

CHAPTER XVI.

CREDIT.

159. UNDER the general subject of exchange, we have been discussing the reasons why goods are exchanged, the principles of value (or the proportions in which they are exchanged), the aid given to exchanges of goods by the use of money, and now it will be our object to explain the operations of credit.

We often hear men in conversation placing a very high estimate on honesty and integrity as sources of business success. This has a close connection with the exchange of goods. The forms of credit are created by the business world to transfer capital to those who will make the most effective use of it, and to facilitate the exchange of goods. **Credit** (from the Latin *credo*, "I believe") means **belief, or confidence**. If A hands over some of his wealth to B, with the understanding that B will return it to him again, A **gives credit** to B; or, in other words, declares a certain **confidence** in B. If B is honest, and as good as his word, he keeps his "credit" high by always justifying the confidence placed in him. In times of business depression, however, people find it hard to borrow, because there is a general distrust, or lack of confidence in everybody; for, in a financial crisis, firms which had had the confidence of all have suddenly been unable to fulfill their promises.

160. In common practice people think of credit only

(164)

in connection with borrowing money; but this is not the whole truth. For **people who borrow money on credit really borrow the use of the wealth which that money will buy**. No one ever thinks of borrowing money merely for the sake of keeping it; on the contrary, it is at once exchanged by the borrower for goods, or used to buy land, or to build a house. "In some countries, where coins are not yet used, people lend and borrow corn, oil, wine, rice, or any common commodity which all like to possess. In the parts of Africa where palm-oil is produced in great quantities, people give and take credit in oil."* Of course, in civilized countries where money is in general use, the borrowing and lending of wealth is masked under the forms of borrowing and lending money. The real thing dealt in, however, is the wealth itself; and when A lends money to B, A is really giving B the use for a time of a certain part of the wealth in the community.

161. There are good reasons why credit should be used. Many widows, children, invalids, and others may have some wealth, but are unable or unwilling to undertake its management in active business enterprises. Others may have more wealth than they need. On the other hand, there are many keen, energetic men naturally fitted for managing industrial operations, who understand men, get on well with employes, and have hard-earned experience, but who may have little capital of their own to start with, or who can profitably employ much more capital than they own. These two classes of people supplement each other; and by credit wealth passes from the hands of those who can make little to those who can make the best use of it. In other words, **credit allows the wealth of the country to be more effectively employed in production**. The banks of the country are the "markets" for credit—that is, they are the places where people leave their sur-

* Jevons, "Primer of Political Economy," p. 110.

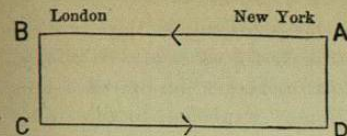
plus funds, and where borrowers go in order to get the use of wealth. What banks are, and how they are carried on, will be described in another chapter.*

162. The forms of credit, however, aid in the exchange of goods, and serve as a substitute for money. In its simplest form, this can be seen in the operations of two shopkeepers—a grocer and a butcher. The grocer buys meat of the butcher, and the butcher buys supplies of the grocer. Now, it is wholly unnecessary that each should carry money every time that he buys of the other. If the grocer should keep a careful account of all he sells to the butcher on credit, and if the butcher should keep a similar account of all he sells to the grocer on credit, then, at the end of a month or a year, the sum of the two accounts can be compared, and it can be found out to which of the two a balance is due. This balance only need be paid in money, and may often be no greater in amount than some of the daily transactions. A single payment of a small sum of money is all that is required to settle a great number of transactions, involving hundreds and thousands of dollars. So long as **confidence** exists between the two dealers, so that they give to each other the use of wealth, with no other security than the entries in an account-book the use of credit **saves the use of actual money**. This is often called **book-credit**.

