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To whomsoever the soil at any time belongs, to him belong the fruits of it. White parasols, and elephants mad with pride are the flowers of a grant of land.

—SIR WM. JONES' TRANSLATION OF AN INDIAN GRANT OF LAND,
FOUND AT TANNA.

The widow is gathering nettles for her children's dinner; a perfumed seigneur, delicately lounging in the *Œil de Bœuf*, hath an alchemy whereby he will extract from her the third nettle, and call it rent.

—CARLYLE.

CHAPTER 1

THE PRIMARY CAUSE OF RECURRING PAROXYSMS OF INDUSTRIAL DEPRESSION

Our long inquiry is ended. We may now marshal the results.

To begin with the industrial depressions, to account for which so many contradictory and self-contradictory theories are broached.

A consideration of the manner in which the speculative advance in land values cuts down the earnings of labor and capital and checks production leads, I think, irresistibly to the conclusion that this is the main cause of those periodical industrial depressions to which every civilized country, and all civilized countries together, seem increasingly liable.

I do not mean to say that there are not other proximate causes. The growing complexity and interdependence of the machinery of production, which makes each shock or stoppage propagate itself through a widening circle; the essential defect of currencies which contract when most needed, and the tremendous alternations in volume that occur in the simpler forms of commercial credit, which, to a much greater extent than currency in any form, constitute the medium or flux of exchanges; the protective tariffs which present artificial barriers to the interplay of productive forces, and other similar causes, undoubtedly bear important part in producing and continuing what are called hard times. But, both from the consideration of principles and the obser-

Our inquiry is ended.

I conclude that the main cause of industrial depressions is the cutting down of earnings of labor and capital, due to the speculative advance of land values.

Other causes include the growing complexity of production, currencies that contract when most needed, defects in commercial credit, protective tariffs, and similar factors.

vation of phenomena, it is clear that the great initiatory cause is to be looked for in the speculative advance of land values.

The preceding chapter showed that speculation in land tends to press the margin beyond its normal limit, reducing wages and interest.

In the preceding chapter I have shown that the speculative advance in land values tends to press the margin of cultivation, or production, beyond its normal limit, thus compelling labor and capital to accept of a smaller return, or (and this is the only way they can resist the tendency) to cease production. Now, it is not only natural that labor and capital should resist the crowding down of wages and interest by the speculative advance of rent, but they are driven to this in self-defense, inasmuch as there is a minimum of return below which labor cannot exist nor capital be maintained. Hence, from the fact of speculation in land, we may infer all the phenomena which mark these recurring seasons of industrial depression.

Production therefore slows. It may not actually diminish, but fails to increase proportionate to the growth of the community, owing to failure of labor and capital to find employment at accustomed rates.

Given a progressive community, in which population is increasing and one improvement succeeds another, and land must constantly increase in value. This steady increase naturally leads to speculation in which future increase is anticipated, and land values are carried beyond the point at which, under the existing conditions of production, their accustomed returns would be left to labor and capital. Production, therefore, begins to stop. Not that there is necessarily, or even probably, an absolute diminution in production; but that there is what in a progressive community would be equivalent to an absolute diminution of production in a stationary community—a failure in production to increase proportionately, owing to the failure of new increments of labor and capital to find employment at the accustomed rates.

This stoppage of production at some points must necessarily show itself at other points of the industrial network, in a cessation of demand, which would again check production

there, and thus the paralysis would communicate itself through all the interlacings of industry and commerce, producing everywhere a partial disjointing of production and exchange, and resulting in the phenomena that seem to show overproduction or overconsumption, according to the standpoint from which they are viewed.

The period of depression thus ensuing would continue until (1) the speculative advance in rents had been lost; or (2) the increase in the efficiency of labor, owing to the growth of population and the progress of improvement, had enabled the normal rent line to overtake the speculative rent line; or (3) labor and capital had become reconciled to engaging in production for smaller returns. Or, most probably, all three of these causes would co-operate to produce a new equilibrium, at which all the forces of production would again engage, and a season of activity ensue; whereupon rent would begin to advance again, a speculative advance again take place, production again be checked, and the same round be gone over.

