

business, puts the scheme of co-operation out of the question as a means of raising wages, or promoting the general welfare of laborers.

In this country, where there is nothing to hinder any laborer from becoming a capitalist, where the savings-banks are open to the smallest gains, where nothing is more common than for two or more workmen to organize a firm to carry on some branch of business, where most of the present capitalists proper were formerly laborers proper, and where the shares of most of the joint-stock companies are open to everybody who has the means to buy them, there is only one consideration that seems to justify any special jealousy of laborers as such towards capitalists as such; and that is the fact, that Legislation, every now and then, sometimes on a small scale and then on a gigantic one, now by means of corporate charters and then by other means more indirect and effective, *does confer certain extraordinary privileges upon capitalists*. So long as capitalists and laborers rest upon their natural rights and positions, neither can get any undue advantage of the other; and just so far as each recognizes their identity of economic interest and the consequent reciprocity of obligation and effort, the prosperity of each will help build up the other; but, on the other hand, so far forth as any advantages are given to capitalists by special laws, either of State or Nation, these become necessarily unjust to laborers, and ultimately also injurious to capitalists; and in this case, the laborers, seeing just what it is that hurts them, *ought to combine together and to strike, not capital (their best friend), but a piece of perverted legislation (their worst enemy)*.

CHAPTER IV.

COMMERCIAL CREDITS.

POLITICAL ECONOMY is the Science of Sales; and because it is the science of sales, its definitions and principles must cover equally all cases of sales actually occurring or possible to occur. We have seen repeatedly, that only three kinds of things are ever bought and sold, or ever will be, and these are Commodities and Services and Claims. The first two kinds have been fully elucidated already in the two preceding chapters, and it belongs to the present chapter to explain and illustrate clearly the peculiarities of the third kind of things salable. Ours is the only science that has to do with the motives and facts and economic results of all sales as such.

The discussions of the present chapter will proceed orderly through the following topics:—

The Nature of Credit.

The Forms of Credit.

The Advantages of Credit.

The Disadvantages of Credit.

1. Certain things are essential in every sale of anything, and of course are common to all sales of everything, such as two persons and two desires and two estimates and two renderings; while there are certain *peculiarities* in the sale of things belonging to each of the three special classes of things salable; for example, in the sale of a commodity there is a rendering of a tangible object that has been

prepared for sale in past time, and in the sale of a service a rendering of an intangible something wholly in the present time; while in the sale of a credit there are likewise two peculiarities, one of them relating to future time and the other to a special trust felt in a person by some other person. We must now study these two peculiarities with care; and, mastering these, we shall be master of the Nature of Credit.

a. Some sales are consummated at once, the things exchanged and the ownership in them are mutually passed over then and there, the reciprocal satisfactions are entered upon immediately, and there is at once an economical end.

For example, one neighbor sells another a peck of green peas and takes in pay a peck of new potatoes, both vegetables may be cooked for dinner in the respective families the same day, and the commercial transaction is all over. But there are other exchanges, an immense class of them, different from these in this respect, that though the transaction considered as a mere case of value created and measured is then and there ended, yet considered as to the nature of that preliminary exchange which implies and requires another future exchange to consummate it, it is not then and there ultimately closed, but one (or both) of the parties then exchanging relies on the good faith of some one else to fulfil in the future a pledge expressly or impliedly made in the prior exchange. Commonly some external evidence of the pledge is created and passed at the time, but this is not essential to the validity of the pledge itself. For example, A buys 50 bushels of wheat of B, and B takes in pay for it A's note of hand at six months for \$75. The note is not the pledge, but it is a legal and convenient proof of it. As a case in Value, the wheat is sold for the pledge and the pledge is the equivalent of the wheat. Each party rendered the other then and there

satisfactory equivalents. All our definitions apply here perfectly.