163. Another form of credit, however, serves to economize the transfer of money in a more marked way than book-credits. When persons are buying and selling between distant cities in the United States (as between New York and Chicago, or even between Boston and New York), or between the United States and Europe, a very clever device is adopted to save the use of money in making payments. Let us take, by way of illustration, a simple trade between New York and London. A sends a

* Part II, chap. xxxi.

cargo of wheat, worth \$100,000 (or £20,000), from New York to B in London; and C, without knowing of B's transaction, sends a cargo of steel rails, worth \$100,000, to D in New York. If money were used, two large sums of gold would cross the



ocean, each running the risk of loss, and causing a good deal of expense. This is all obviated by the use of a **bill of exchange**. A has a claim on money due to him in London, and he is willing to sell this claim to any one (like D) in New York who is obliged to make payments to some one in London. A is an exporter; D an importer. A makes out a title to this money due him from B in London, in the form of a bill of exchange,* sells it for \$100,000 to D (who is inquiring for some one who has a claim on money in London), and thus A gets the pay for his wheat at once. D now has a title to the £20,000 in B's hands, and so he pays C for the steel rails by sending C this claim on B (in London), properly indorsed † in C's favor. In this manner, D sends by mail to C (different copies in different steamers, "first" in one,

* The actual form is as follows:

NEW YORK, January 1, 1886.

At sight of this first bill of exchange (second and third unpaid), pay to the order of D [the importer of steel rails] £20,000, value received, and charge the same to the account of

[Signed] A [exporter of wheat].

To B [buyer of wheat],
London.

† He does this by indorsing the bill of exchange he bought from A as follows:

Pay to the order of C [the seller of steel rails], London, value in account.

[Signed] D [importer of steel rails].

To B [buyer of wheat],
London.

"second" in another, etc., to insure certain transmission) a demand on B, and C then calls on B for the £20,000. Thus all four men have settled their transactions by a bill of exchange without any risk arising from the use even of a single piece of coin. By credit, or confidence in one another, this exchange of goods without the use of money was rendered possible. Thus, in 1885, goods to the amount of \$1,319,717,084 were exported and imported into the United States; but gold and silver coin and bullion were imported and exported in the same time to the value of only \$85,473,848. For the rest, no money was needed.

164. We have already seen (sections 107, 108) that, when persons have goods to sell and others wish to buy such goods, a common place of meeting for both buyers and sellers in a "market" is a necessity among civilized people. The same is true of buying and selling bills of exchange. A man in New York will not know that D wants a bill, and D will not know that A has one to sell; for in a great commercial city one man is not informed of the actions of many other persons. Consequently, banks have been selected as places where A can sell his bill, and where D can come to ask for one. In practice, therefore, **banks buy and sell bills of exchange**, and get a profit by charging a small commission. Like other things, bills of exchange rise and fall in price with changes in the demand and supply. If many merchants are exporting cargoes to England, bills are abundant, and their price falls; that is, when exports exceed imports, bills are low. On the other hand, if many merchants are importing from England, there will be a strong demand for "bills on London" (by which they can meet their purchases from England), and bills will rise in price. A bill, or title to a pound sterling in London, is worth at par just the amount of gold in the pound, which is equal to \$4.866 + of our gold coins; and the price may rise above or below this par value. Therefore, when exports balance imports,

bills of exchange will be selling for about \$4.86; when exports exceed imports, for less than \$4.86; when imports exceed exports, for more* than \$4.86.

165. The act of giving credit creates other forms than bills of exchange by which the act is signalized. These forms of credit signify that property has changed hands. In the case of A, whose cargo of wheat was handed over to B in London, the confidence placed in B permitted the use of a bill, by which B was drawn upon with a certainty that he would meet the demand. Likewise, to consider a new case, X, a merchant in Boston, might sell cotton goods to Z, a retail buyer in Ohio, on a credit of sixty days. Z does not pay the money, but gives a note, promising to pay in sixty days a given sum to X. This use of credit creates a form called a **promissory note**. X has confidence in Z, and is willing to give him the cotton goods merely on his written promise to pay. The merchant X often takes this note, if he is in need of ready money, and has it discounted at a bank; and the bank will collect the sum from Z when the note falls due.

