control of the currency.

After the issue of greenbacks, there were three kinds of legal tender, United States notes, gold coin and silver dollars. But the silver dollars had disappeared long before; in 1859 a silver dollar was worth $1.05 in gold. In like manner the paper dollar supplanted the gold one. At this time there are four kinds of legal tender, namely, gold coin, silver dollars, greenbacks and treasury notes issued for the purchase of silver under the act of July 14, 1890. And, at this time, none of these kinds are soft enough to suit the debtor.

It is lawful, if practicable, to buy or borrow in terms of a high priced dollar and sell or pay back by a cheap one. Thus it was held that a debt incurred previous to the issue of greenbacks could be paid afterwards in paper; Legal Tender cases, 12 Wall. 457. And it was said by the Court in Juilliard v. Greeman 110 U. S. Rep. 421, that Congress may, as it had done, debase the standard coin and thereby enable debtors to discharge their debts by payment in the baser coins. And also, that a contract to pay a certain sum in money, without any stipulation as to the kind of money in which it shall be paid, may always be satisfied by payment of that sum in any currency which is lawful money at the place and time at which payment is to be made, citing, Hale, P. C. 192,194: Bac. Abr. Tender, B. 2: Pothier. Contract of Sale, No. 416: Pardessus, Droit Commercial, Nos. 204, 205. Seawright v. Calbraith 4 Dall. 324. And it was also said, that the obligation of parties is always assumed with reference to the power of the government over the currency. Although it has been adjudged that a creditor may stipulate for payment in a specific kind of dollars (Bronson v. Rodes. 7 Wall. 229) yet it is not

clearly settled that this privilege may not be taken away or nullified. Congress has the power to alter the money standard, debase the coin and make bills of credit a legal tender; but an alteration of the standard unit of common measure is only justifiable for sufficient reasons: as for instance, to save the Union in a great civil war, or avert some other great catastrophe. Since Congress has this power, it is the sole judge of the necessity for its exercise, as, if it should desire to raise the price of silver by buying large amounts and emitting bills of credit therefore, or otherwise to soften the money by other issues of paper.

In the absence of any such an overruling necessity, some think that the money standard ought to be single and as permanent and invariable as possible, and that a double standard is objectionable because the two units of common measure may not always agree. At this time there is a compound double standard, to-wit, two of coin and two of paper. Now it was said formerly, Deut. 25.13: Thou shalt not have in thy bag divers weights a great and a small: Thou shalt not have in thine house divers measures a great and a small. In those days money passed by weight—as standard coins ought to do now. Excepting as to money it is still considered to be dishonest to alter the unit of common measure, as to past transactions still current; or, to have divers weights in the bag, or divers measures in the house.

In the revision of the coinage law (Feb. 12, 1873) the coinage of the silver dollar was discontinued; it was then still worth more than a dollar in gold.

The act of Feb. 12, 1873, provided that the standard for both gold and silver coins of the United States should be, such, that of one thousand parts by weight nine hundred shall be of pure metal and one hundred of alloy: the alloy of the silver coins to be of copper, of the gold coins, copper or copper and silver, but the silver in no case to exceed one-tenth of the alloy.

Also, that the gold coins of the United States should be a one dollar piece which at the standard weight of 25.8 grains should be the unit of value; the other gold coins to be a three dollar piece, a ten dollar piece or eagle, and a double, half and quarter eagle, of standard weights in proportion to that of the gold dollar.

The theory of this law is, that a dollar in gold coin, is a piece of gold certified to be of a certain weight and purity by the form and impress given to it at the mints of the United States. Any number of such dollars is the number of grains of standard gold in one dollar multiplied by the given number, Bronson v. Rodes 7 Wall. 229. Ever since the resumption of specie payments, January 1, 1879, all wealth and wealth value have been estimated, measured and computed throughout the United States in terms of the gold dollar and its value. By a recent act, the coinage of the gold dollar and three dollar piece is to cease, and these coins as fast as paid into the Treasury are to be withdrawn and made into the other denominations of gold coin. This act, however, will make no change in the unit of wealth and value. Until a change of standard actually takes place, the unit of wealth and value will be 23.22 grains of pure gold, as it now is. The gold dollar is too small a coin for ordinary use: and the three dollar piece is not needed.

Coinage is a certificate of the weight and purity of the metal contained in the piece: it is a labor saving device. With a proper series of pieces all payments can be made by a mere count of coins. Standard coins, therefore, now pass by weight just as the precious metal did before coinage was invented. Token money stands upon a different footing as hereinafter explained. When the precious metal was used in bulk as money, it was not easy to ascertain its weight and fineness. Coinage is intended to meet these objections, and the law requires great exactness in the execution of the coinage and in order to secure it, enters into great detail.

Even by the exercise of the highest knowledge and skill and of the use of the best known appliances, the standards for weight and fineness cannot be exactly complied with; therefore, a certain deviation or tolerance is allowed; but which, it is illegal to exceed And the law declares that the gold coins of the United States shall be a legal tender in all payments at their nominal value, when not below the standard weight and limit of tolerance provided by law for the single piece, and, when reduced in weight below such standard and tolerance shall be a legal tender at a valuation in proportion to their actual weight.

The deviations allowed by law as to the various coins are:

In fineness: No ingots shall be used for coinage differing from the standard more than: in gold ingots, one part in a thousand, or 0.001: in silver ingots, 0.003: in minor alloys, 0.025 in the proportion of nickel.

In weight: The following deviations shall not be exceeded in any single piece: double eagle and eagle $\frac{1}{2}$ a grain: each of the other gold coins $\frac{1}{4}$ of a grain: each silver coin $1\frac{1}{2}$ grains: each five cent piece 3 grains: each 3 cent and one-cent 2 grains. And in weighing a number of pieces together, when delivered by the coiner, the deviations from the standard shall not exceed in every $5,000 in double eagles, eagles, half and quarter eagles, and in every one thousand three dollar and dollar pieces $\frac{1}{100}$ of an ounce: in one thousand silver dollars, halves and quarters $\frac{2}{100}$ of an ounce: and in one thousand dimes $\frac{1}{100}$ of an ounce. If any coins executed are found to deviate from standard more than the legal limits, they are required to be defaced and recoined. The coinage is in fact effected at an actual deviation of about one-half of the legal tolerance.

Coins lose in weight by use and wear; this being caused by the public is a proper public charge. And the law provides that: Any gold coins of the United States, if reduced in weight by natural abrasion not more than one-half of one per centum below the standard weight provided by law after a circulation of twenty years as shown by the date of coinage, and at a rateable proportion for any less period, shall be received at their nominal value by the United States Treasury and its offices, under such regulations as the Secretary of the Treasury may prescribe for the protection of the Government against fraudulent abrasion and other practices: also, any gold coins in the Treasury when reduced in weight by natural abrasion more than one-half of one per centum below the standard weight prescribed by law shall be recoined.

Provision is made from time to time for the recoinage of light and worn silver coins.

The law also provides that: No foreign gold or silver coins shall be a legal tender in payment of debts; also, that all foreign gold and silver coins received in payment for moneys due to the United States shall, before being issued in circulation, be coined anew.

Almost every nation has a standard and money system of its own, and foreign money is not available to them for circulation; therefore, foreign money is generally worth no more than its bullion value. Excepting, however, that Mexican and Spanish dollars are current in China and the far East, and Austrian (Maria Theresa) thalers in the Levant. For export the newest and heaviest coins are the most profitable; but in paying a draft from abroad the light coins, if still within the standard and tolerance, are quite sufficient for the purpose. Fine bars are the most suitable for exportation, because coins even when newly made are not exact and the variation becomes very perceptible where large amounts are involved. No one could measure a mile accurately with a foot rule. The coinage mints and the assay office at New York make both gold and silver bars, none of less weight than five ounces. They are required by law to be stamped designating their weight and fineness and with such devices impressed thereon as may be deemed expedient to prevent fraudulent imitation. Gold bullion may be deposited to be made into coin or bars: silver bullion to be formed into bars only. Any deposit of less value than $100 may be refused; also, bullion so base as to be unsuitable for the operations of the Mint. The charges are enough to cover the cost only. No charge is made for converting standard gold bullion into coin: nor upon other gold bullion except to prepare it for coinage.

On deposits of gold coin, United States mint or assay office bars, or fine gold bars bearing the stamp of well known refineries payment therefor may be made at once within two per cent. of the value contained therein, provided no partial payment shall be made on a deposit of less value than $5,000.

Gold bars are also exchanged at the coinage mints and the New York assay office for gold coin of legal weight offered in sums of not less than $5,000.

During the fiscal year ending June 30, 1888, the amount of gold bars made was nearly fifty-two millions of dollars and of silver bars about seven and one-half millions of dollars at coining value. During the fiscal year 1889, the amount of gold bars made was about twenty-two millions and one quarter, and of silver bars about six millions and three-quarters at coining value.

In commerce and other intercourse with foreign nations it becomes necessary to convert foreign money into our own and vice versa. Foreign trade is not conducted by way of barter, unless with savages, but is carried on by two sets of men, called exporters and importers. The exporter of cotton, breadstuffs, provisions, mineral oil, tobacco, &c., is one man; the importer of sugar, coffee, tea, dry goods, &c., is another. An article exported is sold in the foreign market in the money of that country: and it is necessary for the exporter to know that the price realized when converted into American money and returned to him will leave him a profit, and he seeks the best market. So also the importer of a commodity buys it in the foreign market in foreign money and it is necessary for him to know that the price realized at home will leave him a profit; and he also, seeks the best market. The total declared value of the imports of foreign merchandise and of exports of domestic and foreign merchandise for the fiscal year ending June 30, 1889 were; exports, $745,131,652; imports, $742,401,375. Over half of the domestic exports went to Great Britian, while only one quarter of the imports came from that country. The imports from Brazil (coffee, rubber, &c.,) were $60,403,804; the exports to $9,351,081. The imports from Cuba (sugar, cigars, &c.,) were; $52,130,623; exports to $11,691,311. The imports from the Philippine Islands were $10,593,172; exports to $179,647. Imports from China $17,028,412; exports to $2,791,128, &c., &c.

And there was also exported during the above fiscal year in excess of the amounts imported, in gold $59,952,285; in silver, $36,689,248. The greater part of this went to England in the first place.

Neither the exporter nor the importer concerns himself about the balance of trade except so far as it may effect the price of bills of exchange. The exporter has foreign bills to sell and the importer foreign bills to buy. The importer of coffee from Brazil is likely to pay for it by bills on London; and the importer of sugar from Cuba probably gets his exchange or Spanish doubloons at the same place.

The balances in international trade are adjusted by those who deal in bills of exchange. The principal international clearing house is London.

In exercise of the power to regulate the value of foreign coin, it was enacted (March 3, 1873): The value of foreign coins as expressed in the money of account of the United States shall be that of the pure metal of such coin of standard value; and the values of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint and be proclaimed on the first day of January by the Secretary of the Treasury. The second section of the act fixes the value of the sovereign or pound sterling of Great Britain at $4.8665, and declares that this valuation shall be the par of exchange between Great Britain and the United States: and also that all contracts made after the first day of January 1874 based upon an assumed par of exchange with Great Britain of fifty-four pence to the dollar, or four dollars and forty-four and four ninths cents to the sovereign or pound sterling shall be null and void. This rate of fifty four pence to the dollar was an antiquated and fictitious par of exchange, which is said to have had its origin in colonial times, when there was a silver standard in England and Spanish dollars were current in the colonies.

The Director of the Mint in making the estimate for the year 1889 proceeded as follows: In estimating the value of foreign coins, the value of the monetary unit of countries having a gold or double standard was ascertained by comparing the amount of pure gold in such unit with the pure gold in the United States dollar: the silver coins of such countries were given the same valuation as the corresponding gold coins with which they are interchangeable. In countries having a silver standard the value of silver coins was fixed at the gold value of the pure silver contained in such coins based upon the average price of silver in London for a period embraced between Oct. 1 and Dec. 24 1888. This price was 42.911 pence per ounce British standard (0.925 fine), equivalent at the par of exchange to $0.94 per ounce fine.

Silver is quoted in London at so many pence per ounce (0.925 fine), in gold; in New York at so many cents per ounce (fine) in gold. The market price of silver in London fixes its value elsewhere.

This estimate of foreign coins made and proclaimed annually fixes their value relative to our own for custom house purposes and all others. It is called the par of exchange be-

tween this country and the others respectively. Where a foreign nation had a double standard its silver coins were treated as local and domestic tokens of the country to which they belonged. But in the case of Japan its money unit (yen) was computed both in gold and silver, with a note appended that the silver standard was the one in use. Computed as above, the gold yen was worth $0.997 and the silver yen $0.734. In assessing ad valorem duties upon an importation of Japanese goods, it would be very material whether the yen mentioned in the invoice was considered as equal to $0.997 or only to $0.734. In Japan goods were bought and sold in terms of the silver yen as the unit of value.