Still a further and future exchange was contemplated by both parties at the time of making this exchange, and as a silent part of it. A takes what is now his own wheat, and B takes as an equivalent for what was his wheat a right to demand of A in six months an equivalent for the present equivalent (the pledge) for the sake of which B rendered the wheat. The note of hand is the evidence of this pledge, and it belongs absolutely to B. It is his property. He may keep it till maturity and then sell it to A for its face, or he may sell it at once to a bank for its face less the discount for six months. Discount is the difference between the face and the present price of a note of hand. The first peculiarity, then, of Credit is, that it always involves the element of future time. But it involves this secondarily, and not primarily. In other words, a present equivalent is always rendered by both parties in every commercial transaction; but the present equivalent in the case of a credit transaction is the right to demand something of somebody sometime in the future. This distinction is very important, as we shall see clearly when we come to treat of Banking, though it is generally ill-understood at present. Valuables, when they exchange at all, exchange once for all. But there is one kind of valuables, namely, claims, which, when subject to exchange, imply and require another and a future exchange, not necessarily between the parties to the first exchange, but between *some* two parties; and not, speaking strictly, to consummate the first exchange, because that took and gave its own satisfactory equivalents; but, as involving both time and trust, the credit sale must in the nature of things be followed by another sale of one of the three kinds.

We see, accordingly, that in Credit our science of Eco-

nomics takes partial possession of future time for certain purposes of its own. Exchange sets its throne and reigns pre-eminently in present time; but its sceptre extends also over past time, so far as all capital is concerned, and so far as all material commodities (the result of past work) are exposed for sale in the present; and its right hand of rule goes forth also to grasp the future, under limitations indeed both as to the stretch of time covered and as to the character of the persons concerned, but still there is there a fair domain and a broad domain, and a realm on the whole winning a wider and wider circuit. It is one of the proud boasts of Political Economy as a science, as it is too one of the exalted traits of human nature, that the lordly impulse to buy and sell does not confine itself to what the Past offers in all its accumulated valuables, nor to what the Present unfolds in the unlimited desires and efforts of congregated men, but reaches out also into the Future, and makes that pay tribute more and more into the vast treasury of its Gains. And this too is legitimate. Man is at once and all the time actor and historian and prophet. The future is not wholly unknown. Given the one assumption, that Earth and Men go on as heretofore, Exchange knows well enough, and better and better, whom of the coming men to trust and for how long a time. The doctrine of averages and of probabilities comes along to guide and to enhearten the investor. Any thoroughly established government of to-day can borrow all the money that it wants on its public pledge to repay the principal fifty years hence. England has borrowed millions of pounds sterling, giving no day certain in the future for its repayment. These funds are called "Consolidated Annuities": the interest on them is paid on a day nominated in the bond: the principal is to be paid when the borrower chooses, or never.

b. The other and final peculiarity of Credit is, that it always involves on the part of one person a commercial confidence in some person *as such*. The term, Credit, is derived from the Latin CREDO, *I believe*, and the corresponding term, Debt, from DEBEO, *I owe*. Thus the personal element and the future element are wrapt up in the very origin of the words. There is no credit without debt, and no debt without credit. The very words imply a *belief* of one of the two parties in a commercial promise made by the other, and also an *obligation* acknowledged by this party as due to the first. There is a basis for credit in human nature. Faith in each other to a certain extent is natural to men. Whatever enlarges the intellectual foresight, and especially the moral character of men, opens a broader and surer field for Credits. Civilization, so-called, and Christianity certainly, deepens and broadens the natural trust of man in man. Despite all the instances of broken faith, and they are too many; despite the shocks and cautions that come every now and then to every man who trusts much in his fellow-men; experience itself justifies and rewards an ever-growing commercial trust. It is one of the noble things in international commerce, as we shall see, that men trust each other across the oceans, and lay millions of value upon the faith of a single firm. As the core of the Christian religion is confidence in a *Person*, so the very substance of credits is a natural and in general well-grounded faith in *persons as such*.

A Credit, then, may be defined to be a *Right to demand something of somebody*; and a Debt to be an *Obligation to pay something to somebody*. What always lies, accordingly, between creditors and debtors, are Rights coupled with Obligations; and these are *Property*, just as much as anything is and for the same reason, since they always may be, and usually are, bought and sold by other parties as

well as the original parties. In these Rights or Claims, therefore, arises a commerce, domestic and foreign, immense in extent and amount, and the Rights themselves take their undisputed place on an equality with tangible Commodities and personal Services.