If the promise to pay is made, not by an individual, but by a banking institution, or by a State, it is clear that people will take these promises in exchange for goods so

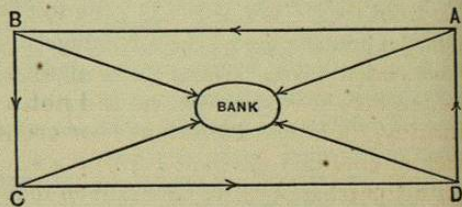
* The price can not go up beyond about \$4.90, the "shipping-point." To send \$4.86 to London, about $3\frac{1}{2}$ cents is charged for brokerage, insurance, and freight. Therefore, if D wants to get a pound sterling (\$4.86) to C, his creditor, in London, he will not pay more for a paper title to a pound sterling (i. e., a bill) than he would pay if he sent across \$4.86 in gold, and paid the $3\frac{1}{2}$ cents of charges. When the price rises to \$4.90, gold will be shipped to London in preference to buying bills.

When the price falls, it can not, for the same reasons, fall more than about $3\frac{1}{2}$ cents below \$4.86. When the price is as low as about \$4.83, gold will be imported into the United States. That is, persons having bills to sell will not sell for less than $3\frac{1}{2}$ cents below par; for they can bring across the gold itself for that. So \$4.83 is called the "importing-point."

long as they have confidence in the promise of the issuer. The note of a private person might be so used, but it could be passed only in a limited district, because the value of his promise might not be known outside of it. This objection would be less true of a bank, and still less true of a State. Just in proportion as people take these promises to pay instead of money is a certain amount of metallic money rendered unnecessary. It is the credit of the issuer which makes their circulation possible. If no confidence were reposed in the issues, no one would give away goods of value for what would be worthless promises. **Banks**, therefore, rely on their credit with the community, and **issue notes**, or promises. Following their example, when they can not get sufficient means in ordinary ways, **governments also issue their promises to pay**, or "coin their credit." In this manner they get the use of wealth by giving in return only a form of credit.

166. We have now mentioned book-credit, bills of exchange, and promissory notes as forms of credit. Another and fourth form is the **check**, which serves as a substitute for money in a very remarkable way. A check is an **order on a bank to pay some one a given sum of money**. The person who signs it keeps a deposit account at the bank, and by the check he transfers to another the right he had to draw on that deposit. A simple illustration may serve to show how checks save the use of money.

Suppose that a country merchant, A, has been buying wool, which he takes to New York and sells to B, a wool-broker, for \$1,000. B pays A by a check on his



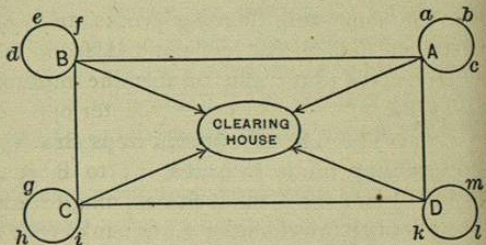
bank, X. B at once sells the wool to a manufacturer, C, and C pays B by a check on the same bank. Then C sells cloth to D, a wholesale dealer in dry-goods, to the amount of \$1,000, and is also paid by a check on X. Finally, A, before going home, purchases dry-goods of D to the amount of \$1,000, and pays D by giving him the check he received from B on the bank X. No money was required in all these transactions. A was the owner of B's deposit, and he gave his right to D. Now D gave a check to C for \$1,000, and thus transferred his right to a deposit of \$1,000 to C, and C gave a check for the same sum to B. So, at the end of the whole circle of transactions, B has the same sum (leaving profit aside) on deposit as at first; no money has left the bank; no money was used by any of the four; and yet the four transactions amounted to \$4,000.