As the gold dollar or 23.22 grains of pure gold furnishes both the legal and actual unit of value in this country, the computation of the value of foreign coins taking it as the basis, was obviously correct. And the value of the standard sovereign or pound sterling which consists of $113\frac{1}{6}\frac{1}{23}$ grains of pure gold may be found by dividing the latter amount by the former.

The Director of the Mint, in his report for 1889, p. 31, gives a table showing exports of gold bars from May, 1888, to September, 1889, to the amount of $61,435,989.00, and the price of sight exchange at the several dates of shipment. And he says, p. 32: "It will be seen that the bulk of the shipments took place at dates when exchange was between $4.88½ and $4.89. The cost of transporting gold bars from New York to Europe is about one-eighth of one per cent., and the cost of insurance from nine one-hundredths to three-sixteenths of one per cent., so that it would not be profitable to ship bullion, rather than to buy exchange, if the price of exchange was below $4.88. As regards shipments to London, the well-known fact that the Bank of England pays for gold only 77s. 9d. per ounce, British standard ($0.916\frac{2}{3}$ fine), while it sells gold at the rate of 77s. 10½d., equivalent to a coining charge of 1½ pence per ounce, would not induce shipments of gold to London. The margin of 1½ pence per ounce, at the Bank of England, between the buying and selling prices of gold, rather encourages shipment of gold from London, as owners of bullion in London will accept any price for shipment above 77s. 9d. per ounce. So that the price of exchange in New York would have to be nearly $4.89 before it would be profitable to

ship gold to London, for sale to the Bank of England, in preference to buying exchange. As a matter of fact, most of the gold which recently left this country went to France."

A sovereign is legal tender in England so long as it weighs enough to contain 112.29+ grains of pure gold, so that if a draft on England or a debt due there were paid in such light sovereigns their value in gold dollars would be $4.836 each, instead of $4.8665. And an exportation of gold from England might be prevented by a tender of light sovereigns. An exporter hence to England, if paid in light sovereigns, might find a difficulty in realizing out of them the par of exchange. Gold bars might not sell for the same price for light sovereigns as heavy ones. To provide for this case the exporter would have to buy his goods cheaper or sell them dearer.

If the silver dollar should become the unit of value, then the relative value of all foreign coins would undergo great alteration, and the section of the statute fixing the English par of exchange at $4.8665 would require immediate repeal. For denoting the gold dollar by d, the silver dollar by d^1, and the pound sterling by L, then

$$d^1 = v.d \qquad (1)$$

$$\text{L.} = 4.8665 \times d = \frac{4.8665}{v}.d^1 \qquad (2)$$

During the fiscal year 1889 the average value of silver was such as to make $v=0.72$: this substituted in Eq. (2) would make the par of exchange between the pound sterling and the silver dollar $6.759+. In order to make $v=1$, the price of silver must be $1.29+ per ounce fine.

The relative bullion value of the gold and silver dollar is as follows: If the gold dollar is d, and the silver one d^1, and the gold price of an ounce of fine silver $v.\ d$, then

$$v.d = \frac{480}{371.25}.d^1 \qquad (3)$$

In which, if $d=d^1$ then $v=1.29+$.

And if r be the ratio of silver to gold as to value for equal weights of each, and $v.d$ the gold price of an ounce of pure silver, then

$$r = \frac{480}{23.22}.\frac{1}{v} \qquad (4)$$

If $v=1.29+$, then $r=15.988+$, which was the ratio adopted in 1837 and now in force.

Foreign money is worth no more here than its bullion value, and so also with our money abroad. A silver dollar may pass at home as the equivalent of and as a token for a gold dollar, but abroad the value of any coin is no more than so much bullion.

In Collector v. Richards, 23 Wall, 246, the above act to fix the par of exchange was held to be a repeal of all previous laws fixing the value of foreign coins and the mode thereby adopted approved as being just to all concerned. In Cramer v. Arthur, 102, U. S., 612, suit was brought on an alleged over-valuation of goods imported from Austria in 1874. The invoice was expressed in Austrian paper florins. The law authorized the President to establish proper regulations for estimating the value of goods imported in respect to which the original cost should be exhibited in a depreciated currency issued and in circulation under the authority of any foreign government. Such regulation then was, that the value of foreign coins as proclaimed was to be taken in estimating custom duties unless collectors had been otherwise instructed, or unless a depreciation of the value of the foreign currency expressed in an invoice from the standard of that country should be shown by a consular certificate. The value of the silver florin as proclaimed was $0.476 in gold and of the paper florin as shown by the consular certificate attached to the invoice was $0.4577: these estimates were held to be conclusive upon the importer. And it was also held that the law required parties to make out invoices in the currency of the country where the goods were bought and did not leave it to them to make a pretended estimate of the cost in a coin valuation. In Hadden *et al* v. Merritt, 115 U. S., 25, the plaintiffs had imported in 1879 from China goods subject to ad valorem duties, the values of which goods were stated in Mexican dollars as the currency of China. The plaintiffs offered to show that the value of these dollars as estimated and proclaimed was based upon a comparison between them and the American silver dollar instead of the gold one, and that thereby the goods had been largely over-valued. But the evidence was excluded and the value as proclaimed was held to be conclusive; that it was an executive function and precluded judicial

enquiry. As the gold dollar furnished both the legal and actual unit of value in 1879, it was both illegal and unjust to use the silver dollar as the basis of computation. In 1879 the silver dollar was worth $0.868 in gold: and in using it as the unit of value, raised the duties upon these Chinese goods over fifteen per cent. At the value of the silver dollar in 1889, viz., $0.72 in gold, the duties would have been increased nearly forty per cent.

After the close of the war, in 1865, a contraction of the previous paper inflation took place and the paper dollar changed from a decreasing to an increasing standard; and provision was made by the act of January 14, 1875, for the resumption of specie payments by the government upon its circulating notes on and after January 1, 1879. The pressure caused by the contraction was severely felt after 1873. The great demand for more money enabled the producers of silver and its other friends to pass, over the President's veto, the act of February 28, 1878, which provided: There shall be coined at the several mints of the United States silver dollars of the weight of 412.50 grains (Troy), of standard silver, as prescribed in the act of January 18, 1837, on which shall be the devices and superscriptions provided by that act, which coins, together with all silver dollars heretofore coined of like weight and fineness, shall be a legal tender for all debts and dues, public and private, except where otherwise stipulated in the contract. And the Secretary of the Treasury is authorized and directed to purchase from time to time, silver bullion at the market price thereof, not less than two million dollars worth per month, nor more than four million dollars per month, and cause the same to be coined monthly as fast as purchased, into such dollars. Any gain or seignorage arising from this coinage shall be accounted for and paid into the Treasury. The deviations allowed by the act of 1837, and since, are as previously stated. Assuming that all silver dollars coined are a legal tender if they are within the limits of tolerance, it is probable that they cease to be so when reduced in weight below the prescribed limit. Under this act there had been coined up to November 1, 1889, in silver dollars, $343,638.001, with their further coinage still proceeding at the lowest limit fixed by the statute; the number of dollars coined from time to time being depen-

dent upon the current market price of silver. The value of the silver dollar had declined from above par in gold in 1873 to about $0.90 in 1878. And this new and additional market for silver failed to arrest its decline in value, so that in 1889 the value of the silver dollar was only $0.72. In the meantime the silver product of the United States increased from 31,550,000 fine ounces in 1879 to 50,000,000 fine ounces in 1889.

All efforts made to establish a general free coinage of silver, upon some agreed ratio of value relative to gold, entirely failed. Those nations which had adopted a single gold standard declined to re-adopt a double standard which they had deliberately rejected, and thus disturb their money systems, in order to raise the price of silver for the benefit of its producers. If the adoption of a single gold standard had enhanced money, or lowered prices, as contended by the friends of silver, the effect was not so apparent or injurious as to justify a return to a double standard, which had come to be regarded as medieval and antiquated; especially as the great increase in the production of silver, and its great decline in value, seemed to put the scheme of an international double standard in the light of a mere experiment which the result might fail to justify, even if all parties should adhere to the agreement in good faith.

The real international medium of exchange is bullion. The conversion of one kind of money into another is easy enough by the method which has been adopted. This country has a far greater trade with Great Britain than with any other country; and if the pound sterling were adopted as the money unit here, or Great Britain should adopt the gold dollar and discard the pound sterling, neither alteration would be of any benefit sufficient to justify the change. The conversion of dollars into pounds sterling, francs, marks, &c., is quite easy enough. Nobody wants to receive any foreign money as a tender in payment of debts or otherwise,—certainly not strange coins of unknown and unreliable weight and fineness. It is unnecessary, and it would be unjust, to compel the people to accept light and worn foreign coins under any scheme for an international American, or other, monetary union. If the other republics upon this continent and South America all legislate upon the subject of money as much as the United

States, it would be idle to attempt to issue an international coin or coins to be used by all of them. Besides any scheme for an international American monetary union which shall fix "the quantity, the kind of currency, the uses it shall have, and the value and proportion of the international silver coin, or coins, and their relations to gold," is evidently an attempt to tie the hands of all the statesmen and legislators of all these republics and forever prevent them from benefiting their people by an almost constant legislation about money. The Argentine confederation and perhaps others are more concerned about paper money at this time than any other kind. When silver began to decline it would have been a great benefit to all its producers in both Americas if a general free coinage of silver at the ratio to gold of fifteen and a half to one, or thereabouts, could have been brought about by an international agreement to that effect; but the non-producers of silver would not concur, and the scheme failed. If all nations could agree about money, and adhere to it, then it would seem feasible for them to agree in other matters: as, for instance, to dismiss their standing armies and live in peace with each other. About two thousand years ago, Cicero imagined that a time might come when there would not be one law at Rome, another at Athens, one law now and another hereafter, but that among all nations and during all time there would be the same perpetual and universal law. Such time has not yet arrived. On the contrary, in this country alone, it requires a national congress and a legislature in each State to keep the governmental machine from creaking upon its hinges.

The purchase of two millions of dollars worth of silver monthly by the Treasury, under the act of February 28, 1878, having failed to arrest the decline in the value of silver, its friends procured the passage of an act (July 14, 1890) authorizing the Secretary of the Treasury to purchase four millions and a half ounces monthly, or so much thereof as may be offered, at the market price thereof not exceeding $1 for 371.25 grains of pure silver, and to issue in payment for such purchases of silver bullion, Treasury notes of the United States in such form and of such denominations, not less than $1, nor more than $1,000, as he may prescribe. Such notes to be redeemable on demand in coin at the Treasury of the United States, or at the office of any Assistant Treasurer, and when

so redeemed may be re-issued, but no greater or less amount of such notes shall be outstanding at any one time than the cost of the silver bullion and the standard silver dollars coined therefrom then held in the Treasury, purchased by such notes; which notes are made a legal tender in payment of all debts, public and private, except where otherwise expressly stipulated in the contract, and also receivable for all customs, taxes and all public dues, and when so received may be re-issued; also the Secretary of the Treasury may redeem the notes in gold or silver coin at his discretion, "it being the established policy of the United States, to maintain the two metals on a parity with each other upon the present legal ratio, or such ratio as may be provided by law." Two million ounces of the silver purchased are to be coined monthly until July 1, 1891, after which as much as may be necessary to provide for the redemption of the notes, any gain or seignorage arising from such coinage to be accounted for and paid into the Treasury. Also, "That so much of the act of February 28, 1878, entitled, 'An act to authorize the coinage of the standard silver dollar, and to restore its legal tender character' as requires the monthly purchase and coinage of the same into silver dollars of not less than $2,000,000, nor more than $4,000,000, worth of silver, is hereby repealed."

The act of July 14, 1890, contains no provision making the silver dollars to be coined thereunder a legal tender in payment of debts: but they are made so, if at all, by that part of the act of February 28, 1878, which is not repealed.

As the amount required to be purchased by this act is quite equal to one-half of the total annual product of silver at this time, its friends confidently expect that its value will be thereby speedily restored to a parity with gold at the present legal ratio of 15.988+ to 1, or to $1.29+ in gold per ounce fine. Unless this occurs, the declaration in the act that it is the established policy of the United States to maintain the two metals on a parity with each other upon the present legal or any other legal ratio, will be nugatory. If the demand for silver is sufficient to make its market value $1.29+ per ounce fine in gold, then 371.25 grains of pure silver will be worth 23.22 grains of pure gold, otherwise not. And if not, then they will differ in spite

of the established policy of government as above declared, and one or the other will be the actual standard of value.

According to the Director of the Mint, the countries which have at this time a single standard, or a double one, are:

Gold—Brazil, Canada, Denmark, Egypt, Germany, Great Britain, Liberia, Norway, Portugal, Sweden, and Turkey.

Silver—Austria, Bolivia, Columbia, Equador, Guatamala; Honduras, India, Mexico, Nicaragua, Peru, Russia, Tripoli and Venezuela.

