distribution which governs metal money, but possessing the capability of temporary and local inflation.

This opinion was ably maintained by Lord Overstone, Mr. Norman and Colonel Torrens, against the views of the Bank of England, and after a long struggle, the economists of this school triumphed in the enactment of the Bank Act of 1844* which still governs the note-circulation of England, though the principle on which it was framed is now challenged by many of the best financiers and economists.

In the United States, owing doubtless to gross abuses of the right of bank-note issue, such as have been adverted to in a note on a preceding page, the views of the English currency school obtained an acceptance among professional economists and writers on finance even wider and more complete than in England, although in but few states did this lead to legislation in any degree comparable, in scope or stringency of operation, to the English act of 1844. The leading writers on this question in the United States, were Messrs. William M. Gouge, Condy Raguet and Amasa Walker.

226. The Currency Principle vs. the Banking Principle.

—The question whether a body of money composed partly of coin and partly of bank notes fully convertible into coin, acts in all respects as would a body of money composed wholly of coin, or, on the other hand, has the capability of being issued in local excess and so maintained for a long enough time to affect local prices, and thus initiate abnormal movements of

trade and production, I regard as the one open question in the theory of money. Brought up in the school which held the latter view, my own reading and reflection have confirmed me in the belief that there resides in bank money, even under the most stringent provisions for convertibility, the capability of local and temporary inflation. The arguments on the two sides of the question are so evenly balanced, and the statistical evidence is so ambiguous, that differences of opinion are likely long to exist between men of intelligence and candor. I freely confess that the preponderance of authoritative opinion is against the view I hold.

CHAPTER VII.

THE REACTION OF EXCHANGE UPON PRODUCTION.

227. Evil Possibilities involved in the Division of Labor.

—We have seen that the division of labor is an essential condition of large and varied production. But the division of labor, when carried far, involves possibilities of loss and disaster. These become more and more serious as production becomes more and more extended and complicated, until, in the most highly organized industrial state, we have to explain the failure of a community to realize its full productive capability, mainly by reference to industrial misadventures and even, at times, a partial paralysis of the productive powers of the community, originating in this very source.

The cause of the trouble adverted to is found in misunderstandings between producers and consumers, whom it is the nature of the division of labor to set apart, and, in an advanced industrial state, widely apart, often by half the circumference of the globe.

It is evident that, were there no division of labor into separate occupations, the relation between production and consumption would be a simple one. Production would, within the capabilities of the several agents concerned, viz.,

^{*} The principal features of the act of 1844, as affecting the circulation, are as follows: 1st. The Bank of England is allowed to issue notes, in a constant sum of £15,000,000, without any specie basis. For all notes above this, it must have, pound for pound, a specie reserve, of which one-fifth may be silver. [This last in consideration of the commercial and political relations of England with India, which has silver money.]

²nd. The issue department and the banking department of the Bank are completely divorced, becoming as separate as the Customs and the Internal Revenue bureaus of our own government.

³rd. No London bank can issue notes, nor can any bank chartered since 1844; while the issues of the English banks then existing are limited to their ordinary outstanding circulation prior to that date.

land, labor, and capital, only be limited by the effective desire of the several individuals of the community to consume wealth. Each man would work by himself, for himself, producing those things, and those only, which he wished personally to eat, drink or wear, or house or warm himself withal. There would here be no question of a market, for every man would be his own customer.

From this point, we may mark off three stages of industrial

228. The First Stage.—The first is where distinction of trades is introduced, and men no longer consume all, or perhaps any part, of the articles they have produced; yet where consumers live near the producer, and are personally known to him. In this condition, production, except in agriculture, generally waits for an order from the consumer. If goods are produced in advance of an order, the kinds are few, the forms are simple, the styles standard. There is, moreover, the reasonable expectation that some certain person, or some one out of a certain group of persons, will surely and soon need the goods, and will become the consumer. Here, we see, is not much liability to a misunderstanding between producer and consumer.