Having thus reached an ultimate and satisfactory definition of Credit, we must still pursue a little further our present object, namely, to obtain a clear conception of the nature of this great class of Valuables, by drawing two or three distinctions between Credit-Rights and some other rights very apt to be confounded with them.

(1) The distinction between credit-rights and other rights is well rooted in the Latin language and in the Roman law, while the corresponding English terms are quite ambiguous and need to be used with great caution. In Latin, a true debt is called a *Mutuum*, because it lies between two persons, a creditor, and a debtor, and is a credit-right independent of the question of fact whether the debtor has now the thing rendered to him or not, indeed whether he has anything at all to pay with or not; on the other hand, a thing merely lent, when the very thing lent is to be returned to its owner, who has not in the meantime parted with his property to the other, is called in Latin a *Commodatum*. The English tongue has but the one word, *Loan*, for the two very distinct operations: for the loan of a book, for instance, which is to be returned after use, and which may be legally reclaimed by the owner if he chance to find it anywhere, that is, the Latin *commodatum*; and for the loan of money, or other such measurable thing, which is to be returned *in kind* only, and which may not legally be reclaimed except through some action of the borrower, since the ownership of that thing rendered has passed over to him completely, that is, the Latin *mutuum*. The same ambiguity of course

inheres in the corresponding English word, *Borrow*. The English language is relatively poor in words expressing nice legal distinctions.

Now, as a true debt is a claim on a *person* and never on a *thing*, the Roman Law is true to the nature of things and to the vital distinctions of our science, when it names the right to which a *mutuum* gives birth as a *jus in personam*, that is to say, a right against the person; while it names the legal obligation arising out of a *commodatum* as a *jus in re*, that is to say, a right to the very thing. So strongly is this doctrine, namely, that the security of a true debt lies against persons and not against things, entrenched in the Roman Law, that debts or credits are even termed "*nomina*," names, in that law, as when Ulpian says, "*Nomina eorum qui sub conditione vel in diem debent et emere et vendere solemus*": We are accustomed to buy and sell DEBTS payable on a certain day and at a certain event. The fundamental law of the present national banks of the United States explicitly recognizes this old and good distinction by requiring the banks to loan money on *personal* security only, that is to say, no tangible things, not even real estate, may be taken as *original* security for any loan.

(2) Henry Dunning Macleod, who has cast fresh light on the nature of Credit, draws another distinction that lies on the threshold of the subject, namely, that between paper documents conveying titles to *specific things*, such as a bill of lading, for example, and those conveying *credit-rights*, such as a bank-note, for example. Bills of lading describe the goods, go out with the goods, are a title to the goods, and have no value separate from the goods; bank-notes have nothing to do with any specific pieces of property anywhere, are in no proper sense a title to anything whatever, but a general *claim* for something upon some

person somewhere that awaits his action for its validity and realization. For instance, a grain-dealer in Chicago sells 1,000 bushels of No. 2 wheat to a party in New York, and ships the grain to that point by rail: two kinds of paper documents arise in connection with this transaction, which are quite diverse in their nature and course of operation: one is a *bill of lading*, that goes along with the wheat, and gives the person named in the bill a complete title to 1,000 bushels of wheat of a certain description, and the holder of the bill takes the wheat and asks no favors of anybody; and the other is a *bill of exchange*, drawn by the grain-dealer in Chicago on the consignee of the wheat in New York, which bill of exchange is sold at once by the creditor in Chicago to a banker there, provided the banker has commercial confidence in the two names on the bill and a sufficient motive in the shape of a discount for buying it: thus the bill of lading has in it neither element of Credit, neither Time nor Trust, while the bill of exchange has both of these elements in it.