Gold and Silver—Argentine Republic, Belgium, Chili, Cuba, France, Greece, Hayti, Italy, Japan, Netherlands, Spain, Switzerland, and the United States.

II.

TOKENS.

The specie part of the currency consists of standard coins and tokens. The value of gold varies directly with its weight; hence, if the gold dollar furnishes the unit of value, the value of the other gold coins is in proportion to their weight, and they constitute the standard coins. All the other coins are tokens,—their nominal exceeds their bullion value. They are the silver dollar, half and quarter dollar, dime, five cent piece, three cent piece and cent. By a recent act the coinage of the three cent piece is to cease, and the same withdrawn; it is not needed.

The silver dollar is a token because 371.25 grains of silver are worth less than 23.22 grains of gold. If silver should become worth $1.29+ per ounce fine, in gold, then the silver dollar will be a standard coin. Or, if it shall drive out of circulation the gold coins, then it will be a standard coin whether it is of equal bullion value with the gold dollar or not; for in such case the silver dollar will then be the actual unit of value. During the fiscal year ending June 30, 1889, the average value of the silver dollar was $0.72 in gold: it has always been worth less than a dollar in gold ever since 1873.

The fractional silver coins and their standard weights are: the half dollar, weight 12½ grams (192.9 grains); the quarter dollar and dime weighing, respectively, one-half and one-fifth the weight of the half dollar. They are a legal tender at their

nominal value in all sums not exceeding ten dollars, in full payment of all dues, public and private.

The minor coins and their weights are: five cent piece, weight 77.16 grains: three cent piece, 30 grains; cent, 48 grains. The two former are composed of an alloy, consisting of 75 per cent. of copper and 25 per cent of nickel; and the cent of an alloy of 95 per cent of copper and 5 per cent. of tin and zinc in proportions to be determined by the Director of the Mint. They are a legal tender at their nominal value for any amount not exceeding twenty-five cents in any one payment.

Also, the fractional silver coins when presented in sums of twenty dollars, and the minor coins when presented in sums of not less than twenty dollars, are redeemable in lawful money at the Treasury or any of its offices; and if wanted, can be obtained there in exchange for other money.

The fractional silver coins were reduced to tokens by the act of 1853. By the act of 1873 their standard weight was slightly increased for the purpose of bringing them into conformity, as to content of silver, with the five franc coin of the Latin Union, and the money units of several states in Central and South America. If this change had caused their use abroad they would return home as worn and light coin, to be recoined at the public expense. They weigh less, and are worth less, in proportion, than the silver dollar. And the object to be attained by fitting a local and domestic token for foreign circulation is not apparent.

The minor coins are made of base metal and of a convenient size, for good reasons. If made of silver they would be too small; and if made of base metal enough to represent thair nominal value, they would be too large and heavy. Small money must not be too small nor too large, but of a size convenient for common use. Their nominal is much more than their bullion value; but their power as legal tender is limited as above stated.

Such money is a necessity, in order to pay sums in full to the extent of one cent, and also to admit of retail in small sums. Without cents the daily newspaper could not be sold for one or two cents. And in view of the variable value of silver, the fractional silver coins are well enough as they are. Both kinds, if redundant, are redeemable in lawful money,

and are therefore a credit currency as well as tokens. The silver dollar, while silver remains below $1.29+ per ounce fine, in gold, and the gold dollar continues to be the unit of value, is a mere token. This fact is not altered because silver dollars are unlimited legal tender for all debts and dues except where otherwise stipulated in the contract. In July, 1864, when gold was $2.85 in paper, the fact that a greenback dollar, worth about $0.36 in gold, was a legal tender for a dollar, did not make the paper money equal in actual value with the coin. In the circulation the silver dollar occupies the place of a gold dollar, and as a token represents it without being redeemable into it. Silver dollars were coined beyond the number which would circulate in specie, for two inconsistent reasons: in order to help the price of silver, and to make money cheaper. Both of these objects are expected to be realized by the recent act.

III.

THE MEDIUM OF EXCHANGE.

Money operates as a medium of exchange. If the money unit is d, and any article or quantity of wealth is w, and another is z, then

$$w = r.d \qquad (5)$$

$$z = r^1.d \qquad (6)$$

and by eliminating d between Eqs. (5) & (6)

$$w = \frac{r}{r^1}.z \qquad (7)$$

which expresses the relative exchange value between w and z. And if prices are quoted in two money standards, the par of exchange readily converts one into the other.

Under date of March 22, 1890, wheat was quoted in Liverpool as follows: California club 7s. 2½d.; No. 2 red winter, 7s.; No. 2 spring, 7s. 3½d.; No. 1 Bombay, 7s. ½d.; Kurachee red, 6s. 4d., &c—with a difference between "spot" and "futures." Also bacon, long and short clear, 30s.; Cumberland cut, 31s. 9d.; hams, long cut, 45s. 6d,. Also, in New York same date:

Sugar—Raw Muscavado, 87 test, $4\frac{7}{8}$c. refined, $\frac{1}{16}$c. lower; extra C, $5\frac{7}{16}$ to $5\frac{3}{4}$c.; white extra C, $5\frac{1}{16}$ to $5\frac{1}{16}$c.; yellow, $4\frac{11}{16}$ to $5\frac{5}{16}$c.; off A, $5\frac{5}{8}$ to $5\frac{3}{8}$c.; mold A, $6\frac{3}{8}$c.; standard A, $6\frac{1}{8}$c.; confectioners' A, $5\frac{15}{16}$c..; cut loaf, $7\frac{3}{16}$c.; crushed, $7\frac{3}{16}$c.; powdered, $7\frac{7}{16}$c.; granulated, $6\frac{1}{4}$c.; cubes, $6\frac{3}{8}$c.

In this way different commodities are quoted in the market according to their various grades and qualities. And from the market prices ruling at any market, their relative exchange value for that market and that date could be figured out. But such quotations require a money standard reasonably well fixed and invariable. Other things being equal that would be the best and most reliable market which had the best system of money. During the great rebellion this country had an elastic and variable standard and currency all of paper. And the price in paper of such a staple article as gold coin was very giddy. During June, 1864, the value of the gold dollar varied from $2.50 to $1.93 in paper; and during July, 1864, from $2.85 to $2.22.

If the standard undergoes variation, as in the case of a paper inflation or otherwise, then d in Eqs. (5) and (6) becomes an unknown quantity. And experience proves that the various articles of wealth do not immediately respond to the expansion of the currency, but begin to rise in price at different times, and move with different degrees of rapidity. The same irregularity occurs in a contraction. These effects were clearly apparent during the civil war and afterwards.

Under such a state of things both v and v^1 vary independently, and the alteration which occurs in d is referred to a change in the value of w and z; and the more rapid the inflation or contraction, the more variable values become. In such case the unit of wealth and value is entirely indefinite, and is of all sizes, as represented by

$$d=\frac{w}{v} : d=\frac{z}{v^1} : \&c. \&c. \qquad (8)$$

A standard of this kind during the suspension of specie payments in England consequent upon the wars of Napoleon was defined as "an ideal unit in terms of which the relative values of all commodities may be computed," and as "expressing a sense of value in reference to currency as compared to commodities." While such an ideal unit might convey "a

sense of value," it would fail to furnish a means by which the relative values of commodities could be computed with any accuracy, for the reason that they do not vary in price uniformly with the changes in the standard. Such a state of things suits the speculator—the market represents chaos, and merchants become merely gamblers. Besides, creditors are impoverished by the inflation; and afterwards, debtors, by the collapse, contraction and decline.

A system of money, in order to perform properly its function as a medium of exchange, should be based upon a standard made as invariable as possible. Commodities are measured by the bushel, pound, gallon, yard, &c., and their value as per unit of quantity to the fraction of a cent, penny, &c., is measured according to all the different grades and qualities by the value of the money standard. And the same reason exists that it should be fixed and remain so as that the foot, yard, pound, and other measures of quantity, should remain unaltered. It is contrary to experience, and indeed absurd upon the face of it, that all the immense variety of articles, each one of various grades and qualities, would simultaneously and immediately respond to every alteration of the standard, as, if it be unreal, fictitious, unstable, elastic, flexible, &c.; or, that all values would instantly change in due proportion to it. Among barbarians where barter is practiced, length may be measured by a man's foot, or in paces, or fathoms, and quantity by the handful, &c. But civilized men require something more definite. The precious metals could be hardly used as money when both their weight and fineness were guessed at.

The law regards it as a great crime to make false or counterfeit money, or to deface, mutilate, impair, diminish, falsify, scale or lighten the coin. But in fact these are small offenses when compared with an alteration of the standard itself, as by debasing it, or by substituting another of different value in its place, or by an inflation of the currency. It would be just as honest, and no more injurious, to tamper with the foot, pound, yard, and other units of common measure.

After values have become adjusted to a system of money, tokens, and other substitutes for the money itself, are often brought into use and made to operate as a part of the circulating medium. And this fact has given color to the idea that anything which can be made to circulate is good enough for

a medium of exchange. In the days of State banks and generous confidence, a hotel cook in New York started a fictitious bank, located nominally in Wisconsin, but really in his kitchen. After printing $100,000 in notes, he made a contract with a money dealer to redeem them in New York at five per cent. discount, and to quote them as good at that rate in his "bank note detector." This was at that time a fair rate of discount on State bank money that far away from home. After a large amount had been put into circulation, the cook disappeared, leaving the medium of exchange furnished by him to render service to the country along with other paper money more lawfully authorized, but in fact of little greater value. Like wheat, provisions, sugar, &c., paper money may be of all grades and qualities. In the above case it lacked a redeemer. In other cases there may be such a person, ostensibly, but without the specie needed for the purpose, or he may be located in some out of the way place and hard to find. Or the paper money may be secured by government bonds as to its ultimate payment after the bank of issue is wound up by a receiver and the bonds are sold, and in the meantime redemption, if demanded, is made difficult and expensive. Or the paper money may be greenbacks with every facility offered to get the specie, and the best kind of specie, thereon; or, of coin certificates, where the coin lies in the Treasury until the certificate is presented for payment. Or the paper money may be Treasury notes issued for the purchase of silver, redeemable in coin at the Treasury or any of its offices with the silver purchased lying in wait to make good the promise of payment engraved upon the notes.

All sales take place upon the basis of an exchange of equivalents: and the price received ought to retain its value until the holder may see fit, at his own convenience, to make use of it. Money ought to be durable; one of the chief merits of the precious metals is their durability. The proper medium of exchange is standard coin and such paper substitutes for it which may be always convertible into specie without cost or delay. Then thrift and industry are encouraged; savings can be made and stored up without fear of loss. When confidence exists the people deposit a large part of their savings in banks where it may be safely kept and profitably used. But if the money consists of bank bills and other tokens for

money, a currency panic is liable to occur and a large part of the money prove to be worthless. The currency ought to be such that the reserves of the banks and of individuals might be entirely trustworthy. The superstructure of credit requires a secure foundation.

A system of money ought to be such that a currency panic would be impossible. Such a one would be a currency composed entirely of gold; or, if silver were the standard, then entirely of silver. In either case, no one could get into a fright about the goodness of his money. Not so, if the currency consists mainly of tokens or of bank bills; for the tokens may cease to be current, or the banks fail or suspend payment. With the best kind of money a credit panic might occur. That is, a fright, not about the goodness of the money, but about getting it. Banks of deposit may fail to pay their depositors and debtors fail to pay their creditors but if the money is good somebody will have it; and property will not be sold for a mere song. A combined currency and credit panic is fatal to all business and nearly all wealth. the labor of a lifetime may become a total wreck at once. In such case there is neither money nor credit. A currency panic is very liable to culminate into one of the combined sort Behind it follows grief and poverty. Hence the importance of a currency about which there can be no fear.

If anything which will operate as a medium of exchange is good enough for money, then an inconvertible paper currency issued out of the public treasury and made a legal tender, is the best kind. It would be cheap, light, and entirely free from loss by wear. There would be no expense or trouble in redeeming it, except to issue a new bill for an old one. Such was the currency of this country previous to the resumption of specie payments in 1879, when the whole of it, even to five cents, was in paper. The credit panic of 1873 occurred during this period. The banks failed to pay their depositors on demand, and other debtors failed to pay also. But there was no panic about the paper money. Bank bills had been inconvertible ever since 1861; and the ultimate payment of national bank notes was secured by government bonds. The objection to such a currency is that expansion is too easy and is liable to be too popular. Money cannot be made too abundant for debtors and speculators. But the amount of a specie

currency has its limits; when it becomes redundant, exportation takes place.

At this time the currency consists of the fractional and minor coin, gold coin, silver dollars, United States notes (greenbacks), Treasury notes, national bank notes, and coin certificates.