In the elaborate and complicated system of production which is characteristic of modern civilization, where, moreover, there is no such thing as a distinct and independent industrial community, but geographically or politically separated communities blend and interlace their industrial organizations in different modes and varying measures, it is not to be expected that effect should be seen to follow cause as clearly and definitely as would be the case in a simpler development of industry, and in a community forming a complete and distinct industrial whole; but, nevertheless, the phenomena actually presented by these alternate seasons of activity and depression clearly correspond with those we have inferred from the speculative advance of rent.

Deduction thus shows the actual phenomena as resulting

The paralysis communicates itself through the interlacings of commerce, resulting in phenomena that seem to show overproduction or overconsumption.

The ensuing depression continues until one or more of: (1) speculative rents decline; (2) increased efficiency of labor enables normal rent line to overtake speculative rent line; (3) labor and capital become reconciled to smaller returns.

Although the complexity of modern civilization makes it difficult to link effect and cause, actual events clearly correspond with what we have inferred from the speculative advance of rent.

from the principle. If we reverse the process, it is as easy by induction to reach the principle by tracing up the phenomena.

Depressions are always preceded by seasons of activity and speculation, and all acknowledge the connection between the two.

These seasons of depression are always preceded by seasons of activity and speculation, and on all hands the connection between the two is admitted—the depression being looked upon as the reaction from the speculation, as the headache of the morning is the reaction from the debauch of the night. But as to the manner in which the depression results from the speculation, there are two classes or schools of opinion, as the attempts made on both sides of the Atlantic to account for the present industrial depression will show.

But one school of thought says the speculation produced the depression by causing overproduction. They cite as evidence unsold goods, idle capital and labor, and that war production brings prosperity.

One school says that the speculation produced the depression by causing overproduction, and points to the warehouses filled with goods that cannot be sold at remunerative prices, to mills closed or working on half time, to mines shut down and steamers laid up, to money lying idly in bank vaults, and workmen compelled to idleness and privation. They point to these facts as showing that the production has exceeded the demand for consumption, and they point, moreover, to the fact that when government during war enters the field as an enormous consumer, brisk times prevail, as in the United States during the civil war and in England during the Napoleonic struggle.

The other school says the speculation produced depression by leading to overconsumption; citing a lack of effective demand which they attribute to earlier extravagance.

The other school says that the speculation has produced the depression by leading to overconsumption, and points to full warehouses, rusting steamers, closed mills, and idle workmen as evidences of a cessation of effective demand, which, they say, evidently results from the fact that people, made extravagant by a fictitious prosperity, have lived beyond their means, and are now obliged to retrench—that is, to consume less wealth. They point, moreover, to the enormous consumption of wealth by wars, by the building of

unremunerative railroads, by loans to bankrupt governments, etc., as extravagances which, though not felt at the time, just as the spendthrift does not at the moment feel the impairment of his fortune, must now be made up by a season of reduced consumption.

Now, each of these theories evidently expresses one side or phase of a general truth, but each of them evidently fails to comprehend the full truth. As an explanation of the phenomena, each is equally and utterly preposterous.

For while the great masses of men want more wealth than they can get, and while they are willing to give for it that which is the basis and raw material of wealth—their labor—how can there be overproduction? And while the machinery of production wastes and producers are condemned to unwilling idleness, how can there be overconsumption?

When, with the desire to consume more, there coexist the ability and willingness to produce more, industrial and commercial paralysis cannot be charged either to overproduction or to overconsumption. Manifestly, the trouble is that production and consumption cannot meet and satisfy each other.

How does this inability arise? It is evidently and by common consent the result of speculation. But of speculation in what?

Certainly not of speculation in things which are the products of labor—in agricultural or mineral productions, or manufactured goods, for the effect of speculation in such things, as is well shown in current treatises that spare me the necessity of illustration, is simply to equalize supply and demand, and to steady the interplay of production and consumption by an action analogous to that of a flywheel in a machine.

