aggrandizement of the owner through the growth of the community, be longer permitted to exist? Why should not this "unearned increment of land," to use Mr. Mill's phrase, go to the community, and not to any individual?

This demand has been made very vigorously, of late years, by a school of writers which embraces more than one economist of reputation. As the elements of the question are not purely economic, but embrace considerations of political equity and political expediency, I shall reserve all remark concerning it till we reach Part VI.

CHAPTER III.

INTEREST.

285. Definition of Interest.—We have seen one share cut off from the product of industry—rent; one claimant satisfied—the landlord. The reader now sees why this topic was first treated. In economic theory, this is ever the first claim to be adjusted and paid. We can make no progress—not so much as by a single step—toward discovering the principles which govern the division of the product of industry among capitalists, employers, and laborers, until rent is taken out, until the claim of the landlord is satisfied. Hence the topic, Rent, comes first, in a treatise on the distribution of wealth.

We are now to speak of Interest: the share of the Capitalist in the product of industry.

In Part II. we inquired into the origin and office of capital. We saw that capital consists of savings out of earnings, the native powers of the earth, air and water not being regarded as capital. Wealth having been produced, some of it, much of it, must soon be consumed, in order to sustain the producing classes, and to repair the waste inevitably attendant upon production, and even upon the mere lapse of time. All of it

may be so consumed, and will be, under the urgent and constantly recurring desires which wealth alone can satisfy, unless some motive for saving can be found which shall prove strong enough to withstand the impulses to immediate gratification, and to wrest a portion of wealth from the jaws of appetite. We have shown what that motive is, and how it manifests itself in a barbarous condition.

In an advanced state of society, the motive to saving is not so much found in the desire of the individual to accumulate tools and materials for his own handling, as in the desire to obtain interest from some one else, for the use of that portion of wealth whose consumption is thus postponed. To the varying strength of this motive with different men, and different races, we shall have occasion to refer further on.

286. Interest not Paid for the Use of Money.—It has been said that interest is the compensation paid for the use of capital. The usual form of statement is that interest is paid for the use of money. Broadly speaking, this is not true. Money, which is one of the many forms of capital, is, indeed, often the agent in effecting the loan of other species of capital. But in these cases, it is not the money, philosophically considered, that is borrowed: The interest paid is for the use of the capital obtained through that agency. One borrows $5,000, and gives a note for that sum, with interest. With this money he purchases live stock, machinery for his factory, or goods for his trade: these were what he wanted; these were what he really borrowed; these are what he pays interest upon. The money was solely a means to that end.

But money is not always, it is not in a majority of cases, in a highly advanced state of industrial society it is, indeed, rarely, the agent in effecting the loan of capital. The country merchant buys goods and gives his notes for two, four, and six months, promising to pay the price with interest. Interest on what? On money? No money passed in the transaction. What was borrowed was hardware and crockery, dry goods, and groceries. The young farmer buys cattle to stock his farm, and gives his note, promising to pay, with

interest: not interest on money, for he has had none, but interest on the value of cows and working oxen.

287. The Rate of Interest.—Let us now inquire how the rate of interest is determined.

Since the use of capital is a matter of bargain and sale, or of exchange, what should determine the rate of interest but the demand for, and the supply of, loanable capital?

Here we see the futility of the notion, which, from time to time, obtains a strong hold on the public mind of America, and, indeed, of all new countries, that the rate of interest is to be lowered by increasing the supply of money through the issue of paper notes. Men wish to borrow that they may get control of the agencies of production: capital in its various forms. The amount to be paid for the use of capital will depend on its abundance compared with the occasions for its productive use. The issue of money will not increase the number of horses and cattle and plows, nor will it build shops and warehouses or construct machinery for manufacture or for transport.

If the people of a community be thriving and progressive, the demand for capital, to start new enterprises, or to enlarge those already established, will be very great. If the community be, also, young, having brought to new fields the social and industrial ideas, tastes and ambitions of an old society, the supply of capital will be scanty, and the rate of interest will rule high.

288. Is this high rate of interest a hardship? No, the hardship lies in the scarcity of capital. The high rate of interest becomes the active means of removing that hardship, through increasing the supply of capital available to meet the demand. A high rate of interest is not an evil, but the cure of an evil. How is this?