Gold certificates are issued out of the United States Treasury for gold coin, and silver certificates for silver dollars deposited there, and are made payable to the bearer in the kind of coin deposited, which is required to be retained in the treasury in order to redeem the certificates issued thereon when presented for payment. Coin certificates and also greenbacks are redeemed by the Treasurer or any assistant Treasurer if not mutilated, otherwise by the Treasurer only according to certain regulations concerning mutilated paper. Both kinds of certificates are receivable for customs, taxes, and all public dues, and when so received are to be reissued. The gold certificates are issued in denominations not less than twenty dollars and upwards, to correspond with the United States notes. The silver certificates are issued in ones, twos, fives, tens and upwards, to correspond with the United States notes. The amount of the silver certificates on September 1, 1890, was $308,423,071; gold certificates, $157,388,269.

United States notes, or greenbacks, are in such form and for such amounts as the Secretary of the Treasury may prescribe, do not bear interest, are payable to the bearer at the Treasury, and are lawful money and a legal tender for all debts, public and private, except duties on imports and interest on the public debt. Their total amount is, as fixed in 1878, $346,681,016. One hundred millions of dollars in gold is retained in the treasury as a fund for their redemption, and when redeemed they are to be re-issued and kept in circulation. They have been issued in denominations of $1, $2, $5, $10, $20, $50, $100, $1,000, $10,000.

The Treasury notes to be issued for the purchase of silver under the recent act, have been already mentioned.

National bank notes are issued in circulation by banks organized under the national free banking system. The notes are prepared and issued to the banks by the United States Treasurer to an amount not exceeding ninety per cent of the value of the United States bonds deposited with the Treas-

urer as security for the redemption of the notes. Each bank is required to keep on deposit with the Treasurer an amount in lawful money equal to five per cent of its circulation for its redemption, if presented in amounts of one thousand dollars or any multiple thereof; otherwise payment must be demanded at the counter of the bank during business hours; if not paid a protest is necessary and a report made to the Comptroller of the Currency at Washington, who has thirty days allowed to him to inquire into the facts and decide what to do. Since these banks number more than three thousand, scattered all over the country, no one, unless a banker, would be likely to have as much as one thousand dollars in the notes of any one bank. If redemption were sought for any less sum the bank might be one thousand miles away. These provisions are evidently intended to make redemption costly and difficult. It is a method to evade payment and enable the banks to enjoy the benefit of their circulation without disturbance. National bank notes are receivable for all public debts and demands due to the United States except duties on imports.

Ever since it was seen that the National Government could lawfully emit bills of credit in a form suitable for common use as a medium of exchange, there has been no reason for the existance of bank notes. A greenback is redeemed in gold at the Treasury, and if not mutilated at any of its offices, while a national bank note is redeemable in any kind of lawful money in manner as hereinbefore stated. Even if bank notes were always redeemable without any cost or delay, such purely theoretical bank notes would be no better than a coin certificate or United States note. The average circulation of bank bills from 1862 to 1890 was over three hundred millions of dollars. If the people had used their own notes, instead of this bank paper, they would have saved the interest upon the above amount for all that time; and during a part of it they paid interest at the rate of seven and three-tenths per cent. per annum, and for a longer time at six per cent. per annum. Taking five per cent. as the average rate, the people would have saved by the use of their own notes, in lieu of bank paper, over fifteen millions of dollars annually during the whole of the above period. Instead of this, they administered an elaborate and expensive free banking system for

the benefit and profit of the private owners of these banks of issue and donated to them annually the above vast sum, which justly belonged to the people themselves.

Fortunately, the field of circulation occupied by bank notes has been needed, or supposed to be so, for the silver certificates heretofore issued, and hereafter for the Treasury notes to be issued for the purchase of silver under the recent act. All schemes to alter the National banking law so as to admit of bank inflation, have been nipped in the bud by the friends of silver. So that the prospect now is, that in a few years, bank notes will entirely disappear, and the currency will be no longer a source of private gain.

A currency consisting of gold coin and gold certificates would be almost panic proof. If the National Treasury lost the gold upon which the certificates were issued, the whole people would be liable for the loss. And even if such a currency were composed of United States notes, in lieu of gold, to the extent of about three-fifths of its sum total, it would be quite safe and reliable, and at the same time more economical.

The currency as it now exists carries the silver dollars, silver certificates and National bank notes as so many tokens for a gold dollar. If the recent act for the purchase of silver shall cause a sufficient inflation, a change of standard will occur. The same may be said of the free coinage of silver, or an excessive issue of bank notes or Treasury notes. The effect of such a change of standard will depend very much upon the gold price of silver at that time

After the silver dollar shall become the standard, and all values have been adjusted to it, then silver dollars and Treasury notes issued for the purchase of silver, will make a currency quite panic proof. But the probability is, that in such case not a few who had incurred debts in silver dollars, would want to pay back something cheaper, and call for legislation to that effect.

IV.

THE VOLUME OF THE CURRENCY.

All the uses for money require a certain amount of it to satisfy a permanent and unexcited demand. In estimating this amount, it is not sufficient to include in it only the money

which is, or is supposed to be, in active circulation. As a store of wealth, money is just as much needed as for a medium of exchange. The money held by banks, railroads, insurance companies and other corporations, trustees, dead men's estates, and privately among the people is all a necessary part of the total amount required. The State and National treasuries require some money to be constantly on hand. Even the money which a man carries in his pocket, if allowed to stay there, is not in active circulation. If money were made too poor to keep, so that everyone would be afraid to hold it over night, its circulation might be more active and a less amount of it sufficient. But if it be composed of gold coin, a large part of it is liable to lodge somewhere in the hands of the people, and in various eddies and pools. According to the Director of the Mint, on July 1, 1889, the National banks held in gold coin $73,907,610; other banks and the people, $293,829,958. Very little of this is seen in circulation: it lies at the bottom of the reserves. It is regarded as trustworthy and reliable in a time of extreme need. Silver is too bulky for hoarding purposes, and paper is too perishable.

Ever since 1878 the currency has been upon a gold basis, and in part composed of that metal. It is a product of this country to the extent in value of about thirty-three millions of dollars annually. Deducting about one-third of this amount for the quantity annually consumed here in the industrial arts, the residue remains for use as money or for exportation. When the currency is redundant, gold is exported, and when deficient, it is imported. These are the limits of the fluctuation in the amount of the currency arising from natural causes. Casual demands for money affect the rapidity of its circulation and the rate of interest. Excessive speculation in stocks, or other commodities, may cause a great stringency in the money market. Very often, in such cases, the lame ducks raise such a cry that it sounds like a panic, and the National Treasury is called upon to interfere, and make money easy for their benefit.

Even when the currency is redundant and the exportation of specie is going on, great complaint is made about the scarcity of money. Speculators for a rise want money very abundant and the articles dealt in scarce. Debtors always complain of

the scarcity of money, especially if they are short of collaterals. And all those who have no money want some. Therefore the constant cry for more money is no proof that its quantity is deficient.

If money is made redundant by thrusting into the circulation more than is really needed, its value declines, and the metallic part is exported until the excess is disposed of. Previous to the late civil war, a large part of the specie was continually driven off by excessive issues of State bank notes. The war inflation caused all the specie to disappear, except a certain amount in gold needed to pay duties on imports. Up to ~~1880~~ 1878 there had been coined, in gold, $1,010,900,324; in silver dollars, $8,031,238; in fractional silver coins, $214,554,683; and yet all the money at that time in common use was of paper. Up to June 30, 1889, there had been coined at the mints, in gold, $1,500,666,297; in silver dollars, $341,533,888; and in fractional silver coins, $225,757,363.45. Only about one-third of the gold, and also of the fractional silver coins are now in the country. Paper inflation in time past expelled even the small silver tokens. In order to make specie abundant, it is not enough to run the mints hot.

In any system of money two things must be kept in view, to wit: the money unit and the currency volume. If money be made artificially, very abundant, the dollar will grow small in proportion: but the value of the standard coins cannot be carried below their exportable value. With an exclusively paper currency the value of the money unit may be carried by inflation to a nominal amount, as in continental money, assignats, and the like.

The numerical amount of the currency has a definite relation to the magnitude of the money unit. For it is obvious that if such unit were a cent, the same quantity of money would be numerically one hundred times as great as if the unit were a dollar; and that if the unit were an eagle, would be only one-tenth as much. If the money unit be denoted by d, all the money by $n.\ d$, and the volume of the currency by V, then

$$V = n.\ d \qquad (9)$$

In which if V is constant, d varies inversely with n.

The limit of inflation of a currency having a metallic basis being the exporting point for the standard coins, it follows that if the money unit were altered in size from d to d^1, so that $d^1 = v.d$, then

$$V = n.d = n^1.\ d^1 : n^1 = \frac{n}{v} \qquad (10)$$

If d were the gold dollar and d^1 the silver one, and $v = 0.72$, then $n^1 = \frac{n}{0.72} = n \times 1.39+$. That is to say, if the volume of the currency were filled up with silver dollars worth $0.72 in gold, to the exporting point for silver dollars, it would require an increase in the number of dollars to the extent of over thirty-nine per cent. This is the same as to say that if 371.25 grains of pure silver were the unit of wealth, and its value $0.72 in gold—being its average value during 1889—then the same wealth would measure about thirty-nine per cent. more in nominal amount when measured thereby, than if measured in gold dollars—credits excepted; as to them, the smaller the dollar the smaller the debt. After the same manner as above, it appears that a ninety cent standard would allow of an inflation to the extent of about eleven per cent.; an eighty-five cent standard, to the extent of about seventeen per cent.; the smaller the standard, the greater might be the inflation.

But if 371.25 grains of pure silver were worth a dollar in gold, viz., if silver were worth $1.29+ per ounce fine in gold, then (Eq. 10) $d = d^1 : n = n^1$. In such case the nominal amount of the money would be the same by either standard, and wealth would measure the same in amount by the one dollar as the other. And money would be no cheaper nor abundant with such a silver standard than with a gold one. Silver dollars would be then exported as readily as gold coin. This state of things is hoped for by the producers of silver. On the other hand, debtors and speculators want money abundant and cheap: they want the dollar made smaller.

If the currency be metallic, and its volume so full that specie is exported, then the standard coins are at their bullion value: for other nations use their own systems of money. Bullion is not suitable for a medium of exchange; it requires

division into parts with the proper authentic stamps thereon, to indicate its purity, weight and value. Hence money may have, if it be deficient in quantity, a greater value than the bullion contained in it. Owing to this fact, it has been believed that if a certain part of the precious metal were extracted out of the standard coins, they would have the same value as before; that, in fact, their use value as money, would make good their loss in bullion value. Acting upon this pleasant and lucrative idea, currencies have been, at various times, greatly debased. But this left an opportunity for inflation, and the precious metal extracted being used for that purpose, the result was to sink the value of the money. Under the act of 1878 for the monthly purchase and coinage of silver into dollars, they occupied the place of the same number of dollars in gold and passed as tokens for them. Hence it might be said that the silver dollars acquired a use value as such tokens which nominally at least made up their shortage in bullion value. According to this reasoning, if these dollars had been made out of base metal or even leather instead of silver, and they could have been made current, they would have answered the same purpose as if made of silver. If a silver dollar of the bullion value of $0.72 in gold will pass at par, why not a dollar made out of some material only worth one cent or less? Whatever token dollars may be really worth, if they were increased continually and would remain current, they would first expel all the standard coins and afterwards cause the value of the money to sink until such tokens became worth only their bullion value. In other words, the token dollar would finally become the standard and furnish the unit of value.

From the foregoing it is quite evident that inflation of the currency depreciates the value of the money unit, and that contraction produces the contrary effect: also, that any alteration made in the standard, admits of a corresponding change in the currency volume.

At this time, the gold dollar is the standard, and the volume of the currency cannot be inflated beyond the point where the exportation of gold sets in, until after it is driven away. How much money now constitutes the volume of the currency? On November 1, 1889, all the money, including therein bul-

lion in the mints and assay offices, was, as given by the Director of the Mint and the Comptroller of the Currency:

Gold coin	$ 619,640,450
Gold bullion	64,554,236
Silver dollars	343,638,001
Silver bullion	10,918,171
Fractional silver coins	76,628,781
Minor coins	18,758,228
United States notes	346,681,016
National bank notes	202,023,415
Total	$1,682,842,298

From this total is to be deducted one hundred millions of dollars in gold held in the Treasury as a fund for the redemption of the United States notes, and which is counted twice in the above statement; also, there is to be deducted not less than twenty millions of dollars in fractional silver coins lying in the Treasury uncalled for. Deducting these two items from the above, leaves the total amount of money at $1,562,842,298.

On July 1, 1889, the paper money was:

Gold certificates	$154,048,552
Silver certificates	262,629,746
United States notes	346,681,016
National bank notes	202,023,415
Total	$965,382,729

So that the relative amounts of coin and paper were:

Specie	$ 597,459,569
Paper	965,382,729
Total	$1,562,842,298

Of the paper money, $448,704,431 was a credit currency; the residue represented specie on deposit in the Treasury.