Therefore, if speculation be the cause of these industrial depressions, it must be speculation in things not the

If people want more wealth than they can get, and are willing to labor to get it, how can there be overproduction? And if capital and labor are idle, how can there be overconsumption?

The trouble is that production and consumption cannot meet and satisfy each other.

It is commonly agreed that this is due to speculation – but in what?

Not in the products of labor, since speculation in products of labor is well known to equalize supply and demand.

So it must be speculation in things not the product of labor, but necessary for production: Land.

Evidence: In the United States, land values rise, culminating in great jumps of speculation. This is invariably followed by dull trade, generally accompanied by a commercial crash.

All trade is the exchange of commodities for commodities, so the cessation of demand for some commodities is really a cessation in the supply of other commodities.

production of labor, but yet necessary to the exertion of labor in the production of wealth—of things of fixed quantity; that is to say, it must be speculation in land.

That land speculation is the true cause of industrial depression is, in the United States, clearly evident. In each period of industrial activity land values have steadily risen, culminating in speculation which carried them up in great jumps. This has been invariably followed by a partial cessation of production, and its correlative, a cessation of effective demand (dull trade), generally accompanied by a commercial crash; and then has succeeded a period of comparative stagnation, during which the equilibrium has been again slowly established, and the same round been run again. This relation is observable throughout the civilized world. Periods of industrial activity always culminate in a speculative advance of land values, followed by symptoms of checked production, generally shown at first by cessation of demand from the newer countries, where the advance in land values has been greatest.

That this must be the main explanation of these periods of depression, will be seen by an analysis of the facts.

All trade, let it be remembered, is the exchange of commodities for commodities, and hence the cessation of demand for some commodities, which marks the depression of trade, is really a cessation in the supply of other commodities. That dealers find their sales declining and manufacturers find orders falling off, while the things which they have to sell, or stand ready to make, are things for which there is yet a widespread desire, simply shows that the supply of other things, which in the course of trade would be given for them, has declined. In common parlance we say that “buyers have no money,” or that “money is becoming scarce,” but in talking in this way we ignore the fact that money is but

the medium of exchange. What the would-be buyers really lack is not money, but commodities which they can turn into money—what is really becoming scarcer is produce of some sort. The diminution of the effective demand of consumers is therefore but a result of the diminution of production.

Would-be buyers lack, not money, but commodities which they can turn into money—produce of some sort.

This is seen very clearly by storekeepers in a manufacturing town when the mills are shut down and operatives thrown out of work. It is the cessation of production which deprives the operatives of means to make the purchases they desire, and thus leaves the storekeeper with what, in view of the lessened demand, is a superabundant stock, and forces him to discharge some of his clerks and otherwise reduce his demands. And the cessation of demand (I am speaking, of course, of general cases and not of any alteration in relative demand from such causes as change of fashion), which has left the manufacturer with superabundant stock and compelled him to discharge his hands, must arise in the same way. Somewhere, it may be at the other end of the world, a check in production has produced a check in the demand for consumption. That demand is lessened without want being satisfied, shows that production is somewhere checked.

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That demand is lessened without want being satisfied, shows that production is somewhere checked.

People want the things the manufacturer makes as much as ever, just as the operatives want the things the storekeeper has to sell. But they do not have as much to give for them. Production has somewhere been checked, and this reduction in the supply of some things has shown itself in cessation of demand for others, the check propagating itself through the whole framework of industry and exchange. Now, the industrial pyramid manifestly rests on the land. The primary and fundamental occupations, which create a demand for all others, are evidently those which extract wealth from nature,

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and one occupation to another, this check to production which shows itself in decreased purchasing power, we must ultimately find it in some obstacle which checks labor in expending itself on land.

and, hence, if we trace from one exchange point to another, and from one occupation to another, this check to production, which shows itself in decreased purchasing power, we must ultimately find it in some obstacle which checks labor in expending itself on land. And that obstacle, it is clear, is the speculative advance in rent, or the value of land, which produces the same effects as (in fact, it is) a lockout of labor and capital by landowners. This check to production, beginning at the basis of interlaced industry, propagates itself from exchange point to exchange point, cessation of supply becoming failure of demand, until, so to speak, the whole machine is thrown out of gear, and the spectacle is everywhere presented of labor going to waste while laborers suffer from want.