Capital is, as we have seen, the result of saving. Interest, then, is the reward of abstinence. A part, a large part, of all produced wealth must be at once consumed to meet the conditions of human existence; but the remaining portion may be consumed or may be accumulated, according to the will of the owner. The strength of the motive to accumulation will vary with the reward of abstinence. If that be high, the disposition to save will be strengthened, and capital will be rapidly accumulated; if that be low, that disposition will be relatively weak, and capital will increase slowly, if, indeed, the body of existing capital be not dissipated at the demands of appetite.

We do not say that the strength of the disposition will increase proportionally to the increase of remuneration; that it will, for instance, be one-fifth greater at six per cent. interest than at five per cent. Moral philosophy has reached no such precision in gauging motives. But it is certain that, among the same people, and at the same time, the higher the rate of interest the stronger will be the motives which lead to saving: the more rapid the accumulation of capital.*

So we see that a high rate of interest, instead of being the cause of an evil, is really its cure; and that to depress the rate of interest, as, for example, by force of law, would be to retard the processes by which capital is supplied.

As a high rate of interest is not in itself an evil, so a low rate of interest does not necessarily imply a condition which is a subject of congratulation. A low rate of interest may mean that, in a thriving, progressive community, the accumulation of capital has gone on so rapidly as to outrun the occasions for its productive use. It may mean that the people are so dull, indolent and unambitious, or the state of society so disordered, that commercial and manufacturing enterprises are not undertaken, and no enlargement of traditional industries is looked for. A small amount of capital more than suffices for such scanty needs.

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* In general, taking all classes of producers into account, this will be so. Yet the effect of a reduction of the rate of interest is not wholly upon one side. Prof. Marshall very justly exhibits an effect of a reduction of the rate of interest, which, with a certain class of producers, might and probably would operate in the opposite direction.

"A high rate of interest no doubt affords a liberal reward of abstinence, and stimulates the saving of all who are ambitious of earning social position by their wealth. Again, if a man is in doubt whether to save in order to make provision for himself or his family, the expectation of a

289. The Rate of Interest tends to a Decline.—Despite the urgent and ever-recurring demands for the consumption of wealth in various forms of self-indulgence; despite the occasional reversal of the course of accumulation, in the occurrence of war; despite all the effects of misgovernment and social disorder, wealth tends strongly to increase. Since the application of steam-power to manufactures and transportation, this rate of increase has been so great as even to transcend the demand for the uses of wealth in undertaking new industrial and commercial enterprises, and thus, with some temporary exceptions, interest has tended to decline.

In this respect interest differs markedly, we may say, essentially, from rent. The latter tends to rise, with the lapse of time, the increase of population, the growth of wealth. The former tends to decline under the same conditions. This constitutes one of the two reasons why the economist insists upon treating interest and rent separately in his discussion of the distribution of the product of industry. The second of these reasons will now be stated.

290. There is not any No-Interest Capital.—We have seen (par. 255) that the whole theory of rent rests on the assumption that there is a body of no-rent lands. These serve

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high rate of interest may induce him to save; because the higher the rate of interest, the larger the amount of future enjoyment which can be obtained by sacrificing a given amount of present enjoyment.

"But the history of the past and the observation of the present show that it is a man's temperament, much more than the rate of interest to be got for his savings, which determines whether he makes provision for his old age and for his family, or not. Most of those who make such a provision would do so equally whether the rate of interest were low or high. And when a man has once determined to provide a certain annual income, he will find that he has to save more if the rate of interest is low than if it is high. Suppose, for instance, that a man wishes to provide an income of £400 a year on which he may retire from business, or to insure £400 a year for his wife and children after his death. If the current rate of interest is 5 per cent., he need only put by £8,000 or insure his life for £8,000; but if it is four per cent., he must save £10,000 or insure his life for £10,000."

as the base from which to measure upwards the successive degrees of productiveness of the lands bearing rent.

In the theory of capital there is nothing to correspond to this. The economist does not find any no-interest capital. In theory, all capital bears an interest, and all portions of capital bear equal interest. If one portion, in fact, brings no interest to its owner, or brings an interest below that obtained by the owners of other portions, this is because of misadventure, due to accident or erroneous calculation, not to the nature of the capital itself.

Of course, it is anticipated by the political economist that the interest realized by portions of capital actually loaned will vary not a little, even within the same market, inasmuch as competition is never perfect in any sphere; but what has been stated shows how fundamentally the theory of interest differs from that of rent.