Besides the surplus in the Treasury in excess of the amount needed to meet ordinary demands, there was also an amount to the extent of five per cent. of the bank note circulation held to redeem it as before mentioned; also, an amount held in lieu of bonds deposited by the banks to secure their circulation, and which had been withdrawn, and which on October 31, 1889, was $71,816,130. When bank notes were presented

for cancellation, they were paid out of this fund. By the recent act for the purchase of silver, this fund has been abolished and the bank notes, when presented for cancellation, are to be paid out of the general cash in the Treasury. The amount of this fund on Sept. 1, 1890, was $55,059,296. This money, when put in circulation by the purchase of bonds or otherwise, was expected to ease the money market and help speculation, especially in silver bullion. The excess of fractional silver coins lying in the Treasury uncalled for was caused by a speculation in trade dollars which were put upon the Treasury at a profit, under an act passed for the purpose. No other use could be made of them except for coinage into small money.

If the money system were more simple the currency might possibly consist of a smaller amount. But with a people rich enough to afford the best kind of money, economy as to its amount is a secondary consideration. If a currency based on gold is the best kind, it would constitute no objection to it that every old woman in the country had at least one eagle safely nested somewhere. Poor money is poor economy; and the saying that poor people have poor ways is especially applicable to money. Poor money is only suitable to pay toll on the road to the poor house.

Assuming that the sum of $1,562,842,298 is all needed at this time for some purpose or other—and if it were not some of the gold coin would be exported—then the requisite amount per head is about twenty-five dollars. As population increases the currency volume will increase. Hence, if population increases hereafter at the rate of two millions of people per annum, a yearly increase of about fifty millions of dollars will be continually required in order to keep the volume of the currency brimming full. A moderate estimate would be, perhaps, twenty dollars per head, involving a necessary annual increase of forty millions. Before the rebellion, in 1860, the currency amounted to about fifteen dollars per head. But the people were much poorer then than now; they had always theretofore been kept poor by broken banks and dishonest money.

The annual amount of Treasury notes to be issued for the purchase of silver under the recent act, will depend upon its price, probably over sixty millions. But the excess of this

amount over the increase annually demanded by the growth of the country will cause no inflation of the currency until after the bank notes are all withdrawn; nor thereafter, until all the gold coin is exported or hoarded.

The Farmers' Alliance, which has become powerful enough at the polls to be very dangerous to present and prospective statesmen, demand by their national platform recently adopted "the unlimited coinage of silver, the abolition of national banks, and the issue of Treasury notes in lieu of national bank notes, in sufficient volume to meet the business demands of the country and the constantly increasing demands of trade."

This platform is sound as to bank money. The national Treasury can fully supply all demands for paper money in the form of coin certificates, treasury notes, or greenbacks. Congress can tamper quite enough with the currency without any assistance whatever from thousands of banks of issue conducted by private enterprise under any banking law, State or national, and free or otherwise.

The demand for the free coinage of silver, and also for the issue of Treasury notes in addition, indicates that this Alliance regard an annual increase to the currency of over sixty millions of dollars as an amount entirely too small to suit their views. The history of paper money might be studied to a good advantage by these farmers, who want abundant and cheap money now, and not at some indefinite time in the future as a slow consequence of the recent act for the purchase of silver.

As there is now no fund actually existing for the redemption of the bank notes, they might be lawfully redeemed by an issue of greenbacks or other Treasury notes under an act passed for the purpose. But if the farmers, or "the growing demands of trade," require an additional amount, how can the bills of credit be lawfully emitted?

After the treasury surplus is exhausted perhaps they might be paid out for pensions. Some "loyal" platforms declare that the country owes the ex-soldiers a (money?) debt so great that it never can be paid. And a governor bearing the martial name of Fifer is reported to have named at a soldiers' reunion the sum of three hnndred millions as a quite reasonable amount to be paid out annually for pensions. After the limit

of taxation is reached, perhaps the ex-soldiers might consent to take notes in part pay on account of the balance due to them.

Others, less loyal, have advocated a loan office at the Treasury for the benefit of the poor farmers, for whose benefit bills of credit should be issued upon real estate security at a nominal rate of interest to all applicants. This plan is much favored by the wealthy owners of the Pacific railroads, who desire to have the government debts thereon reduced in their rate of interest from six per cent. per annum to two per cent. or less.

The platform of the Farmers' Alliance leaves it quite indefinite as to the amount of Treasury notes which would be sufficient, in addition to the free coinage of silver, "to meet the business demands of the country and the constantly increasing demands of trade." Probably the amount demanded is a quantity such that no one could complain of the scarcity of money. Some agricultural platforms have named fifty dollars per head of the population as about the correct amount. Why not say five hundred and make money easy at once? Money must be very scarce now when the treasury is compelled to pay over twenty-five per cent. premium for four per cent. bonds having only a few years to run, and an offer to prepay a year's interest upon the public debt is very slowly accepted. The farmers might well question the right of the Secretary of the Treasury to wet-nurse Wall street. Why should soothing syrup be applied there exclusively and the cries of the poor farmers be allowed to pass wholly unheeded?

V.

MONEY AS A STORE OF WEALTH.

According to the report of the Comptroller of the Currency for 1889, the deposits of individuals were:

In National Banks	$1,475,467,560.37
State Banks	507,084,481.00
Loan and Trust companies	299,612,899.00
Savings Banks	1,444.391,325.00
Total	$3,726,556,265.37

The deposits in savings banks as above, consisted of "savings deposits," excepting $19,160,976 due on demand to other

individual depositors. To the above may be added all the money stored away privately among the people.

Wealth is not saved and hoarded up in perishable products, such as butter, cheese, beef, pork, grain, goods, &c., but in money. And for use as a store of wealth, money ought to be composed of some durable material, so that savings will not spoil, sour, grow musty or rotten, or otherwise lose their value. All wages are paid and saved in money; and savings usually accumulate in small sums, to be afterwards invested in houses, lands, bonds, stocks and other property.

Hence the necessity for good and durable money. It ought to be not only good to use as a medium of exchange, but also to lay away as a store of wealth against sickness, old age, misfortune, or a wet day. A man who has saved up a store of such material is never without friends.

If the right kind of money is in use among the people, it will continually accumulate in their hands. It is said that the hoards of the French peasantry paid the one thousand millions of dollars in gold, demanded by the victorious Germans. England adopted a single gold standard in 1816, and has since adhered to it. There wealth is great. The lender seeks a place where the rule is, with what measure ye mete, it shall be measured to you again; and he is satisfied with a less rate of interest. Here the money has been upon a gold basis ever since 1878, and the country has prospered to an extent unknown before. Indeed there has been no currency panic since 1861.

Any such figures as those above given were impossible in the days of State bank money. Such a superstructure of credit requires a solid foundation. With a dishonest currency what would become of the mass of wealth represented by the above figures? If the money were worthless and the banks suspended and insolvent, all this wealth would vanish like the baseless fabric of a vision. There are no statistics to show how much wealth must have perished in the currency panics of 1809, 1819, 1837, &c. Those who held the notes of the Farmers' bank of Gloucester, hereinafter mentioned, to the extent of $580,000 and lost it all, furnish an illustration. At a certain time before the great rebellion a friend received three hundred dollars in bank notes for farm products, and in a few days afterwards the money was worthless. The bank or banks had failed.

The amount of the above deposits tells a tale of industry and economy. It embodies a vast amount of toil. It represents the hopes and expectations of a vast number of people. These deposits were made upon the faith that the money would stay good, and would be repaid in money equal in actual as well as nominal value with that deposited. A difference of one cent in the money unit would make a difference in these deposits of $37,265,562. If a change of the standard hereafter occurs the difference will probably be much greater than one per cent. In 1889 the average value of the silver dollar was $0.72 in gold. Any one may compute the nominal amount but not the consequence, of paying all these deposits at a discount of twenty-eight per cent.

It may be good law to say that all these deposits can be paid in something cheaper than that deposited, if before such payment the cheaper money has been made a legal tender,—but to do it is contrary to Deuteronomy. In such case, perhaps, it would be a smart thing to say to some poor woman who had her little store of wealth deposited in a savings bank, that, as to money the law of Moses was not in force in this country, but that the doctrine here was, the devil take the hindmost.

VI.

PAPER MONEY.

This kind of money is preferred for common use and to pass from hand to hand. It is easier to carry, count and conceal than specie, is not subject to the objections of bulk, weight and wear, and when properly made is more difficult to counterfeit and tamper with than coin. No one desires to carry about with him any more specie than a sufficient quantity of small change. The chief objection to paper money is its liability to abuse; its manufacture is too easy, and the proper limit to its quantity is too easily forgotten or disregarded.

The legitimate demand for paper money is not a demand for more money, but for that kind because of its superiority for common use over coin, as above mentioned. If coin is deposited in the Treasury and coin certificates taken in lieu of the specie, the demand for such paper money is a proper one. And the demand that about one-half of the currency

shall be in paper is proper enough. And if silver dollars are to become the standard coins and the people prefer to lodge the silver in the Treasury and use treasury notes in its stead, such preference is a reasonable one. But any demand that money shall be made abundant and cheap by excessive issues of bills of credit, is absurd and dangerous. The lesson taught by over issues of Continental money during the Revolution, and of other kinds of paper money since, ought to be worth something.

During the Revolution paper money was a necessity; but there was found to be a limit to the amount which would circulate, although these drafts upon the future were backed by unlimited patriotism. Both the Continental Congress and the several colonies emitted bills of credit to very large amounts. In the absence of cash the colonies fought the mother country jointly and severally on credit. Overissue destroyed the value of the money.

After the adoption of the Federal constitution, it was very generally supposed that paper money was entirely prohibited. It was provided therein that "no State shall coin money, emit bills of credit, make anything but gold and silver a tender in payment of debts, or pass any law impairing the obligation of contracts;" and no express power was conferred upon Congress to do any of these things, except "To coin money, regulate the value thereof, and of foreign coins, and fix the standard of weights and measures."

A written constitution is construed according to its legal import and so as to give effect to the intention, not of its framers, but of the people in adopting it. And if it were intended by its makers that the Federal constitution should prohibit the issue or use of paper money entirely, the necessary words were not inserted in the instrument. For it was very shortly afterwards adjudged and held, that bank notes issued under National as well as State authority were not prohibited, and finally, that Congress could emit bills of credit and make them lawful money and a tender in payment of debts. Paper money, like coinage, was a great invention; and it was not its use but its abuse which needed prohibition.

In 1791 the first United States bank was incorporated with a capital of ten millions, and to continue twenty years. Subscription by individuals were to be paid one-fourth in specie

and three-fourths in public stocks bearing interest. The government was to subscribe for one-fifth of the stock to be paid in cash, and the amount reloaned to the government payable in ten annual instalments. There wes no money in the treasury to pay for this stock, and it was paid for as follows: Bills were drawn on the American Commissioners for loans in Amsterdam for the two millions, and which were purchased by the bank; the money thus realized was at once used to pay for the bank stock; whereupon the bank loaned to the government two millions to be repaid as above by delivering to its treasurer the above drafts, which had been nominally discounted at the bank. This neat way of paying for bank stock was very generally practiced afterwards by those who supplied the country with a currency. They discounted their notes at the banks which they had created for an amount sufficient to pay for their stock subscriptions.

State banks were also established everywhere with a nominal capital, in the aggregate to a very large amount. A bank in those days meant a bank of issue; it was a piece of machinery organized for the purpose of issuing paper money. There was a currency panic in 1809; the business had been overdone. The Farmers' Bank of Gloucester, Rhode Island, when investigated by a committee of the legislature was found to have in circulation $580,000 in notes, and available assets for their redemption to the extent of $84.67. Other banks in New England were no better.

The banks south of New England suspended in 1814. In Philadelphia, the notes of the city banks depreciated twenty per cent. and those of the country banks from twenty to fifty per cent; fractional parts of a dollar were supplied by small notes and tickets of banks, corporations and individuals.

With the exception of a second United States bank incorporated in 1816 with a capital of thirty-five millions, to continue twenty years, and which failed in 1839 with its stock a total loss, the State banks furnished the paper money and controlled the currency of the country until the outbreak of the late civil war.

In 1816, when the bill to incorporate the second United States bank was pending, Mr. Calhoun said in the House: "There has been an extraordinary revolution in the currency of the country. By a sort of undercurrent, the power of Con-

gress to regulate the money of the country has caved in and upon its ruin has sprung up these institutions which now exercise the right of making money in and for the United States. For gold and silver are not the only money, but whatever is the medium of exchange and sale, in which bank paper alone was now employed and had become the money of the country. A change great and wonderful has taken place, which divests you of your rights and turns you back to the Revolutionary war, in which every State issued bills of credit, which were made a legal tender and were of various values. We have in lieu of gold and silver, a paper medium unequally and generally depreciated, which affects the trade and industry of the nation: which paralyzes the national arm, and which sullies the faith, both public and private, of the United States."

And he further stated that the banks had one hundred and seventy millions in circulation, and not over fifteen millions in specie for its redemption.