229. The Second Stage. The second stage is where the element of personal acquaintance between producer and consumer disappears. Production no longer waits for orders, but anticipates demand. Goods are produced for a general market, and upon a calculation of the quantity probably to be required. The individual producer has no longer his own circle of customers; but competes with other producers for the largest possible share of the patronage of a wide circle of consumers. Yet it is still true that production is carried on by artisans working singly or in small groups. Tools and implements are simple and inexpensive; there is little of "plant" or fixed capital. Fashions are few and styles remain standard through long periods of time. Here, manifestly, the opportunity for misunderstandings between producer and consumer exists in a higher degree than under the former conditions described. Yet even here production may still go on

with tolerable uniformity: all hands working steadily through all the seasons of the year, with a reasonable assurance that all goods which are well made, will find a market at fairly remunerative prices.

230. The Third Stage.—The third stage is reached, when increasing facilities of communication make the world one trading community. Then production becomes highly diversified, and the specialization and localization of trades proceed so far that one country, or perhaps one group of towns, produces the greater part of all the goods of a certain sort which are consumed throughout the world. Then luxury and refinement of living are carried to the maximum, so that not only are classes of goods multiplied almost indefinitely, but fashions and modes enter till standard styles almost disappear, each season bringing minute modifications of demand which are not to be satisfied except by an exact compliance, even the colors and shades of one year becoming intolerable the next.

It will appear that conditions like the foregoing increase enormously the liability of misunderstanding between producers and consumers. The possibilities of error in supplying the markets, no longer of a village, but of the world, become tremendous.

231. The Appearance of the Entrepreneur.—But it must further be added, that powerful and complicated machinery is now introduced, and costly structures and "plant" are required. Great numbers of operatives, of both sexes and all ages and of every degree of strength and skill, have to be gathered under one roof, each knowing only his or her own part; all requiring to be instructed and equipped, organized, energized, and directed by the intelligence and will of one man. In other words, we have reached the entrepreneur stage (pars. 106-9) of industrial development.

The introduction of the principle of mastership into industry makes a great gain of productive power; but this gain is not secured without an appreciable loss. The entrepreneur (to anticipate, for a moment, a topic in Distribution), finds his motive for organizing and conducting the great enterprises of modern industry in the profits (pars. 302, 429) which he

hopes individually to realize. His entire personal interest is found here. It is, perhaps, to secure a net profit of twenty thousand dollars, that he leases land and buildings, and borrows capital, and hires the labor requisite to achieve an annual product of half a million of dollars. If, then, the conditions of trade and industry are such as to destroy for the time his profit; much more if they are such as to threaten a loss which will impair the integrity of the capital, his interest in production is greatly diminished, if not destroyed. He will either cease producing entirely, or, which is more likely, will contract the scope of his operations. Were he to produce \$500,000 worth, as heretofore, a small fraction of his stock unsold might sweep away his own gains for the year, or leave a deficit; whereas, were he to produce but \$400,000 or \$350,000 worth, he would probably dispose of his stock at prices high enough to make himself good and perhaps leave a small margin of profit, while holding his laboring force and his customers together.

232. Fluctuations in Production.—Such being the conditions under which production takes place, under the modern organization of industry, we note that there is in the nature of the case a continuous loss through the failure of the producing body to meet, promptly and precisely, the demands of the body of consumers. Wherever, from any cause, there is a failure correctly to anticipate those demands and supply them perfectly, in time, in degree, in form, loss of value results. That there should be such failure in part, is inevitable.

But the loss which we had chiefly in view in beginning this chapter, and with reference to which we have written this long introduction, is not the steady, continuous loss of value due to the inability of those who direct production to comprehend, fully and seasonably, the varying demands of distant markets. It is the occasional loss resulting from the frequent and often furious fluctuations which are involved in the modern organization of trade and industry.