(3) Attention should be called to a third distinction of the same general nature, as between relations very different in themselves and yet extremely liable to be confounded with each other. Let us take a common instance: a customer of a bank takes a package of valuables of any kind to his banker, such as bonds and bills payable and jewels and plate, and asks him to take care of it for the present in his vault, subject of course to a return to him or any one else to his order at any time: no property in these valuables passes over to the banker, it is not a deposit in the ordinary banking sense, the relation of debtor and creditor does not arise as between banker and depositor, the banker becomes Trustee or Bailee of the package, and is bound to exercise common vigilance in the care of it, but if it be burned or stolen extraordinarily the loss is the cus-

tomers' and not the banker's. But now, on the other hand, when a customer deposits in the banking sense money or bills payable with his banker, the property in the money and bills passes over to the banker instantly, the relation of debtor and creditor arises, the depositor receives a credit on the banker's books in return for the money and bills rendered, the exchange as a mere case of value is consummated to the profit of both parties, but the return-service to the depositor is *the right to demand equivalents of the banker at some future time*. In other words, it is a case in Credit.

(4) As this general distinction is vital, we shall lose nothing in the end if we make even a fourth exemplification of it. The United States Treasury receives silver dollars of its own minting from any person who chooses to place them there, and gives out in token what are called "Silver certificates" to the same amount, entitling the bearer to take out the dollars again at will, and thus the certificates being more convenient than the dollars and just as valuable become a part of the money of the country. The Treasury is bound to exercise due care in the keeping of these silver coins, and to return them to the holders of certificates on demand, just as the elevator and railroad companies are under legal obligations to show diligence in keeping and transporting the wheat of our former example; but the United States is not *debtor* to the holders of these certificates any more than the elevator company is *debtor* to the wheat shipper, and consequently there is no element of Credit in these certificates. Just so of the later gold certificate. On the other hand, the so-called greenbacks issued by the United States are also a part of the money of the country, but they are *credit-money*, inasmuch as they are a *promise* to pay to the bearer some time in the future so many dollars. The Treasury has never kept up

any special fund of gold and silver, with which to redeem the greenbacks. They rest back for their value on the good faith of the country. The United States is *debtor* to the bearers, and these in turn are *creditors*, and the legal-tender quality of the greenbacks does not alter their character as a form of pure credit. Both the elements of good faith and future time inhere in the greenbacks, as they do also in the bonds of the United States, while in the certificates neither of these elements appears.

However, circumstances easily conceivable and which were actually realized in the case of the famous Bank of Amsterdam, founded in 1609, might make the United States a debtor and the holders of the silver certificates creditors in the commercial sense of those terms. The Directors of the Bank of Amsterdam, towards the close of the second century of its beneficent existence, loaned out to the Dutch East India Company and to the City of Amsterdam large parts of the bullion, on which its certificates ("bank money") were based, unknown to the public, which felt unlimited confidence in the bank, and the result was in 1795, when the French invaded Holland and the facts became known, that bank money which had previously borne a premium of 5% fell at once to a discount of 16%, although the bullion that remained and the debts due the Bank were fully equal to redeem the certificates and were used for that purpose. So, if the United States should use, clandestinely or otherwise, the silver dollars for other purposes than to redeem the certificates on demand, the latter would undoubtedly both in law and fact be transformed from mere token-money (as now) into credit-money valid as against the United States as debtor, like the greenbacks at present.

Have we now compassed our first object? Do we fully understand, from the foregoing descriptions and distinc-

tions, the *Nature* of Credit? If so, we are prepared to look narrowly into its *Forms*.

2. Credit-rights are commonly, but not always, recorded upon paper; but it is important to observe, that the paper-document is the mere evidence of the right, and not the right itself, which lies back of the paper as substance to shadow, and persists intact even were the paper lost or destroyed. These paper instruments of Credit are commonly contemplated as of two kinds, Promises to pay and Orders to pay, but there is not at bottom any radical difference between these, the Right as between two persons is not affected by this superficial difference, as we shall see, and the present enumeration of credit-forms will proceed independently of it.