This suggests the true cause. Since labor produces wealth, the man who seeks to exchange labor for any form of wealth is like one who proposes to give bullion for coin or wheat for flour. We talk about "want of work" but evidently it is not work that is short while want continues.

This strange and unnatural spectacle of large numbers of willing men who cannot find employment is enough to suggest the true cause to whosoever can think consecutively. For, though custom has dulled us to it, it is a strange and unnatural thing that men who wish to labor, in order to satisfy their wants, cannot find the opportunity—as, since labor is that which produces wealth, the man who seeks to exchange labor for food, clothing, or any other form of wealth, is like one who proposes to give bullion for coin, or wheat for flour. We talk about the supply of labor and the demand for labor, but, evidently, these are only relative terms. The supply of labor is everywhere the same—two hands always come into the world with one mouth, twenty-one boys to every twenty girls; and the demand for labor must always exist as long as men want things which labor alone can procure. We talk about the "want of work," but, evidently, it is not work that is short while want continues; evidently, the supply of labor cannot be too great, nor the demand for labor too small, when people suffer for the lack of things that labor produces. The real trouble must be that supply is somehow

The real trouble must be that somewhere there is an obstacle

prevented from satisfying demand, that somewhere there is an obstacle which prevents labor from producing the things that laborers want.

Take the case of any one of these vast masses of unemployed men, to whom, though he never heard of Malthus, it today seems that there are too many people in the world. In his own wants, in the needs of his anxious wife, in the demands of his half-cared-for, perhaps even hungry and shivering children, there is demand enough for labor, Heaven knows! In his own willing hands is the supply. Put him on a solitary island, and though cut off from all the enormous advantages which the co-operation, combination, and machinery of a civilized community give to the productive powers of man yet his two hands can fill the mouths and keep warm the backs that depend upon them. Yet where productive power is at its highest development they cannot. Why? Is it not because in the one case he has access to the material and forces of nature, and in the other this access is denied?

Is it not the fact that labor is thus shut off from nature which can alone explain the state of things that compels men to stand idle who would willingly supply their wants by their labor? The proximate cause of enforced idleness with one set of men may be the cessation of demand on the part of other men for the particular things they produce, but trace this cause from point to point, from occupation to occupation, and you will find that enforced idleness in one trade is caused by enforced idleness in another, and that the paralysis which produces dullness in all trades cannot be said to spring from too great a supply of labor or too small a demand for labor, but must proceed from the fact that supply cannot meet demand by producing the things which satisfy want and are the object of labor.

Now, what is necessary to enable labor to produce these

which prevents labor from producing the things that laborers want.

Put on a solitary island, a man could meet the needs of those who depend on him. Yet where productive power is at its highest development he cannot. Is this not because in the one case he has access to the material and forces of nature, and in the other access is denied?

Enforced idleness in any one trade is caused by enforced idleness in others, and the paralysis which produces dullness in all trades must spring from the fact that supply of labor cannot meet demand for labor by producing the things which satisfy want and are the object of labor.

To produce wealth, man must have access to natural matter and forces — to land.

things, is land. When we speak of labor creating wealth, we speak metaphorically. Man creates nothing. The whole human race, were they to labor forever, could not create the tiniest mote that floats in a sunbeam—could not make this rolling sphere one atom heavier or one atom lighter. In producing wealth, labor, with the aid of natural forces, but works up, into the forms desired, pre-existing matter, and, to produce wealth, must, therefore, have access to this matter and to these forces—that is to say, to land. The land is the source of all wealth. It is the mine from which must be drawn the ore that labor fashions. It is the substance to which labor gives the form. And, hence, when labor cannot satisfy its wants, may we not with certainty infer that it can be from no other cause than that labor is denied access to land?