From that organization the alternation of highly stimulated and of deeply depressed production appears to be inseparable. The course of trade and industry through the cycle which the conditions of modern life seem to have established, is so well described by Prof. Alfred Marshall that I can not forbear to give it in full:

"The beginning of a period of rising credit is often a series of good harvests. Less having to be spent in food, there is a better demand for other commodities. Producers find that the demand for their goods is increasing, they expect to sell at a profit, and are willing to pay good prices for the prompt delivery of what they want. Employers compete with one another for labor; wages rise; and the employed in spending their wages increase the demand for all kinds of commodities. New public and private companies are started, to take advantage of the promising openings which show themselves among the general activity. Thus the desire to buy and the willingness to pay increased prices grow together; credit is jubilant and readily accepts paper promises to pay. Prices, wages and profits go on rising; there is a general rise in the incomes of those engaged in trade; they spend freely, increase the demand for goods, and raise prices still higher. Many speculators, seeing the rise, and thinking it will continue, buy goods with the expectation of selling them at a profit. At such a time a man who has only a few hundred pounds can often borrow from bankers and others the means of buying many thousand pounds' worth of goods; and every one who thus enters into the market as a buyer, adds to the upward tendency of prices, whether he buys with his own or with borrowed money.

"This movement goes on for sometime, till at last an enormous amount of trading is being carried on by credit and with borrowed money. Old firms are borrowing, in order to extend their business; new firms are borrowing in order to start their business; and speculators are borrowing, in order to buy and hold goods. Trade is in a dangerous condition. Those whose business it is to lend money are among the first to read the signs of the times; and they begin to think about contracting their loans. But they can not do this without much disturbing trade. If they had been more chary of lending at an earlier stage, they would simply have prevented some new

business from being undertaken; but when it is once undertaken, it can not be abandoned without a loss of much of the capital that has been invested in it. Trading companies of all kinds have borrowed vast sums with which they have begun to build railways and docks and ironworks and factories; prices being high they do not get much building done for their outlay; and though they are not yet ready to reap profits on their investment, they have to come again into the market to borrow more capital. The lenders of capital already wish to contract their loans; and the demand for more loans raises the rate of interest very high. Distrust increases; those who have lent become eager to secure themselves and refuse to renew their loans on easy or even on any terms. Some speculators have to sell goods in order to pay their debts; and by so doing they check the rise of prices. This check makes all other speculators anxious, and many rush in to sell. For a speculator who has borrowed money at interest to buy goods may be ruined if he holds them a long time even while their price remains stationary; he is almost sure to be ruined if he holds them while their price falls. When a large speculator fails, his failure generally causes that of others who have lent their credit to him; and their failure again that of others. Many of those who fail may be really 'sound,' that is, their assets may exceed their debts. But though a man is sound, some untoward event, such as the failure of others who are known to be indebted to him, may make his creditors suspect him. They may be able to demand immediate payment from him, while he can not collect quickly what is owing to him; and the market being disturbed he is distrusted; he can not borrow, and he fails. As credit by growing makes itself grow, so when distrust has taken the place of confidence, failure and panic breed panic and failure. The commercial storm leaves its path strewn with ruin. When it is over, there is a calm, but a dull, heavy calm. Those who have saved themselves are in no mood to venture again; companies whose success is doubtful are wound up; new companies can not be formed. Coal, iron and the other materials for making fixed capital fall in price as rapidly as they rose. Iron works and

ships are for sale, but there are no buyers at any moderate price.

"Thus the state of trade, to use the famous words of Lord Overstone, 'revolves apparently in an established cycle. First we find it in a state of quiescence—next improvement, growing confidence, prosperity, excitement, overtrading, convulsion, pressure, stagnation, distress, ending again in quiescence."

233. Periodicity of Panics.—So frequently have trade and industry made this weary round, that the writers on finance have undertaken to establish the law of the periodicity of panics and hard times. The term of ten years is that most often fixed upon for the completion of the cycle. There is at least a very curious series of coincidences to give some substance to this hypothesis.