a. Book Accounts. A charge in a trader's books is both a current and a legal evidence that the person charged has received a certain service, and has virtually promised to render the sum charged as a return-service. Book accounts are the most common of the forms of credit; and if the person charged fails of his own accord to complete the exchange thus commenced, the law, in the absence of any proof to make the charge suspicious, collects it, if possible, and forcibly completes the exchange. The convenience of this form of credit is so great, that it is not likely ever to be disused; and as between people who deal much with each other is very useful, inasmuch as their respective book accounts are set against each other in settlement, and only balances are required to be cancelled in money. It is for the benefit of both creditors and debtors, however, even when the same parties are both creditor and debtor, that such credits should be short in time and such settlements frequent, since in book accounts there is no interest on charges however long they run, and since in this way only can the creditor realize the full gain of the exchange, and

erly called the *consolidated mortgage*. Such a mortgage has recently been executed by the Northern Pacific Railroad Company for \$160,000,000. Railroad Bonds so fortified in proper and legal terms possess the highest possible credit-security to their holders. When no such consolidated or "blanket" mortgage has been put on the property, first and second and third mortgages sometimes support bonds of primary and secondary and tertiary validity; and sometimes so-called *Income-bonds* are issued, with or without mortgages behind them, for the payment of the interest on which bonds the net earnings of the corporations are specifically pledged. Frequently also simple long-time bonds resting on corporation security only are negotiated without difficulty.

It must be constantly borne in mind, that certificates of Stock in railroad and all other similar corporations are not credit-documents at all, but are mere evidences of so much proportional *ownership* in the corporate property. They are not interest-bearing documents at all, although they may draw interest or rather dividends, if the property be prosperous. They are somewhat like deeds to land, in which no element of credit inheres.

Nations too are moral persons in the same loose though binding sense as corporations, and as such often issue promissory notes on interest, commonly called in this country Bonds, in Great Britain Funds, and in some countries Stocks. These are always pure credit. Nations give no mortgages. Yet they often borrow at a less rate of interest than the most solvent individuals or corporations can, as is seen by the fact, that British consols carry but 3%, and yet bear a premium in the present market. The term, "consols," is a popular contraction of "consolidated annuities," the Act to create which at 3%, out of a then confused mass of public debts at various rates of interest passed Parliament in 1757. The maximum of the British debt

was \$4,500,000,000 in 1815, and has now decreased to \$3,467,787,960.

The United States also sold its bonds at 3% for a small premium in 1882. It had borrowed of its own citizens in 1862-65, both inclusive, about \$2,500,000,000 on its bonds at different rates of interest and at different times of repayment: some of these bore gold interest at 6% annually, Government reserving the right to pay the principal in five years and pledging itself to pay it twenty years from date, and so these bonds were called "Five-twenties"; others bore gold interest at 5%, becoming payable at ten and demandable at forty years, and so were called "Ten-forties"; and still others bore greenback interest at $7\frac{30}{100}\%$, the principal payable in greenbacks at three years, or fundable in gold sixes, at the option of the holders, and these were named "Seven-thirties." Over \$90,000,000 of this last kind of bonds were subscribed for by the American people in the course of a single week in the spring of 1865. The whole of our national debt issued prior to 1865 was made payable on a day certain; the so-called "consols" of 1865 and 1867 and 1868 were payable *not more* than forty years from date; while all the bonds authorized from 1870 to 1882 were Consols proper, whose peculiarity is, that they never fall due so as to become a claim for the principal against the Government, but after a day fixed or on a condition fixed are payable "at the pleasure of the United States."¹

The separate States of our Union, as sovereign in their own sphere quite as much as the national Government is sovereign in its sphere, have unlimited power to contract debts for State purposes through their regularly constituted authorities; and consequently to issue promissory notes or bonds to liquidate such debts. New York com-

¹ John Jay Knox's United States Notes.

menced in this way in 1817 the magnificent enterprise of the Erie Canal, to connect the great Lakes with the city of New York by an inland water-way for commerce, and the completion of this in 1825 made the State the "Empire State," and the city the undisputed commercial metropolis of the Union. In a similar way Massachusetts undertook in 1862 the completion of the Hoosac Tunnel for a railway lengthwise of the State; and although the process became unduly expensive, and great abuses sprang up in connection with it, no one now questions that the pecuniary and moral resources of the State have been augmented, on the whole, by contracting the debt and providing by taxation for the liquidation of both interest and principal. The credit of Massachusetts, that is, the ability to borrow money at low rates of interest, has been at times greater than that of the United States; mainly because the State in 1862 and onwards refused to avail itself of a depreciated national paper-money (greenbacks) made legal tender for all debts, with which to pay the interest on its then existing State debt, but persisted throughout (alone of the States) to pay that interest so soon as due in gold coin. On the other hand, several of the States of the Union at different times, and under more or less of provocation and justification, have made a partial or entire repudiation of certain portions of their public debts, justly damaging to their individual credit, and even to the good name abroad of the whole people of the United States.