Up to 1816, the mint had coined in gold (eagles, half and quarter eagles), and in silver, (dollars, halves, quarters, dimes and half dimes, as follows:

Gold	$ 5,610,957.50
Silver dollars	1,439,517.00
Fractional silver coins	6,175,111.50
Total	$13,225,586.00

Any other specie then in the country must have consisted of foreign coins.

The country went into the war of 1812 with a currency consisting of State bank paper. Washington was taken by a small invading force and the public buildings, including the capitol, were burnt, and insolvency compelled peace without honor, except on the water and finally at New Orleans. When Mr. Calhoun said the State bank paper had paralyzed the national arm, he evidently referred to events then fresh in the minds of his hearers.

Mr. Benton says (Thirty Years, etc., vol. 1, p. 1): "The Government struggled and labored under the state of the finances and currency and terminated the war without any professed settlement of the cause for which it began. There was no national currency—no money, or its equivalent, which represented the same value in all places. The first Bank of

the United States ceased to exist in 1811. Gold, from being undervalued, had ceased to be a currency—had become an article of merchandise, and of export—and was carried to foreign countries. Silver had been banished by the general use of bank notes, had been reduced to a small quantity insufficient for a public demand; and besides would have been too cumbrous for a national currency. Local banks overspread the land; and upon these the federal government, having lost the currency of the constitution, was thrown for a currency and for loans. They, unequal to the task, and having removed their own foundations by banishing specie by profuse issues, sank under the double load of national and local wants, and stopped specie payments—all except New England, which section was unfavorable to the war. Treasury notes were then the resort of the federal government. They were issued in great quantities; and not being convertible into coin at the will of the holder, soon began to depreciate. In the second year of the war the depreciation had become enormous, especially towards the Canada frontier, where the war raged and where money was most wanted. An officer setting out from Washington with a supply of these notes, found them sunk one-third by the time he arrived at the Northern frontier. After all, the Treasury notes could not be used as a currency, neither legally nor in fact; they could only be used to obtain local bank paper, itself greatly depreciated. All government securities were under par, even for depreciated bank notes. Loans were obtained with great difficulty, at large discount, almost on the lender's own terms; and still attainable only in depreciated local bank notes. Impressment was the object—the main one, with the insults and the outrages connected with it—and without which there would have been no declaration of war. The treaty of peace did not mention or allude to the subject. * * But the glorious termination of the war did not cure the evil of a ruined currency and defective finances, nor render less impressive the financial lesson which it taught. A return to the currency of the constitution—to the hard money government which our fathers gave us—no connection with banks—no bank paper for federal uses—the establishment of an independent treasury for the federal government; this was the financial lesson which the war taught."

But the lesson was not heeded. The issue of State bank paper went on; and there was another combined credit and currency panic in 1819-20, followed by general insolvency.

In Ex-Gov. Ford's History of Illinois it is said that "in 1818 the whole people of the State numbered about forty-five thousand souls." * * "Such a thing as regular commerce was nearly unknown. Until 1817, everything of foreign growth or manufacture had been brought from New Orleans in keel boats, towed with ropes or pushed with poles, by the hardy race of boatmen of that day, up the current of the Mississippi; or else wagoned across the mountains from Philadelphia to Pittsburg, and from thence floated down the Ohio to its mouth in keel boats. Upon the conclusion of the war of 1812 the people from the old States began to come in and settle in the country. They brought some money and property with them, and introduced some changes in the customs and modes of living. Before the war, such a thing as money was scarcely ever seen in the country, the skins of the deer and raccoon supplying the place of a circulating medium. The money which was now brought in, and which had before been paid by the United States to the militia during the war, turned the heads of the people, and gave to them new ideas and aspirations, so that by 1819 the whole country was in a rage for speculating in lands and town lots. The States of Ohio and Kentucky, a little before, had each incorporated a batch of about forty independent banks. The Illinois Territory had incorporated two at home, one at Edwardsville and the other at Shawneetown; and the Territory of Missouri added two more at St. Louis. These banks made money very plenty; emigrants brought it to the State in great abundance. The owners of it had to use it in some way; and as it could not be used in legitimate commerce, the most of it was used to build houses in towns which the limited business of the country did not require, and to purchase land which the labor of the country was not sufficient to cultivate. This was called "developing the infant resources of a new country." The United States government was then selling land at two dollars per acre: one-fourth in cash, with a credit of five years for the residue. For nearly every eighty dollars in the country, a quarter section of land was purchased; and the notes of most of the numerous banks in existence were good in the public

land offices. The amount of land thus purchased was increased by the general expectation that the rapid settlement of the country would enable the speculator to sell for a high price before the expiration of the credit. This great abundance of money also made a vast increase in the amount of merchandise brought into the State. When money is plenty, every man's credit is good. The people dealt largely with the stores on credit, and drew upon a certain fortune in prospect for payment. Everyone was to get rich out of the future emigrant. The speculator was to sell him houses and lands: the farmer was to sell him everything he wanted to begin with and live upon until he could supply himself. Towns were laid out all over the country and lots were purchased by every one on credit; the town maker received no money for his lots, but he received notes of hand, which he considered to be good as cash: and he lived and embarked in other ventures as if they had been cash in truth. In this mode, by the year 1820, nearly the whole people were irrecoverably involved in debt. The banks in Ohio and Kentucky broke, one after another, leaving the people of those States covered with indebtedness and without the means of extrication. The banks at home and in St. Louis ceased business. The great tide of emigrants failed to come. Real estate was unsaleable; the lands purchased of the United States were unpaid for and likely to be forfeited. Bank notes had driven out specie, and when these notes became worthless, there was no money of any description left in the country. The people began to sue one another for their debts; and as there was absolutely no money in the country, it was evident that scarcely any amount of property would pay the indebtedness. To remedy these evils, the Legislature of 1821 created a State bank. It was founded without money and wholly on the credit of the State. It was authorized to issue one, two, three, five, ten, and twenty dollar notes in likeness of bank bills, bearing two per cent. annual interest and payable by the State in ten years. It was directed by law to lend its bills to the people to the amount of one hundred dollars on personal security; and upon the security of mortgages upon land for a greater sum. These bills were to be receivable in payment of all State and county taxes and for all costs and fees, and salaries of public officers: and if a creditor refused to endorse on his execution his will-

ingness to receive them in payment of the debt, the debtor could stay its collection for three years by giving personal security. So infatuated were this legislature with this absurd bank project, that the members firmly believed that the notes would remain at par with gold and silver. As an evidence of this, the journals show that a resolution was passed, requesting the Secretary of the Treasury to receive these notes into the Land offices in payment for the public lands. When this resolution was put to the vote in the Senate, the old French lieutenant governor, Col. Menard, presiding over that body, did up the business as follows: "Gentlemen of the Senate, it is moved and seconded dat de notes of dis bank be made land office money. All in favor of dat motion, say aye; all against it say no. It is decided in the affirmative. And now gentlemen, I bet you one hundred dollar he never be made land office money." In the summer of 1821 the new bank went into operation. The directors were all politicians; and were then, or expected to be candidates for office. Lending to everybody, and refusing none, was the surest road to popularity. Accordingly, three hundred thousand dollars of the new money was soon lent without much attention to security or care for eventual payment. It first fell twenty-five cents, then fifty and then seventy cents below par. As the bills of the Ohio and Kentucky banks had driven all the money out of the State, so this new issue effectually kept it out. Such a total absence was there of the silver coins, that it became utterly impossible, in the course of trade, to make small change. The people from necessity were compelled to cut the new bills into two pieces, so as to make two halves of a dollar. This again further aided to keep out even the smallest silver coins, for the people must know that good money is a very proud thing, and will not circulate, stay or go where bad money is treated with as much respect as good."

In 1837 there was another combined credit and currency panic, the effects of which lasted for about ten years. To take the State of Illinois for illustration, the condition of the State in 1842 was (Ford's History) "The treasury of the State was indebted for the ordinary expenses of government to about $313,000. Auditor's warrants were selling at fifty per cent. discount and there was no money in the Treasury whatever, not even to pay postage on letters. The treasury was bank-

rupt. A debt of fourteen millions had been contracted for the canal, railroads and other purposes. The currency of the State had been annihilated: there was not over two or three hundred thousand dollars in good money in the pockets of the whole people. They were indebted to the merchants, nearly all of whom were indebted to the banks or to foreign merchants, and the banks owed everybody and none were able to pay."

The bankrupt act of 1841 settled a large part of the debts of the whole country.

State Bank money continually proved to be a failure. It rested upon no secure foundation and had only a local circulation. It never furnished a national currency equally good throughout the whole country. When the issues of a State wandered too far away from home it sank to a discount and became uncurrent. Excessive issues crowded out and kept out the specie, and when confidence in the paper money was lost a currency panic was the consequence. Whereupon there was no money and a credit panic followed and everybody was insolvent or bankrupt. No State could make its bank issues a tender for the payment of debts. Hence the resort to valuation, appraisement and stay laws, which as to past transactions were also invalid.

A United States bank could furnish a national currency. But it was justly regarded as a huge monopoly dangerous to republican institutions. The charter of the first one expired in 1811 and was not renewed. The charter of the second one expired in 1836 and became thereafter a State bank and failed in 1839. Its capital of thirty-five millions of dollars was a total loss, of which the United States owned and lost one-fifth. The public revenue collected in one district in State Bank paper current there, was not available for expenditure elsewhere. And in 1840, Congress passed "An act to provide for the collection, safe keeping and disbursement of the public money," and thereby divorce the National treasury from the State banks. After the election of Harrison and Tyler this act was repealed, and an effort made to establish a third United States bank. Harrison having died, an act passed for the purpose met with a veto from Mr. Tyler. And this finally ended the scheme of a great national bank. In 1846, another act was passed in Congress entitled "An act for the better

organization of the Treasury, and for the collection, safe-keeping, transfer, and disbursement of the public revenue." By this act it was provided that on and after January 1, 1847, all duties, taxes, sales of public lands, debts, and sums of money accruing or becoming due to the United States should be paid into the Treasury in gold or silver or in Treasury notes issued under the authority of the United States; and that on and after April 1, 1847, all payments were to be made in gold and silver, or in Treasury notes, if the creditor saw fit to take them. This closed the Treasury to bank notes, until the creation of the present national bank system in 1863, under which the notes of such banks are receivable for all public dues and demands due to the United States, except duties on imports. Upon any enlargement of that system, the government in case of war, would find its Treasury encumbered with the inconvertible issues of these banks and be reduced to a condition similar to that experienced in the war of 1812. The provision requiring a holder to present the notes of a national bank in multiples of $1,000 at the United States Treasury, or otherwise to present the same at the counter of the bank during business hours, and if unpaid to protest the notes, make report to the Comptroller and wait thirty days for him to take action in the premises is similar to modes adopted earlier in favor of State banks to enable them to evade payment. At one time in Georgia, one who presented a bank note for payment was required to make oath in the bank before a justice of the peace that the note was his own and that he was not the agent of another, and also make the same oath before the cashier and five of the directors, at a total cost of $1.37½ on each note.

A bank of issue lends its own notes without interest for the notes of its customers bearing interest. This constitutes its profit: its notes are issued for private gain, and not for the public benefit. And it is prompt to make its debtors pay with interest and costs; but it seeks to evade the payment of its own notes. It, therefore, finds means to scatter them broadcast and as far away from home as possible. If they never find their way back so much better for the bank. In times past, the bank which always continued to pay its notes on demand or finally paid them in full was the exception. The present national banks suspended payment upon their de-

posits in 1873. From their inception until January 1, 1879, they never redeemed their notes at all. In 1873, Gen. Grant, then President, thought that they ought to be compelled to redeem their notes at least in greenbacks.

Some time after State banks had monopolized the field of circulation, the notion began to prevail that banking ought to be free: that instead of certain banks having a monopoly, everybody ought to be allowed to issue paper money. In 1854 a free banking system adopted in Indiana went to pieces and the holders of the notes suffered great loss.

In 1857 there was another crisis and suspension of specie payments, the effects of which continued until the civil war in 1861.

In the fall of 1860, Mr. Lincoln was elected President, and thereupon the Southern States attempted to secede from the Union, and to that end combined as the Confederate States under a provisional constitution, February 8, 1861. At that time the banks of the State of Illinois, organized under a free banking system, had nearly twelve millions of dollars in paper in circulation, mostly secured by deposit of bonds issued by the Southern States. Secession destroyed the value of these bonds. The banks were numerous, small, and generally located in out of the way places with a view to inconvertibility. The total specie held by them amounted to only $302,905. As the bonds declined in value, so did the money; and the people lost the greater part of the face value of the notes and were left without a currency. The prostration was complete. Deposits, if paid at all, were worth little in such bank paper. The token theory of money, failed to work in this case. The doctrine that money may be composed of mere tokens or counters to pass from hand to hand as a medium of exchange seems to require a general and permanent delusion that the money possesses intrinsic value, or else the bottom drops out.