167. The use of checks depends on the habit of depositing funds in banks. This habit exists chiefly in England and the United States, and does not prevail generally on the Continent of Europe. People must have confidence in banks, to leave their property there; but it is a great advantage to have a place of deposit, where money is safe from fire and robbery. Without confidence, or credit, the check system could not exist. In our illustration, A had confidence that B's check was good, and gave his wool for it; but, if A had gone to the bank and drawn out the actual money, the advantage of the check would have ended there. When he went to the bank and presented his check, however, **he did not want the actual money**, for he had **confidence, or credit, in the bank**, and only wanted the right to draw a similar check to pay for his purchases. The banker then took \$1,000 from B's account and credited it to A. When B brought C's check, the bank took the \$1,000 from C's account and credited it to B. D also found it useful to pay by means of a check, and he did not draw out the money. He paid C

by a check, and then C appeared on the books of the bank as the owner of the deposit instead of D. When A paid D by a check for \$1,000, the bank took the \$1,000 away from A's account and credited it to D, and matters stood as at first. So long as people pay by checks, payments may be made by transfers of deposits on the books of a bank performed simply by written entries. The extent to which checks thus save the use of money is marvelous.

168. It may not happen, however, that all the parties to a transaction have deposits at the same bank. Persons buying and selling may give checks drawn not on one bank but on

several. So let us understand that in this case A, B, C, and D represent different banks in the same city.



One group of persons, *a, b, c*, deposit in bank A; another group, *d, e, f*, in bank B; another group, *g, h, i*, in bank C; and another group, *k, l, m*, in bank D. Now when *a* pays *d* by a check on bank A, *d* does not want the cash if a check is just as good to him. So *d* deposits the check of *a* in his bank B. Now the bank B becomes the owner of the check drawn by *a* on the bank A. In a similar way *e* pays *c* by a check on bank B, and *c* deposits it in bank A. Thus bank A has a check, or demand, on bank B; and bank B has a check, or demand, on bank A. So it goes on in all the other groups who deal with banks C and D. There will be checks given by *g* to *k*, by *m* to *h*, and cross-payments by *b* to *g*, by *m* to *d*, etc. If each bank demanded cash for every check it held against another bank, there would be a constant carrying of money

back and forth between the banks. This useless and risky transfer of money between the banks is obviated by resort to a *clearing-house*. The bank A presents there its checks against banks B, C, and D, and these banks present all their checks against bank A. So, likewise, with B and each other bank. They assemble in a room called a clearing-house, where these checks are brought and offset against one another, and only the balances are paid in money. In the clearing-house there is a circular railing containing as many openings as there are banks in the association. At a given time, a clerk from bank A appears outside the opening assigned to his bank, and hands in all his checks against the other banks, and the sum of these checks is the amount demanded from the other banks. Then a clerk inside distributes the bundle of checks, by dropping each check on the counter opposite the opening of the bank on which the check is drawn. The same is done with the checks belonging to B, C, and D. Then all the checks dropped at the opening of bank A represent the sum of demands against his bank. The difference between the claims of bank A against other banks and the claims of the other banks against bank A can then be paid; but balances are very small in comparison with the sum total of transactions. In the year 1881, at the clearing-house in New York city, goods to the value of \$48,565,818,212 were exchanged, and only three and a half per cent of this sum was paid in money to settle balances. To such a marvelous extent has the system of checks and deposits saved the use of money.

169. The price of a thing is the quantity of money for which it will exchange (see section 84). The price of steel is the number of grains of gold for which it will exchange; hence the price may be changed by anything affecting either the gold side or the commodity side of the price-ratio. Therefore, normal credit can affect prices only in so far as it touches one or the other side of the price-ratio.

Evidently, credit does not change the expenses of production of steel, for instance (or only indirectly, by enabling capital to be turned over more rapidly). Does credit affect the value of money on the other side of the price-ratio? Only in so far as it can change the supply of gold or the demand for gold. Credit can act as a medium of exchange for goods, and thereby relieve gold of a possible demand; or it may work to produce the same result as if gold had been increased. If credit is not fictitiously or abnormally expanded beyond a basis of actual goods behind each transaction, there can be no general change in the prices of goods, although there may be a readjustment of values relatively to each other. Just as general demand and general supply are but different views of the same things, so when all goods, expressed in terms of the common denominators, are exchanged against each other by credit forms, as a medium of exchange, there should be no change in the general relations between gold and goods. It is only when fictitious credit (not based on goods, whether knowingly or unknowingly) is offered that there is a seeming increase in the offer of purchasing power in general, and thus there ensues a fictitious rise in the prices of goods. It is this abnormal use of credit before a crisis which raises prices unusually, and the collapse of this kind of credit after a panic which causes the disastrous fall of prices.