Counties and cities and towns may also issue interest-bearing bonds for public improvements, which have a *quasi* governmental character, but only under conditions and to a maximum amount prescribed by a law of the State.

c. Bank Bills. These are a form of promissory notes not on interest, and thus differ from the notes of ordinary corporations, and from the bonds of nations and states and

municipalities; but the issuing Bank offers, as a sort of compensation for the privilege of circulating notes not on interest, to convert them into coin, that is, to pay them instantly on the demand of any holder. It is this proffered and immediate convertibility into coin that enables the promissory notes of a bank to circulate as money, while the notes of other corporations and individuals equally solid and solvent do not circulate as money. It must be borne in mind, however, that this offer to convert them into the legal and ultimate coin-money does not essentially alter the nature of Bank Bills; they are a form of commercial credit; and although they are commonly issued against another form of such credit, namely, against the interest-bearing promissory notes of individuals and corporations who resort to the bank for discount, this only complicates the exchange without changing its nature. It is a common instance of exchanging one form of credit for another form which happens to have a greater currency or validity than the first, and for this superiority of the bank credit the individual credit pays an interest, in other words, is discounted; and such exchanges of one form of paper credit for another, with or without a premium, may go on indefinitely; especially as *credit-money* in the form of bank bills, such paper may serve as a medium in many exchanges; but ultimately, and before the entire series of transactions is closed, such bank bills are to be redeemed in coin, or taken in by the banker in payment of some debt due to him, in both which cases they are extinguished as an instrument of Credit.

The Bank of England keeps out in circulation on the average £25,000,000 in bank bills. It has been computed, that the average length of life of a Bank of England bill between its issue and redemption is about three days; and no bill once redeemed or received back over the counters

of the Bank is ever issued again. It is then placed on file for record only. The joint-stock and private banks of England and Wales circulate on the average rather more than £4,000,000 of bank bills of their own; and no bank bill of any kind is legal in England and Wales of a less denomination than £5. The ten Scotch banks and their branches keep out in bills about £5,000,000; six out of the nine Irish banks and their branches issue on the average not far from £10,000,000; but both the Scotch and Irish banks are allowed to put out £1 bills.

Bank bills, as a form of paper credit not on interest, but ostensibly redeemable in coin on demand of the holder, have been issued in the United States by more parties and to a larger extent and with more recklessness as to redemption than in any other country. Omitting all reference to Colonial issues, and confining the outlook to the first century under the Constitution, let us note, that when the present national government went into operation in 1789, the "Bank of North America" in Philadelphia and the "Bank of New York" in New York and the "Bank of Massachusetts" in Boston had been opened for business, and all three were State banks issuing bills convertible into coin, though each confined its business mostly to the city in which it was located. Two years later under the auspices of Alexander Hamilton, then Secretary of the Treasury, the first "United States Bank" went into operation at Philadelphia under a charter from Congress that was to run twenty years with a capital stock of \$10,000,000. At first no bills were issued by this bank of a less denomination than \$10; the money was popular and was converted on demand; the Bank was prosperous, and paid dividends to stockholders never falling below 8% and frequently rising to 10% annually; as the time approached for the charter to expire, the stockholders were anxious for a

renewal of their privileges; but the opposition to them in Congress was now strong, owing mainly to the increase in the number of State banks from 3 to 88; and accordingly the recharter was defeated in the House by one vote, and in the Senate also, by the casting vote of the Vice-President, and the Bank was obliged to wind up its affairs in 1811.