291. Is there a Minimum Rate of Interest?—We have said that the inducement to save diminishes, other things equal, as the rate of interest falls. Is there a point at which the disposition to consume wealth for purposes of comfort or luxury will equal in strength the disposition to acquire an annual income by saving wealth for productive uses, so that no further accumulation will take place, the savings out of earnings thereafter being only sufficient to make good the waste of production and keep up the stock of capital?

If there is a minimum rate of interest, it is very low. Fifteen or twenty years ago, six per cent. was the traditional rate of interest in New England, and probably few of us then thought that, if the rate were to go lower, it really would be worth while to "save." We had become so accustomed to six per cent. that it had come to seem as if there were some law of nature that fixed that rate. Six per cent.? Why of course a man would get six per cent.? Yet since that time we have seen the rate of interest steadily fall, in consequence of the vast accumulation of capital, till now loans of capital are to be had on good security at four and one-half or even four per cent., while the government borrows all it wants at three and one-half or even three. The English government

has long borrowed at three per cent. The government of Holland during the most flourishing period of the republic, was even able to borrow at two per cent.

292. Income from Investments, how Computed.—Misapprehensions regarding the actual rate of interest are not infrequently occasioned by the failure to note, what would appear very plain, that the amount of interest paid upon bonds or notes, and the amount of dividends declared upon shares of corporate stock, should be compared, not with a nominal par value, but with the sum actually invested in the purchase of such bonds, stocks, notes or shares, or else with the sum for which these would at the time bring, if sold.

Thus, we read in the newspapers, that the Boston and Maine railroad, in May, 1887, declared a semi-annual dividend of five per cent., being at the rate of ten per cent., a year.

This statement, by itself, might create the impression that investment in the stock of this road would be a peculiarly profitable one. A reference, however, to the stock quotations, in another column of the same newspaper, would have shown that the shares of this railroad were then selling at about $230, on the par of $100. A person, therefore, buying a share of this stock, in April, 1887, would have received but a trifle over four per cent., per annum, which was about the rate of interest then prevailing upon "bottom mortgages."

On the other hand, a number of railroad companies, during the great speculative extension, 1868–1873, advertised to sell at seventy dollars, bonds for one hundred dollars, bearing seven per cent. interest. What, then, was the rate of interest promised on this investment? Seven per cent.? No: the rate of interest promised to be paid was ten per cent., and, even, as we shall see, more than that. The investor paid seventy dollars for a bond, to receive upon it annually seven dollars of interest, per year, until the bond should mature, and then to receive $100 in money, whereas he only paid down $70. In other words, he was, on the expiry of the bond, to receive a premium of $30, over and above an annual interest of ten per cent. The "present value" of this premium

would depend on the length of time the bond had "to run."

293. False Interest: Insurance of the Principal.—A great deal that is paid under the name of interest is not interest in the true sense, but is merely a premium for the insurance of the principal sum lent. Real interest only comprises that part of the payment made which would be paid, were the return of the principal, at the date of the maturity of the obligation, a matter of reasonable certainty. Absolute assurance can be reached in no human transaction; but where the risk is so small that it amounts to nothing in the mind of the lender, as in the case of British consols, or of a "bottom mortgage," where the sum lent is only a half or a third of the value of improved real estate, we have an instance of real interest, pure and simple.

Whatever, in the same market, at the same time, is paid above this, for the use of capital, is of the nature of insurance against the risk of losing the amount lent. If the rate of real interest in London is 3 per cent., as determined by the price of consols, loans on various kinds of fair security may range from that rate up to 5 or 6 per cent.; while all the time note-brokers are "shaving" the "paper" of second and third rate dealers at from 10 to 20 per cent. discount.

294. Extra-Hazardous Risks.—The operation of the mind of the person who lends capital, at a high interest, upon poor security, is a familiar one. He sees the opportunity to obtain interest proper—the normal remuneration for forbearing to consume in immediate self-indulgence the wealth he has created, or come into possession of—without encountering any appreciable risk of losing the principal sum. But there is offered him a higher, perhaps a much higher, rate of interest, for a loan into which a chance of total loss enters. His mind balances the risk against the prize. The yearly value of the latter is definite. It is three, five or ten per cent. on the sum asked to be lent. Were he to receive this added interest for a sufficient number of years, he could even afford to lose the principal. He may receive the interest during the full term of the obligation, and then have his principal back again. He

knows also that he may receive but one or two annual payments of interest, and then be compelled to recognize his investment as a total loss.