170. The relation of credit to goods and to money may be seen by the adjoining diagram. The prices of all goods

(1)	(2)	(3)
Forms of Wealth.	Money.	Forms of Credit.

(1) are adjusted by the relation of goods to money (2). The total wealth of a country is the sum of (1) and (2). But money (2), or goods (1) expressed in terms of money (2), by being exchanged, give rise to forms of credit (3), which aid in the processes of exchange. (3) do not add to the wealth of a community. The amount of purchasing power a man may possess is not only the actual money he has

(which is often very little), but the property which (through banks) he can have coined into means of payment by credit (i. e., bankable property). So that credit makes it possible to set a larger proportion than would be otherwise done of (1) in motion, exchanging for other goods. Yet under normal credit (based upon actual ownership of salable goods to the amount of credit granted) the prices of those goods in general, as expressed in (2), would not necessarily be changed.

Of course, in time of recovery from depression, an increase in wages, materials, interest, etc., the items entering into expenses of production, may thereby increase the price of a commodity relatively to gold; but this kind of change in prices, made possible by a growing demand, should not be attributed to an increasing offer of credit. By reference to the example in section 143, we may see that in times of depression the item of wages may be forced down, or interest even wiped out (i. e., the establishment may be running at a loss), because demand for the goods has decreased so much that the price of the product will no longer cover all the former expenses of production. Either some of the items must be reduced or the industry given up. It may be run at a loss, hoping for better times. Then, as soon as trade recovers and demand springs up again, the producer will be able to increase his price enough to raise wages, to give an ordinary rate of interest, and in some cases to put up prices temporarily, so as to earn excessive profits. This rise of prices (as in 1880-1883, or in 1898-1900) after a depression, therefore, cannot be attributed to any increase of money, nor to any of the operations of credit. This kind of a change in prices arises from an increase in the expenses of production relatively to money, and may bring about a general rise of prices, just as, in the contrary case, a depression brings about a fall in general prices. Such changes, it should be noted, cannot be assigned to the changes in the amount of credit. Credit may rise or fall off, but only as a consequence of the antecedent rise or decline in property transactions.

171. The way in which an expansion of credit raises prices and a contraction of credit lowers prices, excessively, without any change in the quantity of money in the country, may be seen by Mr. Jevons's account* of the progress and end of a commercial crisis: "There can be no doubt that in some years men become confident and hopeful. They think that the country is going to be very prosperous, and that if they invest their capital in new factories, banks, railways, ships, or other enterprises, they will make much profit. When some **people are thus hopeful**, others readily become so too, just as a few cheerful people in a party make everybody cheerful. . . . Clever men then propose schemes for new inventions and novel undertakings, and they find that they can readily get capitalists to subscribe for shares. . . . When the schemes . . . begin to be carried out, great quantities of materials are required for building, and the **prices** of these materials **rise** rapidly. The work-people who produce these materials then earn high wages, and they spend these wages in better living, in pleasure, or in buying an unusual quantity of new clothes, furniture, etc. Thus the demand for commodities increases, and trades-people make large profits. . . . Every trader now wants to buy, because he believes that prices will rise higher and higher, and that, by selling at the right time, the loss of any subsequent fall of prices will be thrown upon other people.