The fundamental occupations are those directly using land; other occupations develop to serve the needs of these. Hence, when, through all trades, men willing to work cannot find opportunity to do so the difficulty must arise in the employment that creates demand for all other employments — it must be because

When in all trades there is what we call scarcity of employment; when, everywhere, labor wastes, while desire is unsatisfied, must not the obstacle which prevents labor from producing the wealth it needs, lie at the foundation of the industrial structure? That foundation is land. Milliners, optical instrument makers, gilders, and polishers, are not the pioneers of new settlements. Miners did not go to California or Australia because shoemakers, tailors, machinists, and printers were there. But those trades followed the miners, just as they are now following the gold diggers into the Black Hills and the diamond diggers into South Africa. It is not the storekeeper who is the cause of the farmer, but the farmer who brings the storekeeper. It is not the growth of the city that develops the country, but the development of the country that makes the city grow. And, hence, when, through all trades, men willing to work cannot find opportunity to do so, the difficulty must arise in the employment that creates a demand

for all other employments — it must be because labor is shut out from land.

labor is shut out from land.

In Leeds or Lowell, in Philadelphia or Manchester, in London or New York, it may require a grasp of first principles to see this; but where industrial development has not become so elaborate, nor the extreme links of the chain so widely separated, one has but to look at obvious facts. Although not yet thirty years old, the city of San Francisco, both in population and in commercial importance, ranks among the great cities of the world, and, next to New York, is the most metropolitan of American cities. Though not yet thirty years old, she has had for some years an increasing number of unemployed men. Clearly, here, it is because men cannot find employment in the country that there are so many unemployed in the city; for when the harvest opens they go trooping out, and when it is over they come trooping back to the city again. If these now unemployed men were producing wealth from the land, they would not only be employing themselves, but would be employing all the mechanics of the city, giving custom to the storekeepers, trade to the merchants, audiences to the theaters, and subscribers and advertisements to the newspapers — creating effective demand that would be felt in New England and Old England, and wherever throughout the world come the articles that, when they have the means to pay for them, such a population consumes.

This is illustrated by San Francisco, which has many unemployed.

Now, why is it that this unemployed labor cannot employ itself upon the land? Not that the land is all in use. Though all the symptoms that in older countries are taken as showing a redundancy of population are beginning to manifest themselves in San Francisco, it is idle to talk of redundancy of population in a State that with greater natural resources than France has not yet a million of people. Within a few miles of

Why cannot the unemployed labor employ itself on the land? Not because all the land is in use.

But the land has been monopolized and is held at speculative prices.

San Francisco is unused land enough to give employment to every man who wants it. I do not mean to say that every unemployed man could turn farmer or build himself a house, if he had the land; but that enough could and would do so to give employment to the rest. What is it, then, that prevents labor from employing itself on this land? Simply, that it has been monopolized and is held at speculative prices, based not upon present value, but upon the added value that will come with the future growth of population.

The same sequence may be seen in other places.

What may thus be seen in San Francisco by whoever is willing to see, may, I doubt not, be seen as clearly in other places.

The present depression is largely attributed to undue extension of the railroad system. That is not the direct cause.

The present commercial and industrial depression, which first clearly manifested itself in the United States in 1872, and has spread with greater or less intensity over the civilized world, is largely attributed to the undue extension of the railroad system, with which there are many things that seem to show its relation. I am fully conscious that the construction of railroads before they are actually needed may divert capital and labor from more to less productive employments, and make a community poorer instead of richer; and when the railroad mania was at its highest, I pointed this out in a political tract addressed to the people of California¹; but to assign to this wasting of capital such a widespread industrial deadlock seems to me like attributing an unusually low tide to the drawing of a few extra bucketfuls of water. The waste of capital and labor during the civil war was enormously greater than it could possibly be by the construction of unnecessary railroads, but without producing any such result. And, certainly, there seems to be little sense in talking of the waste of capital and labor in railroads as causing this

¹ "The Subsidy Question and the Democratic Party," 1871

depression, when the prominent feature of the depression has been the superabundance of capital and labor seeking employment.