But whether there are, indeed, forces operating which bring about commercial convulsions and industrial distress at regular intervals, or not, it seems clear that, under the conditions depicted in the first part of this chapter, it is inevitable that the producing and exchanging body should alternate frequently and even violently between a state of depression and partially suspended activity, and a state of highly animated, excited, almost convulsive exertion, in which the agencies alike of production and of exchange are strained to their utmost to meet demands which are stimulated to the highest extravagance by a universal passion of speculation.

234. Loss of Productive Force.—It is evident that this is not an order of things under which the largest production of wealth takes place. The two extremes do not offset each other, with the same result as if production had been proceeding calmly and equably through the entire period. On the contrary, each extreme involves great and permanent loss of productive force. There is much misdirection of energy, much waste of material, much vital injury to labor power and capital power, in the haste and strain and fever of highly stimulated effort.

On the other hand, the long, dull spell of inactivity that succeeds is not given wholly to recuperation of exhausted energies, renewal of stocks of materials, repair of machinery and plant. It is not a waste of time, merely, involving a proportional loss of productive power: that inactivity becomes itself a cause of mischief. It induces in the working classes a lethargy, a despondency, a recklessness, which are forces productive of evil. It generates habits of lounging and of drinking, perhaps of tramping, which may not be shaken off even with renewed employment.

235. "Hard Times."—Nothing needs to be added, of clearness or of force, to Prof. Marshall's statement of the course which trade and industry run from the time they first cross the line of reviving prosperity to the moment they plunge into the abyss of broken credit, falling markets, commercial panic, failing banks, and general distress. But there is one industrial phenomenon of great significance in respect to our question, why the actual production of a community comes so far short of its productive capability? which economists have not been accustomed to explain: this is, the long continuance of the periods of industrial depression and of restricted production.

It will readily appear that, after running such a rig as has been described, the agencies of trade and industry will require time to refit. The track must be cleared of the wreck. The places left vacant by the casualties of the great crash must be filled by new men. But the actual time covered by the period of depression is sometimes much longer than can be accounted for by the mere loss and destruction of a panic. "Hard Times" are protracted long after the capital power and the labor power of the community are in condition to resume their interrupted functions.

For several years after the panic of 1873, in the United States, industry did not reach its former proportions. During that period vast amounts of labor power and capital power remained unproductive. Tens of thousands, if not hundreds of thousands, of laborers were unemployed; an even greater number were employed only on half or three-quarters time. Hundreds of furnaces were out of blast; thousands of waterwheels ceased to turn; thousands of engines stood still. Yet, during this time, these workmen had occasion to consume

food and clothing for themselves and their families; needed to work to earn the means, and were honestly willing, yea, heartily desirous to work. All this time the owners of capital were ready to secure a return for their investments, if they could find opportunity; the conductors of business were eager to win a profit by employing their abilities and experience in productive industry. Why, then, was it, when all were willing to work and needed to work, that they did not work? What was the force that kept these laboring men, these water-wheels and engines, these capable conductors of business, idle so long?

236. Diversified Production.—We have seen that, as society makes progress toward a minuter organization of industry, productive capability is enhanced, but that, coincidently, at each stage, the opportunities for misunderstanding between the body of producers and the body of consumers are greatly multiplied, while labor power and capital power fall more under the control of men of exceptional abilities, with whom comes to rest all initiative in production.

Now, if we examine the list of articles sold in the market, in a modern community, we shall find some of them supplying wants which are constant and vital. We shall find others which minister to the most delicate tastes or gratify only the merest casual fancies. In a country like England, France, or the United States, tens of thousands of laborers are employed in producing articles of the most trivial character: fireworks, toys, bonbons, fripperies of dress, while hundreds of thousands more are employed in producing articles deprivation of which would not induce cold or hunger, or impair health, or be incompatible with public decency or personal self-respect.

237. Propagation of Economic Shocks.—Let us suppose, as the result of a period of prosperity, the variety of products to have been carried to a very high point, when a disaster, primarily affecting either industry or trade, it matters not, befalls a community. It may be a great fire, or a great flood, or an epidemic of yellow fever, or the destruction of some leading crop. No matter where it comes from, or where it first strikes, the immediate effect is to diminish the productive