"This state of things, however, can not go on very long. . . . Manufacturers, merchants, and speculators, who are making or buying large stocks of goods, wish to borrow more and more money, in order that they may have a larger business, the profit seeming likely to be so great. Then, according to the laws of supply and demand, the price of money rises, which means that the rate of interest for short loans, from a week to three or six months in du-

* "Primer of Political Economy," pp. 116-119.

ration, is increased. The bubble goes on growing, until the more venturesome and unscrupulous speculators have borrowed many times as much money as they themselves really possess. **Credit is said to be greatly extended. . . .**

172. "But the sudden rise which, sooner or later, occurs in the rate of interest, is very disastrous to such speculators; when they began to speculate interest was, perhaps, only two or three per cent; but when it becomes seven or eight per cent, there is fear that much of the profit will go in interest paid to the lenders of capital. Moreover, those who lent the money, by discounting the speculators' bills, or making advances on the security of goods, become anxious to have it paid back. Thus the speculators are forced at last to begin selling their stocks, at the best prices they can get. As soon as some people begin to sell in this way, others who hold goods think they had better sell before the prices fall seriously; then **there arises a sudden rush to sell**, and buyers being alarmed, refuse to buy except at much reduced rates. The bad speculators now find themselves unable to maintain their credit, because, if they **sell** their large stock **at a considerable loss**, their own real capital will be quite insufficient to cover this loss. They . . . stop payment, or, in other words, become **bankrupt**. This is very awkward for other people, manufacturers, for instance, who had sold goods to the bankrupts on credit; they do not receive the money they expected, and as they also, perhaps, have borrowed money while making the goods, they become bankrupt likewise. . . .

173. "Not only does this collapse ruin many of the subscribers to these schemes, but it presently causes work-people to be thrown out of employment. . . . No one ventures to propose new [schemes]; people have been frightened by the losses and bankruptcies and frauds brought to light in the collapse, and when some people are afraid,

others readily become frightened likewise by sympathy. . . . In a year or two the prices of iron, coal, timber, etc., are reduced to the lowest point; great losses are suffered by those who make or deal in such materials, and many workmen are out of employment. The working-classes then have less to spend on luxuries, and the demand for other goods decreases; trade in general becomes depressed. . . . Such a **state of depression*** may continue for two or three years, until speculators have begun to forget their failures, or a new set of younger men, unacquainted with disaster, think they see a way to make profits. . . . After a time, bankers, who were so very cautious at the time of the collapse, find it necessary to lend their increasing funds, and credit is improved. Then begins a new credit cycle."

174. **Exercises.**—1. A borrows \$1,000 from a bank. B, a farmer, had just deposited in the bank \$1,000 in money, so that A was able to get the loan. How did B probably get his \$1,000 of money to deposit? When A parts with the borrowed money in buying goods, does he still have the loan? If A should buy wheat, whose wealth may he be using through the intervention of the bank?

2. Is book-credit of use as purchasing power to any one else than the two persons mentioned in section 135? Can the grocer's accounts be passed along as a substitute for money? Can a note?

3. A is an agent in New Orleans buying cotton. On shipping 1,000 bales to New York, he draws a bill for the price paid on the firm B in New York for whom he has bought the cotton. If C in New Orleans wanted to pay

* In years of depression we hear most of the irrational theories of a general over-production in all industries. It is only an ill-adjusted production which has been caused by the ruinous speculation; and, as soon as the adjustment is properly made, people go on producing far more than in the years when they talked of over-production.

for dry-goods bought from D in New York, how could he make use of A's bill on New York? Write out the bill and the indorsement.

4. Look at a greenback and see whose promissory note it is. Do the same with a national-bank note.

5. Get a blank check and see how it reads. If it reads "pay to bearer," can any one get it cashed? If it reads "pay to the order of John Doe," can any one else than John Doe get it cashed? Why is it safer, in sending a check by mail, to make it payable to the order of a person? Why must a stranger be "identified" at a bank when he wants a check cashed?

6. Let the members of the class be supposed to deal with three banks. Let each member make out a check. Then form a clearing-house, and strike a balance between the various banks.

7. If a man gives \$100 in gold for clothing, and gets provisions on credit to the amount of \$50, what is the whole amount of his demand for commodities? Would the price of provisions be affected if many persons should be unable to get credit, who had had it before?

8. Why do prices rise in the beginning of a speculative period? Why do they fall as soon as the tide turns?

9. Why is it hard to borrow, or to get credit, in the crisis of a commercial panic? Why is it hard to get anything when everybody wants the same thing?