Yet, that there is a connection between the rapid construction of railroads and industrial depression, any one who understands what increased land values mean, and who has noticed the effect which the construction of railroads has upon land speculation, can easily see. Wherever a railroad was built or projected, lands sprang up in value under the influence of speculation, and thousands of millions of dollars were added to the nominal values which capital and labor were asked to pay outright, or to pay in installments, as the price of being allowed to go to work and produce wealth. The inevitable result was to check production, and this check to production propagated itself in a cessation of demand, which checked production to the furthest verge of the wide circle of exchanges, operating with accumulated force in the centers of the great industrial commonwealth into which commerce links the civilized world.

The primary operations of this cause can, perhaps, be nowhere more clearly traced than in California, which, from its comparative isolation, has constituted a peculiarly well-defined community.

Until almost its close, the last decade was marked in California by the same industrial activity which was shown in the Northern States, and, in fact, throughout the civilized world, when the interruption of exchanges and the disarrangement of industry caused by the war and the blockade of southern ports is considered. This activity could not be attributed to inflation of the currency or to lavish expenditures of the General Government, to which in the eastern states the comparative activity of the same period has since been attributed; for, in spite of legal tender laws, the Pacific Coast adhered to a

But there is a connection: Extension of railroads has helped increase speculative land values.

The inevitable result was to check production.

This can be clearly seen in California.

As California prospered in the 1860s,

coin currency, and the taxation of the Federal Government took away very much more than was returned in Federal expenditures. It was attributable solely to normal causes, for, though placer mining was declining, the Nevada silver mines were being opened, wheat and wool were beginning to take the place of gold in the table of exports, and an increasing population and the improvement in the methods of production and exchange were steadily adding to the efficiency of labor.

With this material progress went on a steady enhancement in land values—its consequence. This steady advance engendered a speculative advance, which, with the railroad era, ran up land values in every direction. If the population of California had steadily grown when the long, costly, fever-haunted Isthmus route was the principal mode of communication with the Atlantic States, it must, it was thought, increase enormously with the opening of a road which would bring New York Harbor and San Francisco Bay within seven days' easy travel, and when in the state itself the locomotive took the place of stage coach and freight wagon. The expected increase of land values which would thus accrue was discounted in advance. Lots on the outskirts of San Francisco rose hundreds and thousands per cent., and farming land was taken up and held for high prices, in whichever direction an immigrant was likely to go.

But the anticipated rush of immigrants did not take place. Labor and capital could not pay so much for land and make fair returns. Production was checked, if not absolutely, at least relatively. As the transcontinental railroad approached completion, instead of increased activity, symptoms of depression began to manifest themselves; and, when it was completed, to the season of activity had succeeded a period of depression which has not since been fully recovered from, during which wages and interest have steadily fallen. What I have called the actual rent line, or margin of cultivation, is thus

land values rose, due not only to actual growth but also the anticipation of further growth upon completion of the transcontinental railroad.

But the anticipated rush of immigrants did not take place. Labor and capital could not pay so much for land and make fair returns. Production was checked, and by the time the railroad was completed a depression had begun.

(as well as by the steady march of improvement and increase of population, which, though slower than it otherwise would have been, still goes on) approaching the speculative rent line, but the tenacity with which a speculative advance in the price of land is maintained in a developing community is well known.²

Now, what thus went on in California went on in every progressive section of the Union. Everywhere that a railroad was built or projected, land was monopolized in anticipation, and the benefit of the improvement was discounted in increased land values. The speculative advance in rent thus outrunning the normal advance, production was checked, demand was decreased, and labor and capital were turned back from occupations more directly concerned with land, to glut those in which the value of land is a less perceptible element. It is thus that the rapid extension of railroads is related to the succeeding depression.