Then came in a sort of mania for the creation of new State banks, under the hope that these, now there was no National Bank, might obtain the Custody and temporary use of the national funds, and especially might furnish the country with paper money in the shape of State bank bills. The number of banks went up to 246 in 1816. So many bank bills were put out, and became so much distrusted, and so many were presented for redemption, that the banks could not respond in coin, and in the fall of 1814, there was a general stoppage of specie payment in all the banks of the Country excepting those in New England. General resumption of specie payment by the banks did not take place till 1819. New York bank bills went down to 90%, those of Philadelphia to 82%, those of Baltimore to 80%, and those of Pittsburg to 75%.

Under these circumstances the Second Bank of the United States went into operation in January, 1817, also with a charter to run twenty years, with a capital stock of \$35,000,000, of which the national Government subscribed one-fifth. The new Bank helped indeed the State banks to resume specie payments, as was a part of the purpose, but it pushed its own bills into circulation with such eagerness, that it is thought \$100,000,000 of them were in the hands of the people, before the first year was out. In this way the Bank fell into difficulties. Its bills were distrusted. Coin came to bear a premium over them of 10%. President Jackson began his famous contest with the Bank seven

years before its charter was to expire, and took care that it went out of being the same year that he went out of office, in 1837, namely.

The next year the State banks increased in number to 675, and continued to increase till 1862, when there were over 1500 of them, and when the issue of the "Greenbacks" by the national Government interfered with what had been their exclusive issuing of the paper money after 1837. In 1857, before the commercial panic of that year, the aggregate of their bills stood at \$214,000,000, the largest it ever reached. These bills were nominally convertible into coin at the will of the holders, but they were never actually so convertible for any great length of time. The ratio of their volume to the specie reserved to redeem it was always a very high ratio. For instance, the average for the whole country in January, 1863, was 4:1; in Rhode Island 12:1; and in Vermont 28:1. Such a paper money can be called convertible only by a stretch of courtesy.

It was wisely determined by the People to abandon this loose form of paper money, and in 1863 went into operation the present national banking system, under which originally \$300,000,000 of bank bills were authorized to be issued in the aggregate, but this limit was extended in 1870 to \$354,000,000, and the Act of 1875 removed all restrictions on the total amount, while there have always been restrictions on the amount that can be issued by any one bank in the system. By the law of 1882, national banks may withdraw their bills by depositing lawful money in the Treasury to take them up, and then take back the proportionate amount of the bonds held for the security of the bills. There were outstanding Dec. 26, 1883, \$341,320,256 of these national bank bills, but their volume declined under the law of 1882 to \$151,702,809 on Oct. 4, 1888. These bills were from the first redeemable in greenbacks,

which were themselves, however, irredeemable in gold and silver till New Year's, 1879, since which time till the present all the paper money of the United States of both kinds has been convertible into coin at the will of the holder.

d. Bank Deposits. We are studying in order the forms of commercial Credits, and we have now come to that one which is central in the operations of Banking, and accordingly this is the place for us to understand clearly what a Bank is, who a Banker is, and what are the motives actuating at once the Banker and his Customers. A BANK IS AN INSTITUTION FOR THE CREATION, MANAGEMENT, AND EXTINCTION OF CREDITS. Money of any kind plays a very subordinate part in the general operations of banks, which live and move and have their being in the sphere of pure Credits. *Bankers are buyers and sellers of credits.* As merchants are dealers in commodities, so bankers are dealers in credits, buying (1) some credits with other credits, (2) some credits with money, and (3) money also with credits. Before unfolding these three operations of bankers in their motives and profits, a glance backward to the origin of banks would be a help to us in grasping their nature and benefits.

The word "bank" meant originally a mass or pile or ridge of earth, as we still say, a *sand-bank*, and the *banks* of a river. When first applied to commercial transactions, the word had a different meaning from what it has at present, although the idea of *credit* has inhered in it from the first: in 1171, the Republic of Venice, being at war, ordered a forced loan from its citizens, and promised to pay interest on it at 5%; and certificates were issued for the sums paid in, and public commissioners were appointed to manage the payment of the interest and the transfers of the certificates, which were made negotiable. The Italian word applied to such a public loan is *monte*, but as the