Of the degree of risk there is no measure. The ablest statistician, the first financier of the world, could give no mathematical statement of the chances for or against the ultimate repayment of the loan. The matter lies very vaguely even in the mind of the shrewdest banker or broker. He sees that there is great risk or little risk, very great risk or very little risk, or that the elements on which the ability of the borrower is to depend are altogether shrouded in uncertainty; but as to giving a mathematical expression to the value of the loan, based on the chances of loss, the man who does this is deceiving either himself or some one else.

295. With the great majority of lenders no calculation whatever, deserving of the name, enters into the negotiation of loans where more than double interest is paid. The capitalist is simply tempted beyond what he is able to bear, or else, if a man of another temper, the enhanced inducement becomes of itself a reason for refusing to lend his money, and he shuts the door upon negotiation. Look at the hundreds of millions, the thousands of millions, that have been sunk in railway shares and mining stocks by persons who had not the smallest qualifications for estimating the value of the risk, but whose prudence gave way under an offer of ten, or twelve, or twenty per cent. Writers on Interest are too much given to assuming that the losses sustained in extra-hazardous investments are balanced by the gains, and that the "average rate" is somehow maintained. The fact is, few lenders are capable of making any computation of the value of the risks they take; few even go through the form of doing so.

The only thing that can be said with assurance is that the vast majority of lenders on extra-hazardous risks are losers. The high rate of interest proves a snare. Tempted by the offer of 12 or 20 per cent., they take risks for which 40 or 50 would be inadequate. Interest is paid, dividends are declared, just long enough to complete the subscription, just long enough to secure the last gudgeon in the pool. And it is often astonishing to note the class of men who contribute to a scheme which is in its very terms an insult to common-sense. Bought wit is the best wit; but in this matter, experience seldom suffices for wisdom. The susceptibility to humbug is perennial in the human breast. After a dance of folly, in which figure "The Periwig Company, and the Spanish-Jackass Company, and the Quicksilver-fixation Company;" in which prospectus vies with prospectus to see which shall be the more preposterous; and in which investor vies with investor in recklessness, there comes, indeed, a resting spell, more through exhaustion of means than through acquired prudence; but the first tingle of reviving activity in trade starts the fever of speculation anew, and the knaves find the dupes as numerous and as credulous as ever.

296. The Wreckers of Trade.—The foregoing remarks apply to the great majority of investors who take extra-hazardous risks. Yet there are in every large commercial community those who reap enormous rates of interest with only rare losses to offset their gains. These are men with preternatural sagacity to know when it is safe to trust a rogue, how far to ride with a spendthrift towards his ruin, just the point at which to leave a tottering house whose foundations they have undermined by drains of exorbitant interest, just the moment at which to "unload" a stock; men with the cunning to secure themselves against loss, whoever may suffer; men who have the hardness to exact the last penny of their dues, at whatever distress to the debtor. Such men are the wreckers of trade. Their gains are great, for they reap the enormous profits of extra-hazardous risks, yet seldom lose in the principal sum lent. Rarely, indeed, is an embarrassed firm saved by their aid. Resort to them is the almost certain precursor of ruin. It serves to delay the catastrophe a little, only to make it utter and remediless at the last.

297. Double Interest.—The foregoing remarks apply only to extra-hazardous risks, where, to put it roundly, more than double interest is paid. With investments or temporary loans inside this limit, a different rule obtains. The rates of interest paid are still graded with little real appreciation of the degrees of risk taken; the sums obtained as insurance can not

be assumed to be proportioned to the hazard; yet it is generally possible for an investor or lender to say, this is more safe than that: the adverse chances here are few and small; are many and great there.

But there is a more marked difference between extra-hazardous and ordinary risks in the loan of capital. With the former, the rates obtained are, as a whole, taking all classes of investors or lenders together, below the actuarial value of the risks taken, and such loans and investments, in spite of the acuteness of the professional money-lending class, result, as a body, in loss. With ordinary risks, the rates of interest are, on an average, above their true value, as estimated from the basis of bottom mortgages and government loans.