And what went on in the United States went on in a greater or less obvious degree all over the progressive world. Everywhere land values have been steadily increasing with material progress, and everywhere this increase begot a speculative advance. The impulse of the primary cause not only radiated from the newer sections of the Union to the older sections, and from the United States to Europe, but everywhere the primary cause was acting. And, hence, a worldwide depression of industry and commerce, begotten of a world-wide material progress.

²It is astonishing how in a new country of great expectations speculative prices of land will be kept up. It is common to hear the expression, "There is no market for real estate; you cannot sell it at any price," and yet, at the same time, if you go to buy it, unless you find somebody who is absolutely compelled to sell, you must pay the prices that prevailed when speculation ran high. For owners, believing that land values must ultimately advance, hold on as long as they can.

Not only in California, but, everywhere that a railroad was built or projected, land was monopolized in anticipation and the speculative advance in rent outran the normal advance, checking production.

The same thing went on all over the progressive world.

In attributing these depressions to speculative advance, I imply a cause which must be progressive— a pressure, not a blow. Yet these depressions seem to come suddenly.

There is one thing which, it may seem, I have overlooked, in attributing these industrial depressions to the speculative advance of rent or land values as a main and primary cause. The operation of such a cause, though it may be rapid, must be progressive—resembling a pressure, not a blow. But these industrial depressions seem to come suddenly—they have, at their beginning, the character of a paroxysm, followed by a comparative lethargy, as if of exhaustion. Everything seems to be going on as usual, commerce and industry vigorous and expanding, when suddenly there comes a shock, as of a thunderbolt out of a clear sky—a bank breaks, a great manufacturer or merchant falls, and, as if a blow had thrilled through the entire industrial organization, failure succeeds failure, and on every side workmen are discharged from employment, and capital shrinks into profitless security.

Let me explain why. To enable exchanges, large stocks must be stored and in transit. The exchanges are largely made on credit.

Let me explain what I think to be the reason of this: To do so, we must take into account the manner in which exchanges are made, for it is by exchanges that all the varied forms of industry are linked together into one mutually related and interdependent organization. To enable exchanges to be made between producers far removed by space and time, large stocks must be kept in store and in transit, and this, as I have already explained, I take to be the great function of capital, in addition to that of supplying tools and seed. These exchanges are, perhaps necessarily, largely made upon credit — that is to say, the advance upon one side is made before the return is received on the other.

Now, without stopping to inquire as to the causes, it is manifest that these advances are, as a rule, from the more highly organized and later developed industries to the more fundamental. The West Coast African, for instance, who exchanges palm oil and cocoanuts for gaudy calico and Birmingham idols, gets his return immediately; the English

merchant, on the contrary, has to lay out of his goods a long while before he gets his returns. The farmer can sell his crop as soon as it is harvested, and for cash; the great manufacturer must keep a large stock, send his goods long distances to agents, and, generally, sell on time. Thus, as advances and credits are generally from what we may call the secondary, to what we may call the primary industries, it follows that any check to production which proceeds from the latter will not immediately manifest itself in the former. The system of advances and credits constitutes, as it were, an elastic connection, which will give considerably before breaking, but which, when it breaks, will break with a snap.

Or, to illustrate in another way what I mean: The great pyramid of Gizeh is composed of layers of masonry, the bottom layer, of course, supporting all the rest. Could we by some means gradually contract this bottom layer, the upper part of the pyramid would for some time retain its form, and then, when gravitation at length overcame the adhesiveness of the material, would not diminish gradually and regularly, but would break off suddenly, in large pieces. Now, the industrial organization may be likened to such a pyramid. What is the proportion which in a given stage of social development the various industries bear to each other, it is difficult, and perhaps impossible, to say; but it is obvious that there is such a proportion, just as in a printer's font of type there is a certain proportion between the various letters. Each form of industry, as it is developed by division of labor, springs from and rises out of the others, and all rest ultimately upon land; for, without land, labor is as impotent as would be a man in void space. To make the illustration closer to the condition of a progressive country, imagine a pyramid composed of superimposed layers—the

Advances are generally made from the secondary to the primary industries, so any check to production which proceeds from the latter will not immediately affect the former. But when it comes, the effect is sudden.