Mr. Lincoln, having become President on March 4, 1861, on April 15, 1861, issued a call for seventy-five thousand men and also for a special session of Congress, to meet July 4, 1861. On July 17, 1861, a loan of two hundred and fifty millions was authorized, pursuant to which Mr. Chase, then Secretary of the Treasury, sold at par one hundred millions of Treasury notes bearing seven and three-tenths per cent. inter-

est, and payable three years after date; also, fifty millons of six per cent. twenty year bonds at ten per cent. discount, and also issued fifty millions of demand notes receivable for customs and all public dues.

The battle of Bull Run was fought in July, 1861, and the Union army defeated. During the summer the Union forces were largely increased, and on July 22, 1861, the President was authorized to accept volunteers not exceeding five hundred thousand men to serve not over three years. Thus vast expenditures became necessary, and how to meet them was the problem.

Mr. Chase, in his report of December 9, 1861, said: The circulation of the banks outside of the rebellious States was about one hundred and fifty millions of dollars, the whole of which constituted a loan without interest from the people to the banks, costing them nothing except the expense of issue and redemption, and the interest on the specie kept on hand for the latter purpose; that the value of the existing bank circulation depended upon the laws of thirty-four States and the character of some sixteen hundred private corporations and was actually furnished in greatest proportions by institutions of the least capital; that under such a system, or lack of system, great fluctuations and heavy losses in discounts and exchanges were inevitable and not infrequently through failure of the issuing institutions considerable portions of the circulation became suddenly worthless in the hands of the people. And he thought, Congress under the power to tax, regulate commerce, &c., possessed ample authority to control the credit circulation, which enters so largely into the transactions of commerce and affects in so many ways the value of coin, and that in his judgment, the time had arrived when Congress should exercise this authority. And he proposed two plans: one for the gradual withdrawal from circulation of the notes of private corporations, and the issue, in their stead, of United States notes, payable in coin on demand, in amounts sufficient for the useful ends of a representative currency; the other, to prepare and deliver to institutions and associations, notes prepared for circulation under national direction and to be secured as to prompt convertibility into coin by the pledge of United States bonds and other needful regulations. He said that the first plan had been already partially adopted by

the issue of demand notes; that it might be extended so as to reach the average circulation of the country while a moderate tax, gradually augmented, on bank notes would relieve the national from the competition of local circulation; that the substitution of a national for a State currency upon this plan, would be equivalent to a loan to the Government without interest, except on the fund to be kept in coin, and without expense, except the cost of preparation, issue and redemption; while the people would gain the additional advantage of a uniform currency and a relief from a considerable burden in the form of interest on debt.

The principal features of the second plan were: a circulation of notes bearing a common impression and authenticated by a common authority; the redemption of these notes by the associations and institutions to which they may be delivered for issue; and the security of that redemption by the pledge of United States stocks and an adequate provision of specie. In this plan, the people, in their ordinary business, would find the advantages of uniformity in currency and security, of effectual safeguard, if the same is possible, against depreciation; and of protection from losses in discounts and exchanges. While in the operations of the Government the people would find the further advantages of a large demand for government securities, of increased facilities for obtaining the loans required by the war, and of some alleviation of the burdens on industry through a diminution in the rate of interest, or a participation in the profits of circulation, without risking the perils of a great money monopoly.

And he favored the latter plan, because it would avoid the evils of a great and sudden change in the currency by offering inducements to solvent existing institutions to withdraw the circulation issued under State authority and substitute that provided by the authority of the Union. And thus through the voluntary action of the existing institutions, aided by wise legislation, the great transition from a currency heterogeneous, unequal, and unsafe, to one uniform, equal, and safe might be speedily and almost imperceptibly accomplished.

And he thought no argument was necessary to establish that the power to regulate commerce and the value of coin included the power to regulate the currency of the country or the collateral proposition that the power to effect the end in-

cludes the power to adopt the necessary and expedient means.

When a hard money man and a strict constructionist saw the integrity of the Union menaced by a rebellion of colossal magnitude, his loyalty enabled him to perceive powers in the constitution not clearly seen before. In his opinion also, the time had arrived to put an end to an heterogeneous, unequal and unsafe currency composed of bank notes issued under State authority and to adopt a national currency. The State bank paper which, in the war of 1812, had "paralyzed the national arm and sullied the faith, both public and private, of the United States" had lived long enough. In the crisis of 1861, the men at the helm did not intend to allow the national cause to be swamped by State bank money.

On December 31, 1861, all the banks in the country, still solvent, suspended specie payments, and the United States Treasury followed suit. And thus the idea of United States notes "payable in coin on demand" and National bank notes "secured as to prompt convertibility into coin" passed, as to the coin part of it, into limbo. The specie in the country hardly sufficed to pay duties on imports. The fight had to be made on credit. It was difficult to pay interest in specie where the public securities required it.

The Secretary proposed to nationalize the currency; the whole State bank system being in favor of State rights, was opposed to it, and they were violently opposed to all irredeemable paper money except their own. The offer of the national bank system under national control failed to placate banks whose issues were under less control.

The confederate banks of Boston, New York, and Philadelphia, as champions of State rights, and representatives of a mob of broken and suspended State banks, sent a powerful lobby to Washington to oppose the schemes of the Secretary. Their plan was, no legal tender notes and no more demand notes; the government to become one of their customers and keep its deposits with them, checking out the money as occasion might require; bonds to be issued and sold for whatever they might bring, with power in the Secretary to hypothecate bonds as security for loans which, if not paid at maturity, the bonds might be sold to the highest bidder. All the banks in the States of Massachusetts, New York and Pennsylvania then

had a circulation of about sixty-six millions of dollars, and this they could not redeem. Yet these petty banks proposed to reduce the Government in such an emergency to the condition of a beggar at their doors. The public debt on December 1, 1861, was about two hundred and sixty-seven millions; on October 31, 1865, it was $2,808,545,437.55. Victory had been won by the fore part of May, 1865, at which time there was a navy of 530 vessels of all kinds, armed with 3,000 guns and manned by 51,000 men, and an army of 1,000,516 men. All of these were paid off and mostly discharged by October 31, 1865. In view of these figures, the impudence of these small State banks was gigantic. Their plan failed and their officers went home, not to pay their suspended paper, but to inflate it. These banks never resumed specie payments.

Necessity compelled the Government to emit bills of credit in the form of Treasury notes during the war of 1812. They were not in a form suited to circulate as money; but were receivable for all public dues, were fundable into public stock, and generally bore interest. A promise to pay money to A or order after a time limited or on demand with interest, was thought to be quite as lawful and valid as any part of the bonded debt. And finally it was seen that a promise to pay the bearer a certain sum on demand without interest, was equally valid. This left but one more step, and that was to make the Treasury note lawful money and a legal tender. This was done in the greenback and the power to do it was found in the constitution by the Supreme Court, as chiefly implied in the power to borrow money; so that the National Government now carries both the purse and the sword.

Although Mr. Chase favored his National bank scheme, the logic of events compelled the issue of United States notes. The first issue of one hundred and fifty millions was authorized February 25, 1862. At this time, United States 6 per cent. bonds were selling at twelve per cent. discount in suspended bank paper. The greenback is a promise to pay dollars without saying when. At the time of its issue it meant payment in specie when the Government was able; and the people made it able. Ever since January 1, 1879, it has meant payment in gold on demand with every facility offered to get the coin. The total amount authorized, was four hundred and fifty millions, and part of this was in lieu of the demand notes and a part used as a reserve to pay temporary loans.

The State banks again appear in the Treasury reports. Mr. Fessenden, then Secretary, in his report of December 6, 1864, says: The necessities of former years have led to many expedients, as is apparent from the diversity of forms which our securities present. As the debt increases from year to year borrowing becomes more difficult, embarrassed as the country is with two systems of banking and obstructed as the Government is by a currency wholly beyond its control, it is manifest that to push its own circulation far, if at all, beyond its present limit could only be justified by extreme necessity. He says also, the returns on file show that the whole circulation of the State banks on January 1, 1864, was $169,916,129. The total amount issued to National banks to November 22, 1864, was $65,160,210. The diminution of State bank issues deducted from the National bank issues left an increase of over twenty-one millions of dollars in bank circulation during the year. And after stating his necessities he further says: Under these circumstances, the Secretary thought it advisable in order to meet pressing emergencies to borrow upon bonds or notes authorized by the different acts referred to, fifty millions of dollars of the banks of the cities of New York, Philadelphia and Boston, and met the representatives of a large number of these institutions in New York. The result proved, however, that notwithstanding a professed, and as the Secretary was convinced, a reasonable desire to aid the Government, these institutions were not able to furnish the assistance required upon any terms which under existing provisions of law the Secretary felt authorized to accept.

These were the banks who felt able to manage the whole war debt. They had inflated their suspended paper and yet were unable to take a loan of fifty millions on any lawful terms. At that time the State and National banks were reaping a profit on their circulation of not less than fourteen millions of dollars annually. It was crowding to the wall the Treasury issues. It was choking the channels of circulation to the prejudice of the National cause. Every artifice had been used to keep down inflation by the issue of interest bearing paper, such as 7.30 notes, six per cent. compound interest notes, certificates for temporary loans and certificates of indebtedness bearing six per cent. interest. The times were critical. Sherman was fighting Johnson among the mountains of Georgia.

Grant was fighting Lee on the road to Richmond. Gold in July, 1864, was $2.85; this price indicated great inflation and portended impending collapse. Now it is plain, that if the suspended bank paper then in circulation had not existed, its place could have been occupied by the United States notes and the inflation would have been no greater. This would have put into the Treasury about two hundred millions of additional funds, and that too bearing no interest. The inflated and suspended bank note paper imperilled the national cause On September 1, 1864, Sherman took Atlanta. The back of the rebellion was broken none too soon. The nation was fighting for life and was forced to fight on credit and pay high rates of interest. At the same time, these suspended banks were stuffing the volume of the currency with their irredeemable paper for private gain. Any bank can suspend payment when its interest requires it and feel no shame; but it required the cheek of Judas to do it and also inflate in a great national crisis involving the country's fate.

According to the report of the Secretary of the Treasury for 1889, the bank note circulation on June 30, of each year during the war was as follows: State banks, in 1862, $183,792,079; in 1863, $238,677,218; in 1864, $179,157,717; in 1865, $142,919,638. Of National banks, in 1864, $31,235,270; in 1865, $146,137,860.

The National banks were an injury instead of a benefit. The bonds required to start them soon reappeared in the circulation as paper money. None existed until 1864. The people took the first five hundred million loan of six per cent. bonds in the summer of 1863 at par in paper, equivalent to nearly seventy-two cents in gold. This National bank paper which, according to the original scheme of Mr. Chase, was to be "secured as to prompt convertibility into coin by the pledge of United States bonds and other needful regulations," was convertible into nothing, unless greenbacks. These banks, assisted the State banks in stuffing the volume of the currency and depreciating the value of the United States notes.

The State bank system lived through the war as a fungus and parasite. A part were finally induced to change over to the National bank system and the remainder were taxed out of existence by a tax sufficient for the purpose first levied in 1866. The act of July 13, 1866, provided that every National

banking association, State bank, or State banking association shall pay a tax of ten per centum on the amount of notes of any person, State bank, or State banking association used for circulation and paid out by them after the first day of August, 1866. This act was held valid upon the ground that it was not a direct tax in the sense in which those words are used in the constitution. Veazie Bank vs. Fenno, Collector, 8 Wall. 533. And this act, enlarged so as to include all notes of any town, city or municipal corporation issued for circulation, is still in force, and is all that stands in the way of local issues everywhere by persons and corporations acting under State authority. And a clause for the repeal of this act is said to be inserted in some political platforms.

In the above case, decided at the December term, 1869, Mr. Chase, then Chief Justice, said: "It cannot be doubted that under the constitution the power to provide a circulation of coin is given to Congress. And it is settled by the uniform practice of the Government and by repeated decisions, that Congress may constitutionally authorize the emission of bills of credit. It is not important here to decide whether the quality of legal tender in payment of debts can be constitutionally imparted to these bills (since held that it could): it is enough to say that there can be no question of the power of the Government to emit them, to make them receivable in payment of debts to itself, to fit them for use by those who see fit to use them in all the transactions of commerce, to provide for their redemption, to make them a currency uniform in value and description and convenient and useful for circulation. These powers until recently were only partially and occasionally exercised. Lately, however, they have been called into full activity, and Congress has undertaken to supply a currency for the entire country." * * * * * * * * * * "Having thus, in the exercise of undisputed constitutional powers, undertaken to provide a currency for the whole country, it cannot be questioned that Congress may constitutionally secure the benefit of it to the people by appropriate legislation. To this end, Congress has denied the quality of legal tender to foreign coins, and has provided by law against the imposition of counterfeit and base coin on the community. To the same end Congress may restrain by suitable enactments the circulation as money of

any notes not issued under its authority. Without this power, indeed, its attempts to secure a sound and uniform currency for the country must be futile."