For example, in England, a few years ago, the return from capital invested in government bonds was about 3.3 per cent.; while the savings banks realized on their investments, which may be assumed to have been made in a conservative spirit, 4½ per cent., and the average return to investors in railway stocks was 5 per cent. Now, here is an undeniable case of disproportion. Any shrewd and sensible man, selling £100,000 of consols, investing the proceeds in the shares of ten reputable railways, and compounding through a term of years the extra $1^7/_{10}$ per cent., per annum, would create a fund far more than sufficient to offset any losses he might sustain in an individual case. This disproportion is due first, to the estimation, higher than an actuarial value, placed by large classes of investors upon the feeling of security, the absence of all apprehensions and occasional alarms, and, secondly, to the favor extended by the courts to the investment of trust funds in government bonds.

298. Differing Rates of Interest in the Same Market.—We have laid down the proposition (par. 132) that in one market, at one time, there can be but one price for equal portions of the same commodity. The plain facts of interest seem to controvert this proposition. In the same market, at the same moment, the price paid for the use of capital may range from three per cent. upwards, to five, to ten, to twenty. Is this because between the portions of capital so loaned an

economic difference exists, which creates a preference for one over the other, as when several different grades of flour are sold at several distinct prices? No, the capital loaned may be, in all economic respects, uniform. A man having $30,000 on deposit in a bank, may, on the same day, buy $10,000 worth of "governments" which pay four per cent., invest in "railways" paying six per cent. dividends, to the same amount; and loan the remainder at ten per cent. on personal security. Manifestly, between the three portions of capital loaned or invested, no economic differences existed.

To what, then, is the phenomenon noted due? In part to the cause discussed under the last head—the insurance of the principal sum lent. Twenty years ago there were on the stock market, in Lombard Street, three kinds of government securities: English consols, bringing, then, three and a quarter per cent. interest on the investment; Russian bonds bringing five and a quarter per cent., and Turkish bonds bringing ten and a half per cent. Every day large amounts of these bonds were bought by Englishmen. Doubtless, some purchasers bought portions of each kind of securities.

Inasmuch as the possibility of the English government becoming bankrupt, or tending to repudiation, is never admitted by an Englishman, the dividends received by holders of the "consols" constituted pure interest, the reward of abstinence. The added two per cent. obtained from the Russian bonds represented the value, as viewed by the purchaser, of the insurance of his capital against the risk of loss attendant on loaning it to the government of a people, possessing great natural resources, indeed, and bound together by a strong national feeling, but rude in manner, primitive in industry, with their political questions largely unsolved, and having points of possible collision with England. But while the Englishman demanded five and a quarter per cent. per annum from the Russian government, as the consideration for his loan, he exacted just twice that consideration from the Turkish government, though a government bound to Great Britain by the strongest ties of self-interest, because both the resources and the good faith of the Turkish government were reasonably suspected,

and its existence was dependent on support from foreign powers.

299. Imperfect Competition in the Money Market.—We have in the foregoing paragraph used the expression, "as viewed by the purchaser." Hereby is indicated a consideration, which, while it is of importance in any market, is of especial importance in the market where capital is loaned, the so-called money-market. In quoting Prof. Jevons' statement of the reason, why, in the same market, at the same moment, all equal portions of a perfectly homogeneous commodity must bring the same price, we added that this proposition assumed perfect competition, all the conditions of a good market being fully realized. Now, perfect competition only exists where there is ample and accurate information. In bargains relating to the use of capital, so little is known by the parties respecting the supply of and the demand for capital, especially where usury laws drive borrowers and lenders to shifts and evasions; so much more are men disposed to conceal the fact and the extent of their borrowing than of their buying; so much does the repayment of the principal depend, in spite of law, upon the good faith of the borrower, that the market for the loan of capital can rarely be called a good market.

All bargains in the "money market," as the market for the loan of capital is popularly called, take place necessarily upon information imperfect at the best, often of a private and confidential nature: hence it frequently happens that, in the same market, at the same moment, loans, upon equally good security, are made at different rates; while it is not at all unlikely to occur, that, of two loans of unequal value, as to security, the more hazardous may be made at the lower rate of interest.

300. Differing Rates of Interest in Different Markets.—Of course, all that has been said of differing rates of interest in the same market holds good of different markets; but, wholly in addition of the causes which produce those differences, is reason found for different rates in distinct markets. Thus it is notorious that, for long terms of years, the loan of capital could be obtained, upon what was locally regarded as approved security, for 4 per cent. in London as freely as for 6 cent. in

New York, or 8 per cent. in Chicago, or 12 per cent. in Iowa, or Kansas.