Each form of industry, as it is developed by division of labor, springs from the others, and all rest ultimately upon land.

Imagine a pyramid of superimposed layers, growing and expanding.

Imagine the bottom layer stops growing. The others will for a time keep expanding, until eventually there is a crumbling of the entire structure.

whole constantly growing and expanding. Imagine the growth of the layer nearest the ground to be checked. The others will for a time keep on expanding—in fact, for the moment, the tendency will be to quicker expansion, for the vital force which is refused scope on the ground layer will strive to find vent in those above—until, at length, there is a decided overbalance and a sudden crumbling along all the faces of the pyramid.

I think it's clear that this is the main cause of industrial depression. Political economy can deal only with general tendencies.

That the main cause and general course of the recurring paroxysms of industrial depression, which are becoming so marked a feature of modern social life, are thus explained, is, I think, clear. And let the reader remember that it is only the main causes and general courses of such phenomena that we are seeking to trace or that, in fact, it is possible to trace with any exactness. Political economy can deal, and has need to deal, only with general tendencies. The derivative forces are so multiform, the actions and reactions are so various, that the exact character of the phenomena cannot be predicted. We know that if a tree is cut through it will fall, but precisely in what direction will be determined by the inclination of the trunk, the spread of the branches, the impact of the blows, the quarter and force of the wind; and even a bird lighting on a twig, or a frightened squirrel leaping from bough to bough, will not be without its influence. We know that an insult will arouse a feeling of resentment in the human breast, but to say how far and in what way it will manifest itself, would require a synthesis which would build up the entire man and all his surroundings, past and present.

This explanation is in striking contrast with the contradictory and self-contradictory attempts at explanations based on the current theories of distribution of wealth.

The manner in which the sufficient cause to which I have traced them explains the main features of these industrial depressions is in striking contrast with the contradictory and self-contradictory attempts which have been made to explain them on the current theories of the distribution of wealth.

That a speculative advance in rent or land values invariably precedes each of these seasons of industrial depression is everywhere clear. That they bear to each other the relations of cause and effect, is obvious to whosoever considers the necessary relations between land and labor.

And that the present depression is running its course, and that, in the manner previously indicated, a new equilibrium is being established, which will result in another season of comparative activity, may already be seen in the United States. The normal rent line and the speculative rent line are being brought together: (1) By the fall in speculative land values, which is very evident in the reduction of rents and shrinkage of real estate values in the principal cities. (2) By the increased efficiency of labor, arising from the growth of population and the utilization of new inventions and discoveries, some of which almost as important as that of the use of steam we seem to be on the verge of grasping. (3) By the lowering of the habitual standard of interest and wages, which, as to interest, is shown by the negotiation of a government loan at four per cent., and as to wages is too generally evident for any special citation. When the equilibrium is thus re-established, a season of renewed activity, culminating in a speculative advance of land values, will set in³. But wages and interest will not recover their lost ground. The net result of all these perturbations or wave-like movements is the gradual forcing of wages and interest toward their minimum. These temporary and recurring depressions exhibit, in fact, as was noticed in the opening chapter, but intensifications of the general movement which accompanies material progress.

At the end of the depression, the normal rent line and the speculative rent line are brought together by: (1) fall in speculative land values; (2) increased efficiency of labor; (3) lowering of the habitual standard of interest and wages. But wages and interest will not recover their lost ground. These depressions are but intensifications of the general movement which accompanies material progress.

³This was written a year ago. It is now (July, 1879) evident that a new period of activity has commenced, as above predicted, and in New York and Chicago real estate prices have already begun to recover.