In his report in 1861, as Secretary of the Treasury, Mr. Chase said: "It has been well questioned by the most eminent statesmen whether a currency of bank notes, issued by local institutions under State laws, is not, in fact, prohibited by the National constitution. Such emissions certainly fall within the spirit, if not within the letter, of the constitutional pro hibition of the emission of 'bills of credit' by the States, and of the making by them of anything except gold and silver coin a legal tender in payment of debts." The power to regulate the value of money requires control over the volume of the currency as well as over the standard or money unit. And since it is now settled that Congress has the power to provide a currency, of both coin and paper, for the whole country, it perhaps remains for some future Supreme Court to reverse the doctrine that bank bills or other paper money issued under State authority are not bills of credit in a constitutional sense. If silver had been as abundant and cheap at the adoption of the Federal constitution and afterwards as it was before the passage of the recent act for the purchase of silver, perhaps no such absurd doctrine would ever have obtained any foothold. But in those days a bank meant a paper mill, and the people were poor and destitute of both gold and silver, and having nothing else out of which to make money, they made it out of paper. And the right to issue paper money both as to State banks and a National bank being established, the profit to be realized out of the issue of paper money induced every State to enter into competition in cramming the volume of the currency with the notes of institutions so located and distributed as to prevent as far as possible any demand for specie upon the notes. By this means the specie was continually driven out, and the inflation being overdone, there would be a collapse, hard times, general insolvency and no money. No State could make its paper money a legal tender: therefore, when all devices to evade payment of the notes had been exhausted and specie had risen to a premium general distrust took the place of confidence and a combined currency and credit panic became a financial cyclone which swept everything before it and left nothing but ruin and poverty behind.

The value of money could not be regulated by Congress while every State was allowed to authorize persons and corporations to inflate the currency with paper money without restraint. The relation between the standard and the volume of the currency, and the importance of the kind of money and the quantity, were not perceived, or if so, were entirely disregarded. And the wealth accumulated during prosperity was continually swept away by subsequent adversity caused by bank failures and general financial collapse. The power to regulate money and its value is one of the most important functions of government. "There is no contract, public or private, no engagement, national or individnal, which is unaffected by it. The enterprises of commerce, the profits of trade, the arrangements made in all the domestic relations of society, the wages of labor, pecuniary transactions of the highest and the lowest, the payment of the National debt, the provision for the national expenditure, the command which the coin of the smallest denomination has over the necessaries of life, are all affected by it."

The great rebellion compelled the national authority to assume control of the currency and finally exercise its power to regulate the value of money. This has led to a much better system than ever existed before.

The National free banking system is better than the State bank system which preceded it. But any reasons which may have existed in time past for bank notes have ceased to exist. The power of the people to provide themselves with a currency directly issued out of the National treasury has become fully established. And the delegation of the power to regulate the value of money to banks of issue, free or otherwise, is not justifiable under National or State authority. No person or corporation ought to be permitted by issues of paper money to tamper with the currency and dilute it for private gain and public loss. Banks of issue and bogus mints should be alike prohibited. Even if banks could supply the legitimate demand for paper money, and never abuse the trust, there is no more reason for delegating that function of government to private individuals than any other one vested in the State for the public benefit. Experience proves that its delegation has caused periodical calamity to the country. Furthermore, all profit on the use of paper money belongs to

the people; and it is as great a fraud upon them to grant it away to private individuals and corporations as to vote to them annually, millions of dollars out of the public treasury as a mere gratuity.

The proper office and function of a bank is to reduce the circulation, and not increase it. There are certain things which relieve money from work, such as checks, bills of exchange, book accounts, promissory notes, etc. These, combined with the effects of steam and electricity, reduce the amount of money which would be otherwise required. Now in applying all the facilities for doing business which have been, or may be, invented, a bank finds its proper place. It receives deposits payable on demand; and there is a book account between the depositor and the bank. Any one who has bills or notes discounted, is paid in a book account also. All the customers leave their money with the bank, and from time to time, as occasion may require, pay their debts by checks. The payees deposit them in the same or some other bank. Thus taking all the banks of a city as one concern very little money in fact passes. The great mass of transactions are settled through a clearing house, by an adjustment of mutual accounts. A further extension of this method makes great financial centers clearing houses for great districts of country: New York being the chief centre for this country, and London for the British Empire and indeed for the whole world. The average daily clearings in New York during 1889 were $114,839,820 upon which balances paid in money were only five per cent. The exchanges through the clearing houses of the United States for the year ending September 30, 1889, was $54,494,754,586, of which about 8 per cent. was paid in money. As compared with the sum total of transactions, the amount of money moved is reduced by the agency of banks to a mere nominal sum.

Bank deposits, other than savings, are payable on demand, and in ordinary times a large part of such deposits can be safely used in discounting time paper. But in a credit panic and a run on such a bank by its depositors it would be compelled to suspend, although entirely solvent. Somebody would be compelled to wait until the bank could realize upon its investments. This it could do in a reasonably short time, if the money were good, for somebody would have it. But if

the currency were bank paper, than a bank of issue would require means sufficient to redeem its notes as well as to pay its depositors. If the money itself were not beyond the reach of distrust, then a panic could culminate into a fright about the money itself (a currency panic), as well as a fear that it might not be forthcoming in payment of depositors and other debts (a credit panic).

Formerly the people were kept too poor by panics and revulsions to have any large sums of money, and banks were too much distrusted to obtain any large amount of deposits. Therefore, they relied upon their issue of bank notes as their principal source of profit. The Second Bank of the United States,when it was at its highest point of confidence, and with a capital of thirty-five millions of dollars had on November 1, 1834, notes in circulation to the amount of $15,-968,731.90 and private deposits to the amount of only $6,741,-752.24. After it had ceased to be a United States bank and was operating under a State charter, but still retaining its original capital, it had notes in circulation to the amount $36,-620,420 and deposits to the amount of $2,194,231. In contrast with this bank and its many branches, take one National bank. According to the report of the Comptroller of the Currency for 1889, the Fourth National Bank of New York, with a capital of $3,200,000 and a circulation of $180,000, had $24,745,989.83 in deposits. And according to the same report, State banks with no circulation had individual deposits to the amount of $473,484,147. In England, a bank was originally a bank of issue, and such is the Bank of England now; and it is continually see-sawing with its issues, as gold is exported or imported, and it has been compelled to suspend three times since its reorganization in 1844, which was intended to make it a financial Gibralter. It declares dividends of some six or seven per cent. per annum,while sundry deposit banks in London declare dividends two or three times as great.

The true bank of this day desires no circulation of its own, nor any bank issues at all. It needs the soundest currency possible. Then, if well conducted, it acquires a great credit and its fortune is made. Its deposits furnish it with an ample source of revenue. The bank of issue which expects to make its living by tampering with the currency and bor-

rowing money from the public without interest upon its notes has no right to exist.

The average circulation of the State and National banks from 1862 to 1890 was over three hundred millions of dollars. If they had not existed and their place had been supplied with United States notes, the paper inflation would have been no greater during the war and the resumption of specie payments afterwards would have been quite as easy. The limit of inflation which a suspended paper currency will bear was being rapidly approached in 1864; and it is quite evident that the risk of financial collapse would have been less if the suspended issues of the State banks had been taxed out of existence immediately after 1861 and no National bank notes had ever been issued. By using the above additional amount of their own notes as money during the above period, instead of bank notes, the people would have saved, counting interest at four per cent. per annum, payable quarterly and compounded, over five hundred and seventy-five millions of dollars. But the Secretary of the Treasury in 1861 feared the hostility of the State banks and hoped in vain to propitiate them by an offer of the national free banking system: and his hope was equally vain to conduct a war of such great magnitude upon a cash basis with a quite nominal amount of specie. The suspension of specie payments shortly after the date of his report, and which continued for eighteen years, left the money question in this form, Shall the war be conducted on suspended bank notes, or United States notes, or of the two combined? and the latter was the one adopted, with the result that the bank issues proved to be an incubus which had to be carried ever afterwards. In the war of 1812 bank notes "paralyzed the national arm and sullied the faith, both public and private of the United States." In the great rebellion, suspended bank notes carried the currency well on towards the point of a total financial collapse and hazarded the safety and perpetuity of the Union.

The friends of State bank paper always favored a strict construction of the constitution and abhorred a United States bank with branches or in any form. But the civil war overthrew State rights as represented by paper money issued under State authority, and developed the fact that it could be lawfully taxed out of existence. Both of these paper money

schemes died hard. It is to be hoped that the present National banking system is in the throes of a final dissolution, as the last representative of paper money issued for private gain.

At the end of the war Mr. McCulloch was Secretary of the Treasury: he was a great friend of banks and hated a greenback as much as a friend of State bank paper ever hated a United States bank note He had previously been connected with the State bank of Indiana, which could by its charter issue several dollars in paper for one of specie in its vaults (actually or theoretically). And he had opposed the National bank system; but being made Comptroller of the Currency he became its promoter. Afterwards as Secretary of the Treasury, in his report of December 4, 1865, he said: The reasons sometimes urged in favor of United States notes as a permanent currency are the saving of interest and their perfect safety and uniform value. The objections to such a policy are that the paper circulation of the country should be flexible, increasing and decreasing according to the requirements of legitimate business, while if furnished by the government it would be quite likely to be governed by the necessities of the Treasury or the interests of parties rather than the demands of commerce and trade. And he was urgent to have power given to him to sell six per cent. bonds for the purpose of retiring the greenbacks and was in fact authorized to retire ten millions within six months ending October 12, 1866, and thereafter at the rate of four millions per month. At this same time there was interest-bearing paper outstanding, all due within two years, amounting to over twelve hundred millions of dollars, of which eight hundred and thirty millions were notes bearing seven and three-tenths per cent. interest and over one hundred and thirty millions bearing six per cent. interest then due or payable on ten days' notice. In his anxiety to restore specie payments by retiring greenbacks, he forgot the issues of suspended bank paper then extant, of which there was at that time sixty-five millions of old State bank notes still afloat; they probably belonged to the "flexible" part of the currency.

According to him, it was not safe to trust the Treasury or the people with the control of the currency, but such control ought to be vested in banks with power to make the currency

flexible, expanding and contracting as in former times when panics were periodical. The officers of such banks, forsooth, would make the currency fluctuate according to the requirements of legitimate business: they would not discount a note, no matter how well secured, if the money was to be used for speculation,—of course not: they never did ! !

This "flexible" doctrine used in favor of banks of issue is totally refuted by the facts. The currency for a number of years past has consisted of coin, coin certificates, a fixed amount of greenbacks and a declining amount of National bank notes. And money was never before so abundant or interest so low. In times past when banks of issue controlled the currency, they kept tension enough on the so-called "elasticity" to maintain high rates of interest at all seasons of the year. This is the banking idea of a proper elasticity. An elastic and palpitating currency is no more needed than an elastic and variable standard.

Mr. McCulloch, in his report as Secretary, of December 5, 1866, expressed regret that he had not been allowed to redeem greenbacks faster, and said: The increase of National bank circulation has kept pace with the decrease of United States notes which, as legal tender, he called a false and demoralizing standard. He was not unmindful of the saving which resulted to the government by the use of its own currency, but this was more than overcome by the discredit arising from failing to pay the notes according to their tenor and its bad influence on the public morals. This objection to greenbacks on account of their immoral tendency sounds well, coming from an advocate of State banks who had not redeemed their notes since 1861 and of a National bank system which had never redeemed its notes at all. It never seemed to occur to the Secretary that his administration through the Treasury of a National free banking system of suspended and inconvertible bank notes had an immoral tendency. The withdrawal of the bank notes would have restored specie payments as fast as the withdrawal of greenbacks. He was mindful of the saving to the people by the use of their own notes; but he was more mindful of bank inflation. After the floating debt was all funded except the greenbacks, that false and demoralizing standard rapidly approximated towards gold. And by May 31, 1878, the use of greenbacks had so corrupted the public

morals that pursuant to a loud call to that effect it was at that date enacted. that thereafter it should not be lawful for the Secretary of the Treasury or other officer to cancel or retire any more United States notes and when any were redeemed or received they should be reissued and kept in circulation. Their amount then was, and still is, 346,681,016.

Hereafter the Government can furnish all the money needed, both the coin and paper. The sooner the national bank notes are eliminated from the currency the better; it will be one step toward a more simple money system. And it is quite apparent from the foregoing short summary of past financial history that banks of issue, whether State or National under a free banking or any other system, are both useless and dangerous. If the people are determined to have inflation, the government printing offices can furnish a sufficient supply of paper money: private assistance is not at all necessary. If the people see fit to wreck the currency it is better for them to do it with their own notes. Some time or other, the relation existing between the money unit and the quantity of money will be fully understood and regarded.

For the present, the programme actually adopted is paper money backed by silver as well as the public faith. Such a currency has a natural limit. The objections to it are a probable change of standard, and overloading the treasury with such a vast amount of silver.