Whence these differences? In some degree, doubtless, these successive additions of interest, as capital passed westward, were of the nature of insurance on the principal sum lent. In each case, the security might be as good as could ordinarily be obtained in that community. Security, however, is a relative term; what would be deemed ample security in one place would not pass the scrutiny of lenders in another. The older the country the greater, other things equal, the permanence of economic relations; the more does industry settle down within traditional limits, and acquire a definite and calculable rate of increase; the higher the value assigned to commercial reputation, the more carefully are the men selected who are to control the agencies of production and trade, the fewer the chances of revolutionary changes in business.

301. Disinclination of Capital to Emigrate.—But not all, or even the greater part of the differences which have been noted, are due to this cause. It is the disinclination of capital to emigrate, which allows such wide differences in the local rates of interest. This disinclination is due to various causes. In part, it is the continuing effect of old laws, now generally abrogated, discriminating against aliens. In part, it is due to the suspicion that strangers may not be fairly dealt with by courts and by officers of the law, in case of seizures or foreclosures. In part, it is due to the apprehension of the effect of international hostilities, which cause a suspension of interest-payments, if not forfeiture of the principal. In part, it is due to the fact that investments made at a distance must generally be made through an agent, upon whose good faith or sound judgment may depend the fate of the principal invested.

While these and other causes may operate, singly or in conjunction, to create local differences of interest, the main cause of such differences is found in the inertia of the owners of capital, making them ready to accept lower rates upon the spot than could perhaps be obtained with no less safety, through inquiry and effort at a distance, and, secondly, in the necessary

lack of information as to prevailing rates of interest and existing degrees of security for the principal.

I remember to have read somewhere an estimate by an economist of reputation, fixing this "disinclination of capital to emigrate" at two per cent. It is doubtful, however, whether the matter is subject to any such form of statement. The disinclination to invest capital abroad must differ among men of different races; it must differ with differing conditions respecting the communication of news, and respecting international relations. Indeed, it must differ widely with differing moods of the public mind. At times, it may disappear altogether under the excitement of speculative mania, as in the days of the South Sea Bubble, and in the year preceding the English crisis of 1825. It sometimes seems to be the case that loans and investments are made abroad more freely than at home, probably because it is less easy to detect the fallacy of schemes bearing foreign names, and relating to distant lands.

CHAPTER IV.

PROFITS.

302. Definition of Profits.—We have now seen two shares cut off the product of industry—rent and interest; two claimants satisfied—the landlord and the capitalist.

We now come to inquire respecting the share of the Employer, who organizes and conducts production, deciding what shall be produced; in what amounts, of what varieties, materials and patterns; and to what persons, at what prices, and on what terms of payment, the products shall be sold.

303. The Entrepreneur or Employing Class. — We have seen that in a primitive state of industrial society the employer does not appear. When, however, the forms of production become many and complex; when the hand-tool is replaced by the machine; when many persons, of various degrees of skill, strength and intelligence, are united in the

same industrial operation; when the materials consumed are gathered from distant lands, and the products, in turn, are distributed widely to consumers not known to the producer, and are sold largely upon credit; when, moreover, a few simple, standard styles give way to ever-varying fashions, in material, in form, in color: in such a state, the employer, the master, the entrepreneur, becomes a necessity of the situation. He performs a function which is indispensable to a large and varied production, and for so doing receives a remuneration which we call profits.

304. Unfortunately, as it seems to me, the entrepreneur or employing function has not been adequately treated, if, indeed, it has been in the smallest degree recognized. English and American economists, in general, have chosen to regard the capitalist as the employer of labor, that is, as employing labor merely because of the possession of capital, and to the extent only to which he possesses capital. We have just now said that, in an early stage of industrial society, the employer does not appear in distinct shape. The possession of capital there constitutes a sufficient qualification for the employment of labor.

In the later stages of industrial development, the mere possession of capital no longer constitutes the sole, or even the main qualification for employing labor. The laborer no longer looks to the employer to furnish merely food and tools and materials, but to furnish, also, technical skill, commercial knowledge and powers of administration; to assume responsibilities and provide against contingencies; to shape and direct production and to organize and control the industrial machinery. So important and difficult are these duties, so rare are the abilities they demand, that he who can discharge these will generally find the capital required. If he be the man to conduct business,* food, tools, and materials will not, under our modern system of credit, long be wanting to him. On the

* "Many employers of labor, *in some parts of England more than half*, have risen from the ranks of labor. Every artisan who has exceptional natural abilities has a chance of raising himself to a post of command." —Marshall's "Economics of Industry."